

# Smoke Free/Scent Free Dalhousie

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Most people are aware of the harm caused by tobacco smoke. However, people are sometimes surprised to learn that many people are also harmed when they inhale scents which are present in many personal-care products. Scents in perfume, cologne, hair spray, aftershave, shampoos, and even some soap and fabric softeners, cause serious illness in people who are sensitive to these chemicals. To provide an environment which supports teaching and learning, Dalhousie asks students, staff, faculty and visitors to refrain from using such scented products while in University buildings. This Scent Reduction Programme is part of a broader effort to limit, to the furthest extent possible, exposure to all chemicals in our buildings.

More information on the Dalhousie Smoking Policy and the Scent Reduction Programme is available from the Dalhousie Safety Office. You can reach the Safety Office by telephone at 494-2495, by e-mail at [Safety.Office@dal.ca](mailto:Safety.Office@dal.ca), Web site: [www.dal.ca/safety](http://www.dal.ca/safety) or by visiting the office at 1391 Seymour Street.

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# Academic Dates

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## 2004

### May

- 3 Classes begin, entering Dentistry Qualifying Programme
- 21 Last day of classes, Dentistry (first and second year)
- 24 Victoria Day - University closed
- 25-29 Spring Convocations
- 25 Examinations begin, Dentistry (first and second year)
- 28 End of year, Medicine (first and second year)
- 31 Examinations end, Dentistry (first and second year)

### June

- 9 Last day of classes, Dentistry (third year), Qualifying Programme (first year)
- 13 Applications due for Supplemental and Special exams, Law
- 16 First day of classes, Dentistry (fourth year), Qualifying Programme (second year)
- 30 Last day to register PGY (all years), without late fee

### July

- 1 Canada Day - University closed  
Postgrad Medicine academic year begins
- 2 Last day to apply to graduate in October
- 7 Supplemental and special examinations begin, Law
- 16 Supplemental and special examinations end, Law
- 15 Last day to apply for supplemental examinations in Dentistry and Dental Hygiene  
Supplemental examinations begin, Dentistry and Dental Hygiene
- 17 Summer break begins, Dentistry (fourth year), Qualifying Programme (second year)

### August

- 2 Halifax/Dartmouth Natal Day - University closed
- 10 Supplemental examinations end, Dentistry and Dental Hygiene
- 16 Classes resume, Dentistry (fourth year DDS and second year QP)
- 20 Summer term ends, entering Dentistry Qualifying Programme (Year 1)
- 30 Classes begin, Medicine, (first and second year)  
Classes begin, Medicine (third year - Class of 2006)  
Classes begin, Dentistry and Dental Hygiene (first, second & third years, first year Qualifying Programme)

### September

- 6 Labour Day - University closed  
Application deadline Dentistry Qualifying Programme  
Applications available, Medicine
- 8 Classes begin, Law
- 15 Last day to add or drop fall and full-year term classes, Law
- 18 Medicine Clerkship (Phase 1) ends (third year - Class of 2005)
- 20 Medicine Clerkship (Phase 2) begins (fourth year - Class of 2005)

### October

- 11 Thanksgiving Day - University closed
- 16 Fall convocation (under review)
- 31 Application deadline, Medicine

### November

- 11 Remembrance Day - University closed
- 15 Last day to apply to graduate in May
- 30 Classes end, Law

## December

- 3 Classes end, Dentistry, Dental Hygiene, Qualifying Programme  
Examinations and midterms begin, Law  
Application deadline, Dentistry
- 8 Examinations begin, Dentistry, Dental Hygiene, Qualifying Programme
- 13 Midterms end, Law (first year)
- 17 Examinations end, Dentistry, Dental Hygiene, Qualifying Programme  
Examinations end, Law (second and third year)  
Classes end Medicine (first and second year)

## 2005

### January

- 3 In lieu of New Year's Day - University closed
- 4 Classes resume, Medicine (first, second and third year)  
Classes resume, Law  
Classes resume, Dentistry, Dental Hygiene, Qualifying Programme
- 18 Last day to add or drop winter term classes, Law

### February

- 4 Munro Day - University closed (does not apply to Medicine clerkship years)
- 21 Study break begins (does not apply to Medicine clerkship years)
- 28 Classes resume  
Examinations begin, Dentistry (fourth year) and Qualifying Programme (second year)  
Application deadline, Law

### March

- 4 Examinations end, Dentistry (fourth year) and Qualifying Programme (second year)
- 15 Application deadline, Dental Hygiene
- 25 Good Friday - University Closed

### April

- 5 Classes end, Law
- 8 Examinations begin, Law  
Classes end unless otherwise indicated
- 15 Last day of classes, Dentistry (third year), Qualifying Programme (first year), Dental Hygiene (first and second year)
- 18 Examinations end, Law (first year)
- 20 Examinations begin, Dentistry (third year), Qualifying Programme (first year) and Dental Hygiene (first and second year)
- 22 Classes end Dentistry fourth year and Qualifying Programme second year
- 26 Examinations end, Regular session
- 29 End of Medicine Clerkship (Phase 2), Class of 2005 (tentative)  
Examinations end, Dentistry (third year), Dental Hygiene (first and second year), Qualifying Programme (first year)  
Examinations end, Law (second and third year)

### May

- 2 Classes resume, Dentistry (third year), Qualifying Programme (first year)  
Classes begin, Entering Dentistry Qualifying Programme
- 20 Last day of classes, Dentistry (first and second year)
- 23 Victoria Day - University Closed
- 24 Examinations begin, Dentistry (first and second year)
- 24-28 Spring Convocation (under review)
- 31 Examinations end, Dentistry (first and second year)

**June**

- 3 End of year, Medicine, (first and second year)
- 8 Last day of classes, Dentistry (third year), Qualifying Programme (first year)
- 13 Applications due for Supplemental and Special exams, Law
- 15 Classes begin, Dentistry (fourth year), Qualifying Programme (second year)
- 27 Orientation for all new postgraduate medical trainees
- 30 Last day to register PGY (all years), without late fee

**July**

- 1 Canada Day - University closed  
Postgrad Medicine Academic Year begins
- 4 Last day to apply to Graduate in October
- 11 Supplemental and Special exams begin, Law
- 15 Supplemental exams begin, Dentistry
- 18 Supplemental and Special exams end, Law  
Summer break begins, Dentistry (fourth year) Qualifying Programme (second year)

**August**

- 1 Halifax/Dartmouth Natal Day - University closed

# Admission Dates 2004/2005

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**Final Dates for Receipt of Applications for Admission**

**Regular Session**

**Dentistry**

- DDS.....December 1
- Dental Hygiene ..... March 15
- Dentistry Qualifying Programme .....September 1

**Medicine**

- MD.....October 31

**Law**

- Law<sup>1</sup> ..... February 28

<sup>1</sup> Late applications may be considered up to August 1.

## Academic Programmes

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### Faculty of Dentistry

- Doctor of Dental Surgery - 4 years
- Diploma in Prosthodontics combined with Master of Applied Science in Biomedical Engineering
- Diploma in Dental Hygiene - 2 years Dental Hygiene
- Qualifying Programme - 2 years

### Faculty of Law

- Bachelor of Laws - 3 years
- Bachelor of Laws with Master of Business Administration - 4 years
- Bachelor of Laws with Master of Public Administration - 4 years
- Bachelor of Laws with Master of Health Services Administration - 4 years
- Bachelor of Laws with Master of Library and Information Studies - 4 years

### Faculty of Medicine

- Bachelor of Science (Medical) - 4 years
- Doctor of Medicine - 4 years
- Residencies - various programmes ranging from 2-6 years post-MD
- Doctor of Medicine with Master of Science - 6 years - Master of Science thesis in: Oral and Maxillofacial Surgery
- Doctor of Medicine with Doctor of Philosophy - Programme under review. Applications are not currently being accepted.

## Academic Regulations

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### Registration

It is the student's responsibility to register. Registration information for September 2004 will be sent to all eligible students in late June. Students are strongly encouraged to register early.

A student is registered only after financial arrangements have been made at the Student Accounts Office.

The final step is obtaining an ID or validating an existing ID from the DalCard Office. ID cards are mandatory and must be presented to write an officially scheduled examination. In addition, some services such as the issuance of bursary or scholarship cheques, library privileges and Dalplex require the presentation of a valid Dalhousie ID.

### Class Withdrawal

Non attendance does not, in itself, constitute withdrawal.

Withdrawals are not effective until written notification is received at the Office of the Registrar.

# Definitions

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The following definitions are intended to facilitate an understanding of the calendar and not to define all words and phrases used in the calendar which may have specific meanings.

## Academic Dismissal

A student's required withdrawal from a programme due to unsatisfactory academic performance.

## Academic Programme

A distinct group of classes and other requirements which lead to eligibility for a degree or other university-awarded credential.

## Academic Sessions

- Regular session: September - April
- Fall term: September - December
- Winter term: January - April
- Summer term: May - August

## Advanced Standing

Students possessing advanced knowledge of a subject will be encouraged to begin their studies in that subject at a level appropriate to their knowledge, as determined by the department concerned. However, such students must complete, at Dalhousie, the full number of credits required for the particular credential being sought.

## Audit Student

A student permitted to attend classes but not expected to prepare assignments, write papers, tests or examinations. Credit is not given nor is a mark awarded for classes. Classes appear on the transcript with the notation "Aud". Audit students must apply in the normal way. Students may register to audit a class only after the last day to add classes in the term.

## Class

A unit of instruction in a particular subject identified by a name and number.

## Clerkship

See Internship

## Clinical Practice

See Internship

## Co-requisite

Requirement which must be fulfilled concurrently with the class being considered.

## Course

The term "class" is used in place of the word course.

## Credit

A unit by which University class work is measured. A full year class, i.e. September - April, is normally worth one credit.

## CRN

Each class has a CRN attached to it (class registration number) This number is to be used when signing up for classes.

## E-mail

E-mail is an authorized means of communication for academic and administrative purposes within Dalhousie. The University will assign all students an official e-mail address. This address will remain in effect while the student remains a student and for one academic term following a

student's last registration. This is the only e-mail address that will be used for communication with students regarding all academic and administrative matters. Any redirection of e-mail will be at the student's own risk. Each student is expected to check her or his official e-mail address frequently in order to stay current with Dalhousie communications.

## Exclusion

Students may not register for a class which lists, as an exclusion, a class the student is also taking or has already passed.

## Externship

See Internship

## Fieldwork

See Internship

## Full-time Students

Those registered for three full classes or more, or the equivalent of three half credit classes or more in either the fall or winter term.

## Grade Point Average (GPA)

Weighted sum of the grade points earned, divided by the number of classes enrolled.

- Sessional GPA: Classes taken in a single session, September - April.
- Cumulative GPA: All classes taken while registered in a programme.

## Internship, Fieldwork, Clinical practice, Externship, Practicum, Clerkship

These terms are used in Faculty of Health Professions' programmes to describe practical professional educational experiences that are conducted in a non-university setting such as a health or social service agency.

## Letter of Permission

A Letter of Permission authorizes a Dalhousie student to take a class(es) at another institution for credit towards a Dalhousie qualification. Such permission must be obtained in advance of taking the class(es).

## Practicum

See Internship

## Prerequisite

Requirement which must be fulfilled prior to registering in a specific class.

## Residency

The period of time that graduate students are expected to be on campus for fulfilment of their formal programme requirements. In some programmes, part of the residency period may, with permission, include some time off campus (e.g. for fieldwork or research).

## Transcript

A transcript is a complete history of a student's academic record at Dalhousie. Partial transcripts, e.g. a portion of a student's record pertaining to registration in a particular degree or faculty only, are not issued.

## Transfer Student

A transfer student is one who is awarded credit towards a Dalhousie degree for academic work completed at a previous university or equivalent institution of higher learning.

## Visiting Student

A person permitted to take classes at Dalhousie for transfer of credit to another university.

## Work Term

Career related work experience required in Co-operative Education programmes. Work terms are usually of 13-16 weeks duration.

## Class Codes

### Numbers

1000-level classes are introductory

2000-4000 level classes are advanced

5000-9000 level are Graduate level (with some exceptions)

### Credit Hours - examples only

0.06 credit hours = 1 full credit

0.03 credit hours = ½ credit

0.00 credit hours = no credit

### Subject Codes

Four letter codes are used to describe the department offering a particular class as follows:

AGRI - Agriculture

ANAT - Anatomy & Neurobiology

ARCH - Architecture

ARTC - Applied Health Services Research

ASSC - Arts and Social Sciences Interdisciplinary

BIOC - Biochemistry

BIOE - Biological Engineering

BIOL - Biology

BIOT - Bioethics

BMNG - Biomedical Engineering

BUSI - Business Administration

CANA - Canadian Studies

CH&E - Community Health & Epidemiology

CHEE - Chemical Engineering

CHEM - Chemistry

CIVL - Civil Engineering

CLAS - Classics

COMM - Commerce

COMR - Comparative Religion

CPST - Complimentary Studies

CSCI - Computer Science

CTMP - Contemporary Studies

DCYT - Diagnostic Cytology

DEHY - Dental Hygiene

DENQ - Dentistry Qualifying

DENT - Dentistry

DISM - Disability Management

DMUT - Diagnostic Medical Ultrasound Technology

ECED - Electrical and Computer Engineering

ECMM - Electronic Commerce

ECON - Economics

EDUC - Education

EMSP - Early Modern Studies Programme

ENGI - Engineering

ENGL - English

ENGM - Engineering Math

ENVE - Environmental Engineering

ENVI - Environmental Studies

ENVS - Environmental Science

ERTH - Earth Sciences

FOSC - Food Science & Technology

FREN - French

GERM - German

HAHP - Health and Human Performance

HEED - Health Education

HESA - Health Services Administration

HINF - Health Informatics

HIST - History

HLTH - Health Professions

HSCE - Health Sciences

HSTC - History of Science and Technology

HUCD - Human Communication Disorders

IDIS - Interdisciplinary Studies

IENG - Industrial Engineering

INTD - International Development Studies

INTE - Interdisciplinary Studies (Graduate)

INWK - Engineering Internetworking

ITAL - Italian

JOUR - Journalism

KINE - Kinesiology

KING - King's Foundation Year Programme

LAWS - Law

LEIS - Leisure Studies

LIBS - Library & Information Studies

MARA - Marine Affairs

MATH - Mathematics

MECH - Mechanical Engineering

MEDI - Medicine

MEDS - Medical Science

METL - Metallurgical Engineering

MGMT - Management

MICI - Microbiology & Immunology

MINE - Mining Engineering

MUSC - Music

NESC - Neuroscience

NUMT - Nuclear Medicine Technology

NURS - Nursing

OCCU - Occupational Therapy

OCEA - Oceanography

ORAL - Oral & Maxillofacial Surgery

PATH - Pathology

PETR - Petroleum Engineering

PGMD - Post-Graduate Medicine

PGPH - Post-Graduate Pharmacy

PHAC - Pharmacology

PHAR - Pharmacy

PHIL - Philosophy

PHYC - Physics

PHYL - Physiology

PHYT - Physiotherapy

PLAN - Urban and Rural Planning

POLI - Political Science

PROS - Prosthodontics

PSYO - Psychology

PUAD - Public Administration

RADT - Radiological Technology

REGN - Registration Course

RSPT - Respiratory Therapy

RUSN - Russian Studies

SCIE - Science

SLWK - Social Work

SOSA - Sociology and Social Anthropology

SPAN - Spanish

STAT - Statistics

THEA - Theatre

TYPR - Transition Year Programme

VISC - Clinical Vision Science

WOST - Women's Studies

# Dalhousie University

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The influence of Nova Scotia's largest university is felt throughout Canada—and well beyond. Founded in 1818, Dalhousie University provides a wide range of programmes from the undergraduate to the doctoral level in a dozen faculties. It offers more than 3,600 classes in over 182 undergraduate, graduate and professional degree programmes, as well as an extensive array of continuing education programmes.

Dalhousie combines a tradition of excellence with learning for tomorrow. The university is proud of its excellent students and its loyal alumni, who play professional and community leadership roles across Canada and around the globe.

Dalhousie is located on a 79 acre campus in the heart of Halifax. Its 15,519 full and part-time students come from across the country and throughout the world. They benefit from personal education in an attractive environment, coupled with all the educational, cultural and recreational advantages of a major university. In addition to its teaching and research facilities, Dalhousie has a system of libraries, student residences, an Arts Centre, an art gallery, a Student Union Building, athletic and recreational facilities and other facilities. Major teaching hospitals, federal and provincial research laboratories and the provincial archives are all close at hand.

In 1997, Dalhousie University created a dynamic new centre of advanced technical education and research in Nova Scotia. It continues the Technical University of Nova Scotia's tradition of leadership in education, research and technology transfer in architecture, computer science, and engineering.

The University of King's College, situated adjacent to the Dalhousie campus, is an affiliated institution, and its students in Arts and Science receive Dalhousie degrees in the name of both institutions. By agreement with Mount Saint Vincent University students have access to various classes and services. Co-operation in a number of academic programmes, in administrative services, and in use of library resources is provided for in working arrangements with Saint Mary's University and other institutions in Halifax. Degrees in agriculture, awarded to students of the Nova Scotia Agricultural College, are awarded by Dalhousie in co-operation with the College.

Dalhousie University is a member of the Association of Universities and Colleges of Canada, the Atlantic Association of Universities, and the Association of Commonwealth Universities.

## Executive Officers

### President and Vice-Chancellor

Tom Traves, BA, MA, PhD

### Vice-Presidents

#### Academic and Provost

Sam Scully, BA, MLitt, PhD

#### Finance and Administration

Bryan Mason, BA

#### Student Services

Eric McKee, BA, MA

#### External

Dale Godsoe, BA, BEd, MEd, LLD (Hon)

## Research

Carl Breckenridge, BSc, MSc, PhD

## Associate Vice-President, Academic

Larry Maloney, B.P.E., BEd, MA, PhD

## Assistant Vice-President, Personnel Services

Michael Roughneen, CPIR, BA, MSc, FIPM

## Deans of Faculties

### Architecture and Planning

Grant Wanzel, BArch, MArch (Toronto)

### Arts and Social Sciences (Acting)

David Schroeder, AMus, BA, MA (Western), PhD (Cantab)

### Computer Science

Nicholas Cercone, BS, MS, PhD

### Dentistry

David Precious, D.S., DDS, (Dal), MSc (Dal), FRCD (c). FADI, FICD, FACD,  
Oral and Maxillofacial Surgery

### Engineering

William F. Caley, BSc, MSc, PhD

### Graduate Studies

Jan Kwak, BSc, MSc, PhD, FCIC

### Health Professions

Lynn McIntyre, MD, MHSc, FRCP(C)

### Law

Dawn Russell, BA, LLB, LLM

### Management

Abolhassan Jalilvand, BA, MA, PhD

### Medicine (Acting)

Harold Cook, BSc, MSc, PhD (Dal), Research

### Science

Keith Taylor, BSc (St.FX), PhD (Alberta)

### College of Continuing Education (Acting)

Andrew Cochrane, BPER, MBA

### College of Arts and Science, Provost

Keith Taylor, BSc (St.FX), PhD (Alberta)

## Administrative Officers

### University Legal Counsel

Karen Crombie, BA, JD

### University Librarian

William Maes, AB, MA, MLS

### University Registrar

Deanne Dennison, BA

### Coordinator of Policy Development

Julia Eastman, BA, MA

### Director of Government Relations

Gillian Wood, BA, MA (Economics)

### Coordinator, Special Projects, President's Office

Kim Thomson, BSA, MSA

## Executive Directors

### Computer and Information Services

John Sherwood, BSc, EP

### Centre for Learning and Teaching

Lynn Taylor, BSc and BEd (Memorial), MA (Dal), PhD (Ottawa)

### Office of Institutional Affairs

Vacant

## Directors

### Alumni and Corporate Relations

Lynne Sheridan, BA

### Annual Giving

Marni Tuttle, BA, BSc

### Arts Centre

Heather McGean, BA

### Athletics and Recreational Services and Dalplex

Al Scott, BPEd, MSc(PED)

### Communications and Marketing

Acting Director

Judy Davidson, BJ (Hon) (Carleton)

### Community and Public Affairs

Director

Ann Janega, BComm, LLB

### Counselling and Psychological Services

Judith Hayashi, BA, MA

### Global Gifts

Linda Crocket, CFRE

### Environmental Health and Safety

William Louch, PhD

### Facilities Management

Director

Jeffrey W. Lamb, BEng, MEng (Royal Military College)

### Financial Services

Ian Nason, BComm

### Health Services

Kim Plaxton, MD (U of T), CCFP (Dal)

### Housing and Conference and Ancillary Services

Heather Sutherland, BSc, MEd

### Student Resources

Suzanne Kolmer

## Board of Governors

Under the University's statutes, the Board of Governors is responsible for the operation of the University. The Board consists of representatives named by the Government of Nova Scotia, the alumni, the Student Union and certain other bodies. Internal regulation of the University is the primary concern of the Senate, subject to approval of the Board of Governors.

The President and Vice-Chancellor is the Chief Executive Officer of the University, responsible to the Board of Governors and Senate for supervision of the University's administrative and academic work.

## Chancellor

Dr. Richard B. Goldbloom, O.C.

## Chancellor Emeritus

Dr. Rueben Cohen

Sir Graham Day

Dr. Ruth Goldbloom

## Officers

Mr. James S. Cowan, Chair

Mr. Murray Coolican, Vice Chair

Mr. Colin Latham

Ms. Cathy MacNutt

Mr. Don Mills, Honourary Secretary

Mr. John C. Risley, Honourary Treasurer

Mr. Jim Spatz

Dr. Tom D. Traves

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Mr. Wesley Campbell

Mr. Gerald A. Clarke

Hon. Lorne Clarke

Mr. Ezra Edelstein

Dr. Mohamed El-Hawary

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Mr. Sunny Marche

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Ms. Suzanne Rosson

Dr. Michael Shepherd

Dr. Alasdair Sinclair

Dr. James Spatz

Mr. Peter Stuart

Ms. Nancy Tower

Mr. Bruce Towler

## Secretary

Mrs. Sharlene Drake

## Observer for Faculty Association

Mr. Ian Flint

## Senate

Senate consists of the President, Vice-President (Academic and Provost), the University Librarian, Deans of faculties, Dean of Henson College, forty-eight elected faculty members, four students elected by the Dalhousie Student Union, a representative of the University of King's College and a representative of the Nova Scotia Agricultural College.

Senate is the academic governing body of the University. Subject to the general approval of the Senate, faculties are responsible for supervision of programmes of study, of teaching and research, and for recommending candidates for degrees, diplomas, and university prizes. In addition, it is responsible for student discipline academic appeals, and faculty appointments, tenure and promotion.

## Chair of Senate

Dr. Mohamed El-Hawary, BEng, PhD

## Vice Chair of Senate

Lloyd Fraser, BA, BEd, MEd, Ed.D

## Secretary of Senate

Denise Sommerfeld, BScN, MSN, RN

# University Regulations

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## General

1. The Senate is charged with the internal regulations of the University, including all matters relating to academic affairs and discipline, subject to the approval of the Board of Governors. Within the general policies approved by Senate, academic requirements are administered by the Faculty concerned.
2. All students must agree to obey all the regulations of the University already made or to be made; in addition to the above University regulations, students must also comply with the regulations of the Faculty in which they are registered, and pay the required fees and deposits before entering any class or taking any examinations. Additionally, students are advised that this Calendar is not an all-inclusive set of rules and regulations but represents only a portion of the rules and regulations that will govern the student's relationship with the University. Other rules and regulations are contained in additional publications that are available to the student from the Registrar's Office and/or the relevant Faculty, Department or School.
3. For the purpose of admission to the University, the place of residence of a student is the place of domicile. This is normally presumed to be the place (country, province, etc.) where the parents' or guardian's home is located. That place remains unchanged unless the Registrar is satisfied that a place of residence is established elsewhere. No person under sixteen years of age is admitted to any class except on the specific recommendation of the admissions committee of the relevant Faculty or School, which shall take into account all aspects of the applicant's preparedness for the class or programme involved, and which may attach such conditions to the applicant's admission as the committee judges appropriate.
4. All students must report their local address while attending the University to the Office of the Registrar, on registration or as soon as possible thereafter. Subsequent changes must be reported promptly. This may be done online at [www.dal.ca/online](http://www.dal.ca/online).
5. E-mail is an authorized means of communication for academic and administrative purposes within Dalhousie. The University will assign all students an official e-mail address. This address will remain in effect while the student remains a student and for one academic term following a student's last registration. This is the only e-mail address that will be used for communication with students regarding all academic and administrative matters. Any redirection of e-mail will be at the student's own risk. Each student is expected to check her or his official e-mail address frequently in order to stay current with Dalhousie communications.
6. Students who change their name while attending Dalhousie must provide proof of name change to the Registrar's Office.
7. Students are bound by the regulations of the home faculty regardless of the faculty in which the student takes classes.
8. In the interests of public health in the University, students are encouraged to have a tuberculin test. This is compulsory for Dentistry, Dental Hygiene, Physiotherapy and Nursing students. Facilities for testing are arranged by the University Health Services.
9. Except for university purposes, transcripts, official, or unofficial, will be issued only on the request of the student, and where appropriate, on payment of the required fee. A student may receive only an unofficial transcript. Official transcripts will be sent on a student's request to other universities, or to business organizations, etc. A transcript is a complete history of a student's academic record at Dalhousie. Partial transcripts, e.g., a portion of a student's record pertaining to registration in a particular degree, faculty or level of study only, are not issued.
10. Students withdrawing voluntarily from the University should consult the individual faculty regulations and the Fees section of this Calendar.
11. When the work of a student becomes unsatisfactory, or a student's attendance is irregular without sufficient reason, the faculty concerned may require withdrawal from one or more classes, or withdrawal from the Faculty. If a student is required to withdraw from a Faculty such a student may apply to another Faculty. However, in assessing the application, previous performance will be taken into consideration.
12. Any graduating student who is unable to appear at the convocation is expected to notify the Registrar in writing prior to May 1, for Spring convocations (or October 1 for Fall convocations), giving the address to which the degree/ diploma is to be mailed. Students whose accounts are delinquent on April 15 will not receive their degree/ diploma parchment nor their transcripts. For October graduation the date is September 1.
13. Students should be aware that certain classes at the University involve required laboratory work where radioactive isotopes are present and are used by students. Since there are potential health risks associated with the improper handling of such radioactive isotopes, Dalhousie University requires that, as a condition of taking a class where radioactive isotopes are to be used, students read and agree to comply with the instructions for the safe handling of such radioactive isotopes. In the event that students do not comply with the instructions for the safe handling of radioactive isotopes, students will receive no credit for the required laboratory work unless other acceptable alternatives are arranged with the instructor. In many cases, alternate arrangements are not possible and students should consider enrolling in a different class.

## Rescission of Acceptance into a Programme

Dalhousie University reserves the right to rescind any acceptance of an applicant into a programme or to rescind an offer of admission of an applicant into a programme. Such rescission shall be in writing and may be made by the President or the Vice-President (Academic) and Provost, in consultation with the appropriate Dean, at any time prior to the applicant's registration being confirmed by the Registrar. Any such rescission shall be reported to the Senate in camera.

## Official Examination Regulations

1. Candidates will not be admitted to the Examination Room more than thirty minutes after the beginning of the examination. Candidates will not be permitted to leave the examination within the first thirty minutes.
2. Candidates are required to present their valid Dalhousie ID card at all examinations scheduled during the official examination periods and sign the signature list when used.
3. No articles such as books, papers, etc. may be taken into the examination room unless provision has been made by the examiner for reference books and materials to be allowed to the students. All books, papers, etc. not specified on the printed paper as well as communication devices must be deposited with the invigilator. Calculators may be used at the discretion of the instructor.
4. Candidates may not leave their seats during an examination except with the consent of the invigilator.
5. Answers to questions must be written on the right hand pages and properly numbered. The left hand pages may be used for rough work, but no sheets may be detached.
6. Each question should be started on a separate page.
7. If more than one book is used, the total number should be marked in the space provided above. The other books should be properly marked and placed inside the first book. All books supplied must be returned to the invigilator.
8. Candidates found communicating with one another in any way or under any pretext whatever, or having unauthorized books, papers, or communication devices in their possession, even if their use be not proved, shall be subject to expulsion.
9. After the first thirty minutes have elapsed, students may hand in their examination book(s) to an invigilator and quietly leave the examination room. Candidates may not leave the examination room during the last fifteen minutes of the examination.

## Policy in the Event that a Formal Examination Cannot be Completed at the Regularly Scheduled Time

Formal examinations, up to three hours in length, are scheduled by the Registrar each December and April during formal examination periods, as laid out in the Calendar. If, in the unusual event that one of these examinations must be postponed or abandoned at short notice, the following policies will apply.

1. If more than fifty percent of the time allocated for the examination has elapsed, students' work up to the premature end of the examination, but prorated for the actual time written, will lead to the mark to be obtained from the formal examination.
2. If less than fifty percent of the time allocated for any examination has elapsed, the examination will be rewritten as soon as possible, normally on a day when examinations are not scheduled. Students will be informed by the Registrar of the time and place of the rewrite on the Web site of the Registrar ([www.registrar.dal.ca](http://www.registrar.dal.ca)).
3. In all cases in which a formal examination cannot be written at its scheduled time and special arrangements must be made, it is essential that faculty ensure that all students in the class are treated fairly and equitably and according to the evaluative criteria in the class description given to students at the beginning of the term. If an examination is terminated as under point #1, any student who feels disadvantaged by not having been able to write an examination for the length specified in the class description, may appeal through the appropriate departmental or school appeal mechanism for an examination of the specified length. Appeals will be in writing and in a timely fashion. If the appeal is granted, arrangements for such a makeup examination will be made between the student and the class professor.
4. If a formal examination cannot be written at its scheduled time, it is the responsibility of students to check the Registrar's Web site for when the examination will be rewritten. Announcements will be made as soon as possible after the original time, normally within 24 hours, and rewrites will normally take place within the regular examination period.

## Retention of Student Work

### Faculties of Architecture and Planning and Engineering

All work executed by students as part of their academic programmes in the Faculties of Architecture and Planning and Engineering automatically becomes the property of the University and may be retained for exhibition or other purposes at any time and for an indefinite period.

### Faculty of Computer Science

The Faculty of Computer Science has the right to retain the original or a copy of any work handed in by students. This will only be used for evaluation or for administrative purposes. The permission of the originator of the work is required if it is to be used in any other way.

## Freedom of Information and Protection of Privacy

The Freedom of Information and Protection of Privacy Act (FOI/POP) provides for the protection of an individual's right to privacy but also requires that certain records be disclosed upon request unless they are exempted from disclosure. The Act requires that the University not disclose personal information if that information would constitute an unreasonable invasion of personal privacy. Applicants to Dalhousie are advised that information they provide along with other information placed in a student file will be used in conjunction with university practices for internal university use and will not be disclosed to third parties except in compliance with the FOI/POP Act or as otherwise required by law.

## Release of Information About Students

The following information is available, without application through the Freedom of Information and Protection of Privacy Act:

### I. Disclosure to students of their own records

1. Students have the right to inspect their academic record. An employee of the Registrar's Office will be present during such an inspection.
2. Students will, on submission of a signed request and payment of a fee where appropriate, have the right to receive transcripts of their own academic record. These transcripts will be marked "ISSUED TO STUDENT". The University will not release copies of transcripts if students owe monies to the University.
3. If transcripts are issued for a student while a senate discipline case is pending and the committee subsequently makes a decision that affects the student's transcript, revised transcripts will be sent to recipients if transcripts are issued while the case was pending.

### II. Disclosure to Faculty, Administrative Officers, and Committees of the University.

Information on students may be disclosed without the consent of the student to University officials or committees deemed to have a legitimate educational interest.

### III. Disclosure to Third Parties

1. The following information is considered public information and may be released without restriction:
  - Name
  - Period of Registration
  - Certificates, Diplomas, Degrees awarded
  - Field of Study (as relates to degree awarded)
  - Hometown and Awards/Distinctions\*\*As indicated in the convocation programme.
2. Information will be released without student consent to persons in compliance with a judicial order or subpoena or as required by federal or provincial legislation.
3. Necessary information may be released without student consent in an emergency, if the knowledge of that information is required to protect the health or safety of the student or other persons. Such requests should be directed to the Registrar.
4. In compliance with Statistics Canada requirements, a student's national personal identification number assigned by the university or college first attended will routinely appear on a student's transcript of record.
5. The Federal Statistics Act provides the legal authority for Statistics Canada to obtain access to personal information held by educational institutions. The information may be used only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information from being released in any way that would identify a student.

Students who do not wish to have their information used are able to ask Statistics Canada to remove their identifying information from the national database.

Students should also be aware that the Maritime Provinces Higher Education Commission (MPHEC) collects data on behalf of Statistics Canada, and that it uses the data for similar purposes. Statistics Canada will notify the MPHEC of any student choosing to have their personal information removed from the national database, and their information will subsequently be removed from the MPHEC's database.

Further information on the use of this information can be obtained from the Statistics Canada Web site: <http://www.statcan.ca> or by writing to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, K1A 0T6.

6. Other than in the above situations, information on students will be released to third parties only at the written request of the student, or where the student has signed an agreement with a third party, one of the conditions of which is access to her/his record (e.g., in financial aid). This restriction applies to requests from parents, spouses, credit bureaus and police.

## Policy on Accessibility for Students with Disabilities

1. Dalhousie University is committed to the goal of providing equal opportunity for qualified students with disabilities. To demonstrate full respect for the academic capacities and potential of students with disabilities, the University seeks to remove attitudinal and environmental restrictions which may hamper or prevent academically-qualified students with disabilities from participating fully in University life. The University understands that persons with disabilities may have different ways of doing things, recognizing that performance is not inferior merely because it is different.
2. The University recognizes, subject to its financial and other resource constraints, that qualified students with disabilities have a right to:
  - 2.1 full access to all educational programmes;
  - 2.2 full access to the educational process and learning environment (including but not limited to classes, laboratories, workshops);
  - 2.3 full access to the University campus; and
  - 2.4 full access to University facilities and services.
3. The University recognizes that qualified students with disabilities have a right to assistance that is individualized with respect to scope and pace, consistent with the student's needs, legitimate academic demands, and the University's capacity to respond.
4. To ensure that qualified students with disabilities may pursue quality post-secondary education, the University shall:
  - 4.1 be proactive in fostering, creating and maintaining a barrier-free environment, including:
    - a) the provision of support services, within reasonable financial and resource limitations; and
    - b) promoting an attitude of respect for persons with disabilities, and
    - c) promoting sensitivity to the needs and abilities of persons with disabilities;
  - 4.2 inform the University community about the services available to qualified students with disabilities and seek to ensure that such services are delivered in ways that promote equity;
  - 4.3 where warranted and without compromising the academic standards, and through the relevant academic authority, modify:
    - a) workload;
    - b) examination procedures;
    - c) other class requirements; and
    - d) scholarship and other financial assistance requirements; and
  - 4.4 take all reasonable steps to consult students with disabilities as fully as possible about decisions relating to matters affecting them.
5. In accordance with provisions in the Human Rights Act, the University may also define essential requirements for professional performance for students in programmes, where these are appropriate, and this policy is not intended to replace or supersede these requirements.
6. Students with disabilities requiring assistance from the University shall:
  - 6.1 initiate contact with the Advisor to Students with Disabilities and make the nature of their disability and/or their needs known; and
  - 6.2 be expected to undertake a reasonable measure of self-advocacy to ensure they are provided with an equal opportunity by Dalhousie University.
7. The responsibility to implement these policies throughout the University rests on all members of the University community, including all faculty, administration, staff, students and the Advisor to Students with Disabilities.

## Procedures Regarding Students with Learning Disabilities

Dalhousie University is committed to providing equal educational opportunities and full participation for students with learning disabilities. These procedures regarding students with learning disabilities derive from the University's Policy on Accessibility for Students with Disabilities as stated above. These students are intellectually capable and possess potential which may not be fully realized without a recognition of their

special needs. We are both morally and legally required to supply such support consistent with the Policy on Accessibility for Students with Disabilities.

### I. Admission

Students with diagnosed learning disabilities who meet the current admission requirements for Dalhousie University may follow the current admission procedures. All new Dalhousie students will receive in the offer of admission a statement indicating that, if they have a learning disability or any other disability for which they will require accommodations or special assistance, they should contact the Advisor to Students with Disabilities, in order to ascertain the degree to which their needs can be met.

Students with diagnosed learning disabilities who do not meet the current admission requirements or who otherwise wish to have their learning disability considered may apply for special consideration as may all other students who have extenuating circumstances. These requests will be made to the appropriate admissions committee, acting in consultation with the Advisor to Students with Disabilities and the other knowledgeable professionals.

The following documentation must be submitted by students who wish to apply for special consideration:

1. Letter(s) of recommendation from the individual(s) most familiar with the applicant's academic performance and/or potential for success at university;
2. A written, oral or electronic statement from the student. In this brief personal statement, students should describe their learning disability, how this affected their grades and the type of assistance they would require while at Dalhousie University;
3. A current (within three years) psychological assessment based on standard diagnostic instruments administered by a registered psychologist documenting the presence of learning disabilities. If a current report is not possible, Dalhousie University may accept an earlier report along with a current opinion (i.e., within the past year) expressed in a letter by a registered psychologist (or individual supervised by a registered psychologist) that the student has a learning disability. This letter should specify the nature, extent and rationale for programme modifications or accommodations that were deemed appropriate in the student's last two years of schooling.

### II. Academic Accommodation for Students with Learning Disabilities

Students requesting academic accommodation will arrange a personal interview with the Advisor to Students with Disabilities. Schools and Faculties will provide relevant Faculty committees and individual Faculty members with fairly specific instruction as to the circumstances in which certain types of accommodation are normally to be made (e.g., the language requirement of the Faculty of Arts and Social Sciences). The Advisor to Students with Disabilities will assist faculty and students in developing reasonable accommodations.

#### A. Documentation Required

The student will provide the Advisor with a current (within three years) psychological report documenting the presence of a learning disability as outlined in Section A. above.

#### B. Procedures Regarding Academic Accommodation

Students are expected to identify themselves as having a learning disability and inform the Advisor to Students with Disabilities as early as possible and preferably before the beginning of the term. They should make this initial contact during office hours and be prepared to discuss strengths, weaknesses and the types of accommodation that may be necessary.

The Dalhousie University Policy on Accessibility for Students with Disabilities will guide the Faculties and the relevant committees in their deliberations. That policy specifies three factors that must be taken into account when considering requests for accommodations from students with disabilities: the needs of the students; preservation of the academic integrity of the programmes; and the ability of the University to provide resources.

### C. Types of Academic Accommodation

The types of academic accommodation provided for students with learning disabilities may vary depending on the nature of the learning disability and the class content. For example, a student may benefit from an oral exam in one subject area, but not in another. It is not unusual for there to be an initial trial-and-error period of finding the best way to evaluate a student's ability to demonstrate mastery of class material.

Accommodations for students with learning disabilities typically can include but are not necessarily limited to the following:

1. Extend the time permitted for a student with a learning disability to earn a degree;
2. Modify programme requirements (e.g., class substitutions);
3. Permit examinations to be proctored, read orally, dictated or typed;
4. Allow extra time for completion of examinations and extend the time for the examination period;
5. Change the test format (e.g., multiple choice to essay);
6. Provide alternative formats for class materials;
7. Permit basic four-function calculators and standard desk dictionaries during examinations;
8. Use alternative methods for students to demonstrate academic achievement (e.g., a narrative tape instead of a journal);
9. Permit review of final drafts of term papers with a proofreader and make changes without altering content; and
10. Use computer software programs to assist in test-taking.

### D. Appeals

Admission and programme appeals by students with learning disabilities will follow the usual procedures of the relevant Faculty at Dalhousie University.

### E. Release of Information About Students

A student will be told before disclosing any information on learning disabilities that such information will be governed by the University Regulations on the Release of Information as indicated in this calendar.

## III. Support Services

Dalhousie University endeavours to provide a broad range of support services to all of its students. Students wishing to obtain assistance from the University shall be expected to undertake a reasonable measure of self-advocacy to ensure that they are provided with the support services necessary. Such support services may include personal counselling, academic counselling, academic advising, and academic skill training.

**NOTE 1:** Accommodation of a student's needs due to disability will be facilitated if the student self-discloses and makes prior arrangements. Accommodation may be hindered if advance notification and/or prior arrangements have not been made

## Policy on Submission of Student Papers

Any instructor may require student papers to be submitted in both written and electronic (computer-readable) form, e.g., a text file on floppy disk or as an e-mail attachment as defined by the instructor. The instructor may submit the material to a third-part computer-based assessment system(s) for the purpose of assessing the originality of the paper. The results of such assessment may be used as evidence in any disciplinary action taken by the Senate.

## Intellectual Honesty

A University should epitomize the quest for intellectual honesty. Failure to measure up to the quest for such a standard can result in an academic offence. The seniority of the student concerned, the presence of a dishonest intent, and other circumstances may all be relevant to the seriousness with which the matter is viewed.

## Examples of Academic Offences

### A. Plagiarism or Self-Plagiarism

Dalhousie University defines plagiarism as the presentation of the work of another author in such a way as to give one's reader reason to think it to be one's own. Plagiarism is a form of academic fraud.

Plagiarism is considered a serious academic offence which may lead to loss of credit, suspension or expulsion from the University, or even the revocation of a degree.

In its grossest form plagiarism includes the use of a paper purchased from a commercial research corporation, or prepared by any person other than the individual claiming to be the author.

Self-plagiarism is the submission of work by a person which is the same or substantially the same as work for which he or she has already received academic credit.

The University attaches great importance to the contribution of original thought to scholarship. It attaches equal importance to the correct attribution of authorities from which facts and opinions have been derived.

The proper use of footnotes and other methods of attribution varies from discipline to discipline. Failure to abide by the attribution standards of the discipline concerned in the preparation of essays, term papers and dissertations or theses may, in some cases, constitute plagiarism.

Students who are in any doubt about the proper forms of citation and attribution of authorities and sources should discuss the matter in advance with the faculty members for whom they are preparing assignments. In many academic departments, written statements on matters of this kind are made available as a matter of routine or can be obtained on request.

### B. Irregularities in the Presentation of Data from Experiments, Field Studies, etc.

Academic research is predicated on the presentation of accurate and honestly derived data. The falsification of data in reports, theses, dissertations and other presentations is a serious academic offence, equivalent in degree to plagiarism, for which the penalties may include revocation of degrees, loss of credits or suspension or expulsion from the University.

Students who are in any doubt about the proper forms of citation and attribution of authorities and sources should discuss the matter in advance with the faculty member for whom they are preparing assignments. In many academic departments, written statements on matters of this kind are made available as a matter of routine or can be obtained on request.

### C. Irregularities in Admissions Procedures

A person who gains admission or assists any other person in gaining admission by any irregular procedure, for example, by falsifying an academic record or by forging a letter of recommendation or by impersonating any other person, commits an academic offence and is liable to a penalty (see Senate Discipline Committee).

### D. Irregularities in Evaluation Procedures

A member of the University who attempts or who assists any other person in an attempt to obtain, by irregular procedures, academic standing in a class related to any degree, diploma or certificate programme, commits an academic offence and is liable to a penalty. Without limiting possible irregularities in evaluation procedures that may be considered by the Senate Discipline Committee, the following examples shall be considered irregular procedures:

1. arranging for or availing oneself of the results of any personation at any examination or test, or,
2. attempting to secure or accepting assistance from any other person at any examination or test, or,
3. having in one's possession or using any unauthorized material during the time that one is writing any examination or test, or,
4. without authorization procuring a copy of an examination, test or topic for an essay or paper, or,

5. in the absence of any enabling statement by the Faculty member in charge of that class, submitting any thesis, essay, or paper for academic credit when one is not the sole author, or,
6. without authorization submitting any thesis, essay or term paper that has been accepted in one class for academic credit in any other course in any degree, diploma or certificate programme.

## Discipline

1. Members of the University, both students and staff, are expected to comply with the general laws of the community, within the University as well as outside it.
2. Alleged breaches of discipline relating to student activities under the supervision of the Dalhousie Student Union are dealt with by the Student Union. Alleged breaches of discipline relating to life in the residences are dealt with by the appropriate Dean or Director of Residence in consultation with the relevant Residence Council. Senate is charged with the authority to deal with cases of alleged academic offenses, see examples above, (as delegated to the Senate Discipline Committee), as well as with certain other offenses that are incompatible with constructive participation in an academic community.
3. On report of a serious breach of the law, or a serious academic offence deemed by the President, or in his or her absence by a Vice-President or the Dean of a Faculty, to affect vital University interests, a student involved may be temporarily suspended and denied admission to classes or to the University by the President, Vice-President or Dean, but any suspension shall be reported to the Senate, together with the reasons for it, without delay.
4. No refund of fees will be made to any student required to lose credit for any class taken, required to withdraw or who is suspended or dismissed from any class or any Faculty of the University.

## Senate Discipline Committee

### I. Composition

The Committee comprises ten representatives of the faculty elected by Senate for staggered three-year terms, one of whom shall be the Chair (chosen annually by the Committee), and five representatives of the student body. A student who is a member of the Judicial Board of the DSU may not at the same time be a member of the Senate Discipline Committee.

The Senate Nominating Committee shall arrange for nominations to fill casual vacancies for the remainder of the second term.

### II. Functions

The Senate Discipline Committee shall:

1. consider all complaints or allegations respecting offenses or irregularities of an academic nature, including those relating to admissions procedures and evaluation procedures, and may impose penalties in cases where the Committee finds an offence or irregularity has occurred;
2. have the power to discipline a student who, before or during the course of the disciplinary process involving him or her but prior to adjudication, has:
  - i) been compelled to withdraw academically;
  - ii) chosen to withdraw from the class, programme or University prior to being disciplined;
  - iii) chosen not to register at the University;
3. assume jurisdiction when a complaint or allegation respecting offenses or irregularities of an academic nature are brought to its attention by the Secretary of Senate; complaints or allegations may be made by faculty or other evaluators of academic work done by students; a panel of Student-Discipline Officers is available to assist and advise evaluators, and guidelines for evaluators are set out in the document entitled Guidelines for Academic Evaluators Regarding Violations of Academic Regulations by students;
4. conduct open hearings according to the rules of natural justice and such other procedures as the Committee may decide in advance, with due notice to all interested parties. A panel of three faculty and two students shall hear each complaint, including complaints made under the Code of Student Conduct. The Committee Chair or alternate chosen by and from the Committee shall chair each hearing;

5. evaluate the evidence of innocence or guilt of an accused student. This evaluation shall include the premise that the more senior the student in terms of chronological age, year of university registration, extent of other exposure to university rules and regulations at Dalhousie University or elsewhere, the less credible are assertions of ignorance or innocence and the stronger is the case for a more severe penalty than would be imposed on a less senior student;
6. report its findings, and any penalty imposed to the Secretary of Senate who shall forward a copy of the report to the student; if the alleged offender is not a student, a copy shall also be sent to the Vice-President (Academic and Provost)

### III. Appeals

Appeals from decisions of the Senate Discipline Committee may be made to a Senate Discipline Appeal Board, but only on the limited grounds: (a) denial of natural justice; (b) disputed jurisdiction of the Senate Discipline Committee. Decisions of a Senate Discipline Appeal Board are final and binding on all parties. At the time of filing the appeal a student must specifically indicate the facts and allegations that will form the basis of the appeal. An appeal will be limited to matters so alleged.

Where the rules of a faculty, such as Health Professions, expressly provide that suitability, fitness, or aptitude for the practice of the profession is a requirement for advancement or graduation, or both, and a Faculty determines that a student should be suspended or dismissed or otherwise should not advance or graduate because of unsuitability for the relevant profession, an appeal from the Faculty decision may be made to an ad-hoc appeal committee established by the Senate Steering Committee. The Ad-hoc Appeal Committee shall: (1) hear an appeal by a student from the decision of a Faculty regarding suitability, fitness or aptitude for the practice of the relevant profession when: a) the student has exhausted the approved appeal regulations and procedures of the relevant Faculty; and b) the student alleges that there were irregularities or unfairness in the application of the regulations in question. The Ad-hoc Appeal Committee shall not hear appeals: a) by students on a matter involving a requested exemption from the application of Faculty or University regulations or procedures; b) on substantive aspects of a finding of unsuitability.

### IV. Penalties

The range of penalties which may be imposed by the Senate Discipline Committee be circumscribed only by the requirement that such penalty or penalties be of an academic nature and, without restricting the generality of the foregoing, may include any one or more of:

1. notation of the fact of discipline on the offender's transcript for a period of one (1) or more years, but not exceed five (5) years;
2. repeat of the assignment that triggered the discipline;
3. a failing grade or mark or assessment in the piece of work triggering the discipline;
4. failure of the class or seminar or programme;
5. failure of the academic year;
6. suspension for an academic term or year (to a maximum suspension of three (3) academic years);
7. expulsion from the University;
8. loss of a current or continuing scholarship, or both, or loss of eligibility to receive or to maintain scholarships or prizes or bursaries; and
9. removal from the Dean's List.

PLEASE NOTE: If transcripts are issued for a student while a Senate Discipline case is pending, and the Committee subsequently makes a decision that affects the student's transcript, revised transcripts will be sent to recipients of transcripts issued while the case was pending.

## Code of Student Conduct

### I. Commentary

1. Dalhousie University is a community of faculty, support staff and students, involved in teaching, research, learning and other activities. Students are members of the University for the period of their registration in the academic programme to which they have been admitted and as such assume the responsibilities that such registration entails.

2. The University does not stand *in loco parentis* to its student members, that is, it has no general responsibility for the moral and social behaviour of its students, as if they were its wards. In the exercise of its disciplinary authority and responsibility, the University treats students as free to organize their own personal lives, behaviour and associations subject only to the law and to University regulations that are necessary to protect the integrity of University activities, the peaceful and safe enjoyment of University facilities by other members of the University and public, the freedom of members of the University to participate reasonably in the programmes of the University and in activities in or on the University's premises, or the property of the University or its members. Strict regulation of such activities by Dalhousie University is otherwise neither necessary nor appropriate.
3. University members are not, as such, immune from the criminal and civil laws of the wider political units to which they belong. Provisions for non-academic discipline should not attempt to shelter students from their civic responsibilities nor add unnecessarily to these responsibilities. Conduct that constitutes a breach of the Criminal Code or other statute, or that would give rise to a civil claim or action, should ordinarily be dealt with by the appropriate criminal or civil court. In cases, however, in which criminal or civil proceedings have not been taken or would not adequately protect the University's interest and responsibilities as defined below, proceedings may be brought under a discipline code of the University.
4. The University must define standards of student behaviour and make provisions for student discipline with respect to conduct that jeopardizes the good order and proper functioning of the academic and non-academic programmes and activities of the University or its faculties, schools or departments, or that endangers the health, safety, rights or property of the University or its members or visitors.
5. The University may also define standards of professional conduct for students in programmes where these are appropriate, and this Code is not intended to replace or supersede such standards.

## II. Definitions

1. In this Code, the word "premises" includes lands, buildings and grounds of the University, or other places or facilities used for the provision of the University's programmes or services or for University-approved events and activities.
2. In this Code, "student" means a person:
  - i) engaged in any academic work or placement which leads to the recording and/or issue of a mark, grade or statement of performance by the appropriate authority in the University or another institution; and/or
  - ii) registered in, enrolled in, or attending any course or class, or otherwise participating as a learner in any activity which entitles the person to the use of a University library, library materials, library resources, computer facility or dataset.
3. In this Code, the words "Dalhousie University" refer to Dalhousie University and include any institutions affiliated with it, where such inclusion has been agreed upon by the University and the affiliated institution, with respect to the premises, facilities, equipment, services, activities, students and other members of the affiliated institution.
4. Unless otherwise stated, a student will only be liable for conduct that she or he knew or ought reasonably to have known would constitute conduct prohibited under this Code.
5. Nothing in this Code shall be construed to prohibit peaceful assemblies and demonstrations, or lawful picketing, or to inhibit freedom of speech.

## III. Offences

The following conduct shall be deemed to be an offence under this Code, when committed by a student of Dalhousie University, provided that such conduct:

1. occurs on premises of Dalhousie University or elsewhere in the course of activities sponsored by Dalhousie University or by any of its faculties, schools or departments; and
2. is not specifically assigned to another disciplinary body within the University as in the case of sexual harassment as described in the Policy and Procedures: Sexual Harassment; and
  - i) has not already been dealt with as failure to meet standards of professional conduct as required by a college, faculty or school; or

- ii) is not subject to the disciplinary authority of the Dalhousie Student Union; or
- iii) is not subject to action under a residence discipline policy unless some non-residence University interests are deemed to be involved, in which case the President may specifically authorize proceedings under this Code.

### A. Offences Against Persons

1. No student shall assault another person sexually or threaten any other person with sexual assault.
2. No student shall otherwise assault another person, threaten any other person with bodily harm, or cause any other person to fear bodily harm.
3. No student shall create a condition that unnecessarily endangers the health or safety of other persons.
4. No student shall threaten any other person with damage to such person's property, or cause any other person to fear damage to her or his property.

### B. Disruption

No student shall undertake by action, threat or otherwise, to disrupt, obstruct or adversely affect any activity organized by Dalhousie University or by any of its faculties, schools or departments, or the right of another person or persons to carry on their legitimate activities, to speak or to associate with others.

### C. Offences Involving Property

1. No student shall take without authorization, mis-use, destroy or damage the property or premises of Dalhousie University, or property that is not her or his own, or information or intellectual property belonging to Dalhousie University or to any of its members.
2. No student shall deface the property of Dalhousie University.
3. No student shall possess the property of Dalhousie University, property in the custody of Dalhousie University, or property that is not her or his own, if the student knows that property to have been appropriated without authorization.
4. No student shall create a condition that unnecessarily endangers or threatens destruction of the property of Dalhousie University or of any of its members.

### D. Unauthorized Use of University Facilities, Equipment or Services

1. No student shall use any facility, equipment or service of the University, or enter or remain on any premises, to which he or she does not have legitimate access, or contrary to the expressed instruction of a person or persons authorized to give such instruction, unless the student has good reason for doing so.
2. No student shall gain access to or use any University computing or internal or external communications facility to which legitimate authorization has not been granted. No student shall use any such facility for any commercial, disruptive or unauthorized purpose, or in any other way that is incompatible with the principles in the Guide to Responsible Computing.
3. No student shall mutilate, misplace, misfile, or render inoperable any stored information such as books, film, data files or programmes from a library, computer or other information storage, processing or retrieval system.

### E. Aiding in the Commission of an Offence

No student shall encourage or aid another student in the commission of an offence defined in this Code, or encourage or aid behaviour by a non-student which, if committed by a student, would be an offence under this Code.

### F. Alcohol and Drug Use

No student shall contravene the Liquor License Act of Nova Scotia or a provision of the Campus Alcohol Policy, nor shall any student possess, use or sell a drug to which access is restricted by the Narcotics Control Act.

### G. False Information and Identification

1. No student shall knowingly furnish false information to any person or office acting on behalf of the University.

2. No student shall forge, alter or misuse any document, record or instrument of identification.

#### **H. Unauthorized Possession of a Firearm or Weapon**

No student shall possess a firearm or other weapon on the University premises without the specific written permission of the Chief of Security.

#### **I. Contravention of University Regulations**

When a rule, regulation or policy of the University prohibits or proscribes certain conduct but does not provide any penalty for breaches of the rule, regulation or policy, breaches shall be dealt with under this Code.

#### **J. Other**

No student shall contravene any provision of the Criminal Code or any other federal, provincial or municipal statute on the premises of the University or in the course of the University's programmes or services, or University-approved events or activities.

### **IV. Procedures**

1. Whenever possible and appropriate, reason and moral suasion shall be used to resolve issues of individual behaviour before resort is made to formal disciplinary procedures.
2. Any person may make a complaint against any student for misconduct. A complaint shall be prepared in writing and directed to the Vice-President, Student Services. Any complaint should be submitted as soon as possible after the event takes place. All complaints shall be presented to the accused student in written form.
3. The Vice-President, Student Services, or designate shall conduct an investigation to determine if the complaint has merit and/or if it can be disposed of informally by mutual consent of the parties involved on a basis acceptable to the Vice-President, Student Services. The Vice-President, Student Services, shall invite the President of the Student Union or his or her designate to participate in any attempts to resolve the matter informally. If an informal disposition of the complaint results, such disposition shall be final and there shall be no subsequent proceedings.
4. If the complaint cannot be resolved informally through the procedures described in section 3, or if in the judgment of the Vice-President, Student Services, it is not appropriate for the complaint to be so resolved, the Vice-President, Student Services, shall refer the complaint to the Senate Discipline Committee for a formal hearing.
5. Hearings shall be conducted by the Senate Discipline Committee according to procedures determined by the Committee.
6. The President or designate shall appoint a person to present the complaint.
7. If a student fails to appear at a hearing, the hearing may proceed, provided that the student has been given adequate notice. Except in the case of a student charged with failing to obey the summons of the Committee or University official, no student may be found to have violated the Student Code solely because the student failed to appear before the Committee. In all cases, the evidence in support of the complaint shall be presented and considered.

### **V. Sanctions**

1. In each case in which the Senate Discipline Committee determines that a student has violated the Student Code, the sanction(s) shall be determined and imposed by the Committee.
2. The following sanctions may be imposed upon any student found to have violated the Student Code:
  - i) Warning—A notice in writing to the student that the student is violating or has violated institutional regulations.
  - ii) Probation—A written reprimand for violation of specified regulations. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any institutional regulation(s) during the probationary period.
  - iii) Loss of Privileges—Denial of specified privileges for a designated period of time.
  - iv) Fines—Previously established and published fines may be imposed.
  - v) Restitution—Compensation for loss, damage or injury. This may take the form of appropriate service and/or monetary or material replacement.

- vi) Discretionary Sanctions—Work assignments, service to the University or other such discretionary assignments that are considered appropriate by the Discipline Committee.
  - vii) Conditions—Conditions may be imposed upon a student's continued attendance.
  - viii) University Suspension—Suspension of the student from the University for a specified period of time, after which the student is eligible to return. Conditions for readmission may be specified.
  - ix) University Expulsion—Permanent separation of the student from the University.
3. More than one of the sanctions listed above may be imposed for any single violation.
  4. Other than expulsion from the University and suspension for the duration of its effect, disciplinary sanctions shall not be made part of the student's academic record, but shall be kept on file in the Office of the Vice-President, Student Services, for use in the event of further breaches of this Code.
  5. No student found guilty of an offence under this Code shall refuse to comply with a sanction or sanctions imposed under the procedures of this Code. Such refusal will constitute grounds for the imposition of additional sanctions.
  6. The Committee may direct that a sanction be held in abeyance if a student's registration at the University is interrupted for any reason.

### **VI. Interim Suspension**

In the following circumstances, the President of the University, or a designate, may impose an interim suspension prior to the hearing before the Committee.

1. Interim suspension may be imposed only: (a) to ensure the safety and well-being of members of the University community or preservation of University property; (b) to ensure the student's own physical or emotional safety and well-being; or (c) if the student poses a threat of disruption or of interference with the normal operations of the University.
2. During the interim suspension, students may be denied access to specified campus facilities (including classes) and/or any other University activities or privileges for which the student might otherwise be eligible, as the President or the designate may determine to be appropriate.
3. A student who is the subject of an interim suspension may request a hearing before the Senate Discipline Committee on the issue of the interim suspension itself. This request shall be submitted in writing, with reasons, to the Secretary of Senate. The Committee shall hear the matter, including submissions by the President or designate, within ten working days, and shall have the authority to confirm, negate, or alter the terms of the interim suspension.

### **Protection of Property**

1. Dalhousie University is the owner and/or occupier of the lands and buildings which comprise its campuses. In addition to all other processes set out in this Calendar (including the Code of Student conduct), the University reserves the right to exercise all rights and remedies available to it pursuant to any statute, by-law, regulation, ordinance, order, or otherwise, in order to protect campus property and those who use it.
2. Without limiting the foregoing, Dalhousie University may issue a notice against a student pursuant to the *Protection of Property Act* prohibiting entry to all or part of the campuses or prohibiting a particular activity or activities on all or part of the campuses, where circumstances warrant. Such a notice may be issued either separately or in conjunction with the procedures set out in the Code of Student Conduct. The notice may be in force for the period stated in the notice which will normally be for up to one calendar year. If considered appropriate by the Vice-President, Student Services, a notice may be renewed for further periods.
3. A notice under the *Protection of Property Act* may also be issued by Dalhousie University in relation to the Student Union Building at the request of the Student Union. In the case of urgent or emergency situations, such a notice may be issued immediately. If the Student Union request is to have a prohibition extend beyond seven (7) days for a registered Dalhousie University student, the Student Union shall

make a written request to the Vice-President, Student Services, providing detailed reasons for the request and the process followed leading up to the request for the notice, including details of when the student was advised that his or her behaviour or activities were inappropriate and ought to cease, the reasons provided to the student, and whether the student was afforded the opportunity to respond or to rectify behaviours or cease the inappropriate activity.

4. A Dalhousie University student may appeal any notice issued against him or her under the *Protection of Property Act* in writing to the Vice-President, Student Services.

## Suspension or Dismissal from a Programme on the Grounds of Professional Unsuitability - Faculty of Health Professions

The Faculty of Health Professions, acting through its Committees on Studies at the School/College and Faculty levels, and in consultation with the Directors and Dean, may suspend or terminate a student from a programme if the student is judged to be unsuitable for the profession in which s/he is studying. Because of the nature of the study and practice of the various health professions, which places care givers in a position of special trust, certain impairments or some types of conduct unbecoming to a member of a health profession may be grounds for suspension or dismissal.

The following list includes examples of behaviours that might indicate unsuitability for the various health professions. The nature of these behaviours is such that, should any of them ever be repeated, grievous harm could be caused to clients. This list should not be considered to be all inclusive:

1. a criminal act (e.g., assault, sexual assault, fraud, and drug trafficking) which according to established Faculty processes was determined to be of such a nature as to bring disrepute to the profession, or by which in the opinion of the Faculty, the student demonstrated poor judgment, lack of integrity or (other) unsuitability for the profession; or evidence that, on the balance of probability, the student had committed such an act;
2. being under the influence of alcohol or drugs while participating in client care, any other professional activity, or any activity related to the practice of the health profession;
3. in accordance with provisions of the Nova Scotia Human Rights Act, the occurrence of a health condition that impairs essential performance required for the health profession;
4. unethical behaviour as specified by the code of ethics/standard of practice of the health profession.

The student's situation will be considered with discretion throughout the investigation of the allegation of unsuitability and these deliberations shall determine whether suspension, dismissal or neither is recommended. The principles of natural justice and due process will be observed in all investigations.

Any member of the University community can bring to the attention of the Director behaviours that are deemed unsuitable. These behaviours will be investigated and allegations heard.

Appeals will follow the appeal procedure for academic matters within the Faculty of Health Professions notwithstanding that the criteria are different. At the University level, appeals will require formation of an *ad hoc* Senate Committee.

## Guide to Responsible Computing

In recognition of the contribution that computers can make to furthering the educational and other objectives of the University, this Guide is intended to promote the responsible and ethical use of University computing resources. It is in the best interests of the community as a whole that these resources be used in accordance with certain practices which ensure that the rights of all users are protected and the goals of the University are achieved.

This Guide applies to all computer and computer communication facilities owned leased, operated, or contracted by the University. This includes word processing equipment, micros, mainframes, minicomputers, and associated peripherals and software, regardless of whether used for administration, research, teaching, or other purposes.

It should be noted that system administrators of various campus computing facilities and those responsible for the computer access privileges of others may promulgate regulations to control use of the facilities they regulate. System administrators are responsible for publicizing both the regulations they establish and their policies concerning the authorized and appropriate use of the publicly available equipment for which they are responsible.

### A. Basic Principles

Individuals should use only those University computing facilities they have been authorized to use. They should use these facilities:

- 1) with respect to the terms under which they were granted access to them;
- 2) in a way that respects the rights of other authorized users;
- 3) so as not to interfere with or violate the normal, appropriate use of these facilities;
- 4) so as not to impose unauthorized costs on the University without compensation to it.

### B. Elaboration

1. Individuals should use only those University computing facilities they have been authorized through normal University channels to use. They should use these resources in a responsible and efficient manner consistent with the objectives underlying their authorization to use them.
2. Individuals should respect the rights of other authorized users of University computing facilities. Thus, they should respect the rights of other users to security of files, confidentiality of data, and the benefits of their own work. Users should respect the rights of others to access campus computing resources and should refrain from:
  - i) using the computer access privileges of others without their explicit approval;
  - ii) accessing, copying, or modifying the files of others without their permission; and
  - iii) harassing others in any way or interfering with their legitimate use of computing facilities.
3. Individuals should respect the property rights of others by refraining from the illegal copying of programs or data acquired by the University or other users or putting software, data files, etc. on University computers without the legal right to do so.
4. Individuals should not attempt to interfere with the normal operation of computing systems or attempt to subvert the restrictions associated with such facilities. They should obey the regulations affecting the use of any computing facility they use.

### C. Disciplinary Actions

Reasonable suspicion of a violation of the principles or practices laid out in this Guide may result in disciplinary action. Such action will be taken through normal University channels.

Nothing in this Guide diminishes the responsibility of system administrators of computing services to take remedial action in the case of possible abuse of computing privileges. To this end, the system administrators with the approval of the President and with due regard for the right of privacy of users and the confidentiality of their data, have the right, to suspend or modify computer access privileges, examine files, passwords, accounting information, printouts, tapes, and any other material which may aid in an investigation of possible abuse. Whenever possible, the cooperation and agreement of the user will be sought in advance. Users are expected to cooperate in such investigations when requested. Failure to do so may be grounds for cancellation of computer access privileges.

## Faculty of Dentistry

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Saulnier, Y., BSc (Acadia), DDS (Dal), Prosthodontics  
Seth, S., BSc (Dal), DDS (Dal), Prosthodontics  
Shaffner, V., DDS (Dal), MScD (Ind.) MRCD(C), Prosthodontics  
Sharma, S., BSc, DDS (Dal), Patient and Community Care  
Shaw, W., BSc, (Dal), DDS (Dal), Prosthodontics  
Therault, B., BSc (Mount), DDS (Dal), Prosthodontics  
Usher, G., BSc (MtA), DDS (Dal), Cert in Endo (Tufts), Endodontics  
West, D., BSc (MtA), DDS (Dal), Prosthodontics  
Whiting, C., BSc (Dal), BA (Dal), BEd (Dal), MEd (Dal), DDS (Dal), Prosthodontics

## I. Introduction

The Maritime Dental College was founded in 1908 and quartered in rooms provided by Dalhousie University in the Forrest Building. In 1912 the Maritime Dental College became the Faculty of Dentistry of Dalhousie University. The Dentistry building, which was opened in 1958 and extensively enlarged and renovated in 1980, serves as the principle clinical, didactic teaching and research base of the Faculty. Basic science classes of the Dentistry programmes are offered by Departments of the Medical Faculty located in the Sir Charles Tupper Medical Building.

The educational programme is supplemented by clinics and demonstrations in metro hospitals and Faculty operated community-based clinics. These arrangements enable students to obtain extensive and varied clinical instruction and experience.

In addition to the DDS programme the Faculty also offers a two-year programme leading to a Diploma in Dental Hygiene, and a two-year Qualifying programme which is one of the requirements for graduates of foreign dental programmes for certification by the National Dental Examining Board of Canada. A six-year combined graduate programme leading to the Degrees of MD/MSc in Oral Maxillofacial Surgery and a three year Master of Applied Science, Biomedical Engineering and Diploma in Prosthodontics are offered through the Faculty of Graduate Studies.

The Faculty also has an office for Continuing Education which arranges short classes primarily for dentists and dental hygienists. Alumni are a vital part of the Faculty through the office of Alumni Affairs.

## II. Doctor of Dental Surgery Programme

### A. Admission

#### 1. Minimum Academic Requirements

While enrolled in a regular bachelor's degree programme whose sole entrance requirement is Nova Scotia grade 12 or its equivalent, completion of the following by the end of the Spring Session of the year of expected entry to the Faculty of Dentistry is required: a minimum of 10 full-year academic courses\* (usually during two years of full-time attendance), including university classes of a full academic year's\* duration in: Introductory Biology (with lab), Introductory Chemistry (with lab), Introductory Physics (with lab), and Organic Chemistry (with lab). Other classes required are: Introductory Microbiology, Introductory Biochemistry, and Vertebrate Physiology as well as three full year academic courses\* chosen from the humanities and/or social sciences, one of which must involve a significant written component. Courses must have been completed within a reasonable time period prior to admission. Credit will be given for correspondence courses that are offered by a university as credit courses. Such courses must have their content, sequence, format and testing well defined.

A current Level C CPR - Basic Rescuer certificate is required prior to admission.

\*a combination of two one-term academic courses in the same discipline is considered equivalent to one full-year academic course.

The Faculty of Dentistry considers it desirable that all students intending to proceed to the study of dentistry should acquire a broad academic background and attain facility in the use of the written and spoken English. Therefore, while minimum entrance requirements are established, students are encouraged to proceed to a Bachelor's degree before seeking admission to the Faculty of Dentistry, particularly if there is any intention or likelihood of proceeding to graduate programmes in dentistry or associated sciences. This statement is not to be interpreted to mean that any penalty will be imposed upon those who do not have more than the stated minimum requirements and truly outstanding candidates may be admitted after completion of the minimum entrance requirements.

Prior to or after making application to the first year of the DDS programme, applicants are strongly encouraged to spend time in the office of a dentist to learn about the dental profession.

Because of the difficulty in comparing marks and grades from the various universities from which dentistry students are drawn, it is not possible to state a minimum standard that ensures serious consideration for admission. Completion of advanced level courses with grades which are better than average is an indication of ability to succeed academically as a dentistry student. An academic record which shows failed or repeated courses, courses passed with low grades or supplementary examinations,

particularly in the two years prior to anticipated entry to dental school, makes the prospect of admission unlikely.

Applicants with the best academic record have the greatest chance of admission. Nonetheless, the Admissions Committee can and does make significant use of non-academic factors in deciding which applicants are admitted (e.g. Dental Aptitude Test, interviews, references).

For the information of potential applicants, the following is provided showing the characteristics of the applicants and entering class of 2003/2004.

Number of applicants: 205

Number enrolled: 36 (17 males, 19 females)

Age of Students: Range: 21-43, Mean 24

Residence: Atlantic Provinces - 31; Other Canadian Provinces - 2; International - 3 (USA);

Mean DAT, reading comprehension - 18; Mean DAT, PAT - 19; Mean DAT, chalk carving - 17; Mean DAT, science average - 19; Mean University final two year - 3.7; Mean University higher sciences average - 3.7.

### B. Application Procedure

The Faculty of Dentistry application form must be submitted to the Office of the Registrar by December 1. Applications from all students, including those who have attended Dalhousie or King's must be accompanied by a \$70.00 admission fee, which is not refundable and is not applicable to tuition fees. A new application form must be submitted in each year in which application is made.

Applications must be complete before they will be considered by the Admissions Committee. Applications submitted by the deadline may be completed at any time up to June 30, however, applicants are encouraged to submit supporting documents by February 1. Applications completed after February 1 are considered when completed if unfilled places remain in the entering class. The following documentation must be submitted in support of the application:

1. Faculty of Dentistry application form
2. Applicants must submit results from an approved Dental Aptitude Testing Programme. Applicants must complete the Dental Aptitude Test no later than February to be considered for admission to the following September. Information regarding the Canadian Dental Aptitude Testing Programme may be obtained from the Office of the Registrar, from the Faculty of Dentistry, or by writing to the Administrator, Dental Aptitude Test Programme, Canadian Dental Association, 1815 Alta Vista Drive, Ottawa, Ontario K1G 3Y6.
3. Official transcripts in support of the applicant's academic record must be forwarded by the institution or institutions at which the applicant completed his pre-professional studies. If the applicant is still engaged in university studies, it would be advantageous to forward an interim transcript and a final transcript must be forwarded on completion of these credits. Dalhousie University regards an applicant's failure to disclose all his/her previous academic experiences to be an academic offence which could lead to subsequent dismissal from the University. Applicants must ensure that all successful or unsuccessful university attendance is indicated on the application form.
4. Three completed confidential evaluation forms (provided in the application package) in regard to the applicant's character are to be forwarded directly to the Faculty of Dentistry, Dalhousie University Admissions Office, Halifax, NS, B3H 3J5. Two of these forms must be from a university faculty member who has taught the applicant recently or from a recent employer if the applicant is employed. The remaining form should be from someone (not a relative) known to the applicant.
5. Competitive applicants will be required to attend an admissions interview.

An application will not be considered if the applicant has been required to withdraw from studies at any other university dental or medical programme at the request of the Faculty of that Institution, unless the application is supported by a recommendation from the Dean of that programme.

On notice of acceptance to the Faculty of Dentistry, Canadian applicants must deposit with the Registrar the sum of \$200.00 before a specified date.

This amount is credited toward tuition fees if the student registers, but is not refundable if he/she withdraws.

Accepted students must obtain a current level of C CPR-Basic Rescuer certificate prior to enrolment.

The admissions procedures may be amended without notice by the Faculty of Dentistry.

### C. Place of Residence of Students

The number of students admitted in any one year is limited by the availability of physical facilities.

Preference is given to residents of the Atlantic Provinces but applications from well qualified applicants from other provinces and countries may be considered.

To qualify as a permanent resident of any province, an applicant must meet the following criteria:

- i. his/her parent(s), guardian, or spouse must reside in that province on a permanent basis; or
- ii. if the applicant is independent of his/her parent(s) or guardian, he/she must have lived and worked on a full-time basis in that province (not attending school on a full-time basis) for a minimum of one full year. or
- iii. an applicant whose parent(s), guardian, or spouse do not meet the residency requirements as a direct result of a recent employment transfer, either into or out of a particular province would be given the choice (either the province of immediate former or future residency) of his/her province of residence.

### D. Assessment of Applicants with an International Educational Background

The Faculty of Dentistry will consider applications to the Doctor of Dental Surgery degree programme from individuals who have received their former education outside the Canadian educational system. Such applicants will be assessed on an individual basis and may be required to fulfil specific criteria, such as, but not confined to those outlined below.

1. If the applicant's first language is not English, he/she must complete an English language proficiency test such as the TOEFL (Test of English as a Foreign Language) with a minimum score of 580 or computer-based score of 237; or the TWE (Test of Written English) with a minimum score of 5.0; or IELTS score of 7.0; or MELAB score of 90.
2. Complete an approved Dental Aptitude Test.
3. Original supporting documents from previously completed education must be provided, including course descriptions, and explanation of the grading system used, and course standings.
4. Completion of the prerequisite university study in North America.

## III. Qualifying Programme

The certification process of the National Dental Examining Board of Canada (NDEB) requires graduates of programmes not accredited by the Commission on Dental Accreditation of Canada, i.e., Non-Canadian and Non-USA graduates, to be certified by successfully completing a two-year "Qualifying Programme" and the same NDEB of Canada examinations as those taken by Canadian and USA graduands and graduates.

The purpose of the Qualifying Programme is to provide an educational opportunity for Non-Canadian and Non-USA dentists to qualify to take and to prepare for the NDEB certification examinations.

The Faculty of Dentistry accepts up to eight students into the Qualifying Programme each year.

Applicants must be Canadian citizens or residents.

### Application Procedure

Application forms, accompanied by a \$70.00 application fee, must be submitted to the Office of the Registrar, Dalhousie University by September 1. The following documentation must be submitted by October 1 at the latest in support of an application.

1. Dental graduation certificate or equivalent.

2. University transcript (or equivalent) and calendar course descriptions, indicating the courses completed for the dental degree referred to in No. 1.
3. Demonstrated proficiency in English, e.g. An acceptable score in English tests such as TOEFL - 580 or computer-based 237; IELTS - 7.0; MELAB - 90; TWE - 5.0.
4. Results of the Eligibility Examination (EE). The Eligibility Examination is coordinated by the Association of Canadian Faculties of Dentistry / l'Association des facultés dentaires du Canada (ACFC/AFDC) and is the initial screening examination for acceptance into one of the Qualifying Programmes. Inquiries regarding the Eligibility Examination should be directed to the Central Office of the Association of Canadian Faculties of Dentistry / l'Association des facultés dentaires du Canada, telephone number (613) 237-6505. Information is also available at Web site: acfd.ca. Results of the September Eligibility Examination may be submitted to the Faculty of Dentistry after October 1.

Competitive applicants will be required to complete an admissions interview and further evaluations at the Faculty of Dentistry. Inquiries regarding the Qualifying Programme at Dalhousie University should be directed to the Office of the Dean, telephone number (902) 494-1400.

Accepted students will be required to submit a tuition deposit before a specified deadline. This amount is credited toward tuition fees if the student registers, but is not refundable if he/she withdraws. Accepted students must obtain a current level C CPR Basic Rescuer certificate prior to enrolment.

## IV. Academic Regulations

The following section describes academic regulations within the Faculty of Dentistry. More detailed information is provided to each student at the beginning of the academic year in the Academic Policy Manual and the Clinic Policy Manual. These Policy Manuals contain information for students and faculty members on the following areas: Evaluation of Students, Grade Procedures, Remedial Opportunities, Supplemental Examinations, Promotion and Graduation, Examination Regulations, Appeal Procedures, Course Waivers, Absences, Senate Discipline, Student Course Evaluation and Clinic Protocol and Procedures.

### A. Academic Programme

The course for the degree of Doctor of Dental Surgery extends over four years. The course for the Qualifying Programme extends over two years. It is to be distinctly understood that the regulations regarding courses of study, examinations, fees, etc., contained in this calendar are intended for the current year only, and that the University does not hold itself bound to adhere absolutely to the curriculum and conditions laid down.

### B. Academic Year - DDS Programme

The academic year for years one and two commences in early September and continues until the latter part of May. The academic year for year three commences in early September and continues to mid-June. The academic year for the fourth-year begins in mid-June (with a four-week break in July/August) and terminates in the early part of May. Late registration will be permitted only under most exceptional circumstances, if approved by the Dean. Total length of the programme is currently 144 weeks in actual attendance: two 35.5-week sessions of two terms each, a 37-week session of three terms in third-year, and a 38-week session of three terms in the fourth year.

### C. Academic Year - Qualifying Programme

The academic year for year one commences in early May and continues mid-June of the following year. The academic year for year two commences in mid-June (with a four-week break in July/August) and terminates in the early part of May. Late registration will be permitted only under the most exceptional circumstances, if approved by the Dean. Total length of the programme is currently 91.5 weeks in actual attendance: one 53.5 week session of 4 terms in the first year and one 38 week session of three terms in second year.

## D. Course Outlines and Programme Changes

Before the beginning of term, each Course Director must provide a copy of the course outline, including evaluation methods, according to University and Faculty format with any individual additions, to the Office of the Associate Dean for Academic Affairs. Students will be provided with a course outline by the instructor at the first meeting of the class.

Programme changes as to content, requirements, etc., may be necessary and may not be reflected in a given edition of the Calendar. Such changes will be included in the course outline provided to students at the first meeting of the class. Instructors may make changes to course outlines at any time. However, if these changes affect any of the following areas, at least two-thirds of enrolled students must approve the changes in order for them to be valid: (a) evaluation; (b) weight of individual evaluation components; (c) examination requirements with a value of 10% or greater.

## E. Course Waiver Policy

Course waivers may be granted by the Academic Standards Class Committee upon the recommendation of the Course Director. Requests for such waivers must be directed to the Associate Dean for Academic Affairs, and must be accompanied by university transcripts and course descriptions. Such requests will not normally be considered after the classes has been in progress for two weeks. Students must attend all classes and complete all course requirements until notified by the Associate Dean (Academic) that a course waiver has been granted.

Individual course waivers for students repeating the year as a result of failing grades may be granted by the Class Committee and only for courses in which a grade of B- or higher was obtained. A student thus repeating a year is not permitted to register concurrently for courses in any other year of the Dentistry/Dental Hygiene/Qualifying programme.

Course waivers will not normally be granted for courses with preclinical/clinical components.

Students in the DDS and Qualifying programme who are granted a course waiver shall, for the purpose of establishing (1) course rank; (2) grade point average; and (3) prizes and awards, have their final grades computed using only the required courses being taken.

Policies and procedures regarding application for and awarding of course waivers are outlined in the Academic Policy Manual.

## F. Immunization Policy

The Faculty of Dentistry's immunization policy requires that all students show documented appropriate immunization for tetanus, diphtheria, polio, measles, mumps, rubella and chicken pox. Proof of immunization must be written documentation obtained from a physician and/or public health facility, including the date of the immunization. All students must be immunized against Hepatitis B, which will be made available in a three injection series in the autumn of first year. It is strongly recommended that all students be immunized against influenza. During week 1, students are skin tested to establish their tuberculin status. Accepted students must obtain a current Level C CPR - Basic Rescuer Certificate prior to enrolment.

## G. Review of Students

Student academic and professional progress is reviewed at least twice each term by the appropriate Academic Standards Class Committee (membership - Course Directors of the respective year of the programme), and each student is provided with his/her Achievement Classification (I to VI as described in the Academic Policy Manual). Appropriate remedial actions will be initiated for students with Classifications II to VI. Students with Classifications IV to VI may be placed on probation.

## H. Guidelines for Student Probation

1. A student may be placed on probation for academic or professional reasons, described in classifications IV, V, VI in the Academic Policy Manual.
2. Probation shall usually occur when there are multiple concerns in one or both of the above parameters.

3. Probation shall only be implemented following thorough review of a student's progress by the appropriate Academic Standards Class Committee.
4. Student(s) on probation must be reviewed regularly at the meeting of the appropriate Academic Standards Class Committee.
5. A student who has fulfilled all of the conditions of probation, in the opinion of the Class Committee, shall be removed from probation and permitted to proceed in the appropriate course as recommended by the Class Committee.
6. A student may not be eligible to sit final examinations and may not be promoted while on probation.
7. A student who has not met the conditions of probation shall be required to (a) enroll in a supplementary educational programme; or (b) repeat an academic year; or (c) withdraw from the Faculty.

## I. Academic Accommodation for Students with Learning Disabilities

See University Regulations, page 24.

Dalhousie University is committed to providing equal educational opportunity and full participation for students with learning disabilities.

Students wishing to discuss accommodation for disabilities within the Faculty of Dentistry should contact the Assistant Dean for Student Affairs, Faculty of Dentistry before classes commence.

## J. Examination and Course Grades

### 1. Admission to Examinations

In order to qualify for admission to examinations, candidates must attend the prescribed courses of the curriculum regularly and punctually. Students are expected to attend all lectures, seminars, preclinical and clinical sessions. A student may not be eligible to sit final examinations while on probation. The Examination Regulations of the University are followed, as well as specific Faculty of Dentistry regulations which are provided to students in the Academic Policy manual.

### 2. Promotion and Graduation

A student will not normally be promoted or graduated unless a passing grade in all subjects and an overall grade point average of 2.30 has been achieved.

A student who has achieved an overall grade point average of at least 2.30 and received one or two failing grade(s) may be offered the privilege of taking the required remedial steps to prepare for a supplemental examination(s). \*Successful passing of the supplemental examination(s) prior to commencement of the academic year will permit promotion. Failure to pass the supplemental examination may result in the student being offered the privilege of repeating the year or being required to withdraw from the Faculty.

A student who has passed all courses and failed to achieve an overall grade point average of at least 2.30, but has attained an overall grade point average of 2.00 or greater, may be offered the privilege of repeating the year.

A student who has obtained an overall grade point average of less than 2.00, or who has obtained an F grade in more than two courses, or who has obtained an overall grade point average less than 2.30 with one or more failing grades will normally be required to withdraw from the Faculty.

## Summary

- Minimum GPA 2.30 and no failing grades = promotion, graduation
- Minimum GPA 2.30 and one or two failing grades = supplemental privileges
- Minimum GPA 2.00 and no failing grades = may be offered privilege of repeating year
- GPA below 2.30 and any failing grades = required to withdraw
- GPA below 2.00 (with or without failing grades) = required to withdraw
- More than two failing grades (regardless of GPA) = required to withdraw

As an academic requirement, students are assessed in each year on their aptitude and fitness for the profession of Dentistry as described in course outlines and the Academic Policy Manual. A student who, in the judgment of the Faculty, fails to attain satisfactory standard on this assessment may be retired from the Faculty.

Students must prepare exercises, reports, etc., as may be prescribed, and in courses involving laboratory or practical work they must complete such work satisfactorily before any credit for that course can be given. If Faculty deems it advisable, giving consideration to the students' overall performance in the programme and the constraints of available time and resources, students may be given the opportunity to clear any deficiencies by means of remedial programmes.

Students who, in the judgment of the Faculty, are deficient for any reason in their clinical practice may be required by Faculty to return for a special clinical session or to repeat the year. The satisfactory completion of this entire clinical session is required in order to allow students either to continue in their regular course or to graduate at a subsequent Convocation.

Individual course waivers for students repeating the year as a result of failing grades may be granted by the Class Committee and only for courses in which a grade of B- or higher was obtained. A student thus repeating a year is not permitted to register concurrently for courses in any other year of the programme. Course waivers will not normally be granted for courses with preclinical/clinical components.

### 3. Graduation with Distinction

Graduation with Distinction may be awarded to graduating Dentistry students whose cumulative grade point average is at least 3.60.

### 4. Course Grades

Upon completion of a class, a student is awarded a grade of A+, A, A-, B+, B, B-, C+, C, C-, D, F, T, ILL or INCOMPLETE, or for courses designated a grade of PASS or FAIL.

In this system; A is the highest and D is the lowest passing grade; an INC grade allows an otherwise qualified candidate to fulfil the course requirements within a specified time in a programme determined by Faculty; an F is a failing grade which may allow an otherwise qualified candidate supplemental examination privileges, or may disqualify the student from further evaluation without repeating the course and/or the entire academic year.

The course directors concerned are responsible for defining the requirements for grades.

### 5. Grade Point Equivalents and Averages

The numerical percentage score-letter grade equivalency scale for all courses in the Faculty of Dentistry is as follows:

Numerical Score	Letter Grade	Grade Point Equivalent
95-100	A+	4.30
90-94	A	4.00
85-89	A-	3.70
80-84	B+	3.30
74-79	B	3.00
70-73	B-	2.70
67-69	C+	2.30
64-66	C	2.00
60-63	C-	1.70
50-59	D	1.00
0-49	F	0.00
N/A	INC	0.00
N/A	ILL	Neutral
N/A	Pass	Neutral
N/A	W	Neutral
N/A	T	Neutral

INC - Incomplete: Students are expected to complete course work by the prescribed deadlines. Only in special circumstances may an instructor extend such deadlines. Incomplete work in a course must be completed by a time assigned by the relevant Academic Standards Class Committee and

approved by Faculty. An INC will be converted to the earned grade if completed by the deadline. Otherwise, the course grade point value will be calculated as a 0.00 on the student's grade point average and the INC grade will normally be converted to a failing grade.

ILL: Students who are given special consideration by the Academic Standards Committee for compassionate reasons, illness or other special circumstances may be given a grade of ILL. This grade has a neutral grade point equivalent and will be converted to an earned grade upon completion of the class. If the course is not completed in the time period indicated by the Academic Standards Committee, the student will receive no credit for the work done in the course and may receive a failing grade.

W: A grade of W is recorded for courses in which a student withdrew with Faculty approval. No grade point value is recorded. It should be noted that all courses for a given year must be successfully completed to be considered for promotion or graduation for a student.

T: Transfer credit on admission.

### 6. Calculation of Average

Each course, except courses with final grades of PASS or FAIL, is assigned a course weight based on its length and the mix of lecture, laboratory or clinical components. An individual student's point equivalent for each course is multiplied by the adjusted course weight. The student's yearly grade point average is calculated by dividing the sum of the weighted grade point equivalents earned for all the separately numbered courses for the academic programme year and the sum of the adjusted course weights for all courses.

A cumulative grade point average is calculated by adding the total weighted grade point equivalents earned and dividing by the sum of the adjusted course weights for all courses taken. The cumulative GPA is used for awarding of certain prizes, awards and scholarships.

### 7. Supplemental Examinations

A candidate who has received failing grades in not more than two subjects of any year, and who has attained the required overall grade point average of 2.30, may be offered the privilege of taking supplemental examinations in such subjects, provided he or she is qualified in attendance and course work for admission to examination.

Supplemental examinations are normally written after July 15 and before August 10, and are written at Dalhousie, unless approval is obtained to do otherwise.

Application for admission to a supplemental examination must be made on or before July 15th. Application forms may be obtained from the Dean of Dentistry's Office and must be accompanied by a supplemental examination fee.

On passing a supplemental examination or evaluation the candidate receives no higher than a D grade for the class. Failing grades must be replaced by passing grades before a student is promoted to the next year of the programme.

### 8. Illness or Absence

It is the student's responsibility to immediately inform the Office of the Dean and, when clinical activities are involved, any scheduled patients, of any absence due to illness, injury, or other cause. In the case of illness or injury, the student may be required to present a valid medical certificate documenting the illness/injury. In the case of a student missing a test/examination, a medical certificate will be required before a make-up test/examination is planned. In the case of a serious personal problem, the student will be required to submit to the Associate Dean for Academic Affairs, a confidential written statement documenting the reasons for absence.

Students who fail to attend clinics as scheduled without providing proper notification and required documentation may have clinic privileges suspended for up to one week. Special consideration and make-up time will not be provided to students whose clinic privileges are suspended.

Failure to report to courses or clinic or to report an absence due to injury or illness as required may result in suspension of clinic privileges and may

limit a student's right to appeal an unsatisfactory class grade or the failure of an academic year. Written policies describing the responsibilities of students in such cases are available to all students in the Academic Policy Manual.

## 9. Appeals

Students have the right to appeal their assigned grade in a given course as well as decisions regarding promotion or graduation. Written policies describing the Faculty's appeal procedures are available to all students in the Academic Policy Manual.

## K. Licensing Regulations

Students are reminded that the degree in Dentistry is not the only requirement for admission to practise in any province. The regulations for admission to practise are established by the licensing board of the province in which the person desires to practise. Information on these requirements may be obtained from the respective Dental Registrars whose names and addresses may be obtained from the Office of the Dean.

The National Dental Examining Board of Canada incorporated under Federal Statute offers an examination leading to a certificate which is recognized by the dental Licensing Boards in all provinces and territories of Canada. Holders of the certificate may be licensed to practise in all provinces sometimes after meeting additional provincial requirements. For further information inquiries should be addressed to: Registrar, National Dental Examining Board of Canada, Suite 103, 100 Bronson Ave., Ottawa K1R 6G8.

The programme of dental education in the Faculty has received approval of the Commission of Dental Accreditation of Canada. The Dalhousie Doctor of Dental Surgery Degree and the Qualifying Programme certificate are, therefore, an accepted educational qualification for obtaining a certificate from the National Dental Examining Board of Canada, the National Board of Dental Examiners of U.S.A., and the Boards of many of the states of the United States of America.

## L. Instruments, Equipment and Books

The University provides all required instruments, equipment, supplies for laboratory exercises and incidental fees include such things as: vaccinations, manuals, clinic uniforms, locks for lockers and replacement supplies used during laboratory exercises in a student 'instrument kit' and for clinical care activities through a student clinic 'user fee'. The cost of the 'kit' varies by year while the clinic 'user fee' remains constant and is only changed with advance notice to all students. See summary of typical fees below.

Many instruments and equipment items are signed out to students. Students are financially responsible for lost or damaged items. Degrees are withheld pending the return of or payment for missing/damaged items.

The University obtains all kit and user fee items for all students in order to maintain minimum standards and to ensure timely delivery and availability for September or May classes.

**Student Kit Refunds:** If for any reason, a student leaves their programme during the first week of the official start of the programme (of any year) the student will receive a full refund of the kit they received for that year of the programme. There will be no refunds after the first official week of the programme.

**User Fee Refunds:** There are no refunds of the User fee.

The textbooks prescribed for the various classes are available for purchase at the University Bookstore in the Dentistry Building. The following estimate of the cost of instruments and books for each year is subject to change without notice, but it can assist the students in estimating their expenses.

Fees:

Doctor of Dental Surgery Programme 2003/2004

	*Auxiliary/ Instrument Fee	Textbooks
Year 1	\$6,296.00	\$1,950.00
Year 2	\$4,506.00	\$1,670.00
Year 3	\$1,416.00	\$700.00
Year 4	\$1,196.00	\$125.00

\*(Auxiliary/Instrument Fee includes User Fee of \$625.00)

Qualifying Programme 2003/2004

	*Auxiliary/ Instrument Fee	Textbooks
Year 1	\$8,856.00	\$1,200.00 (Summer)
Year 2	\$1,196.00	\$125.00

\*(Auxiliary/Instrument Fee includes User Fee of \$625.00)

## V. Doctor of Dental Surgery Degree Requirements

### First Year

- DENT 1112.01: Human Biochemistry
- DENT 1113.06: Gross Anatomy/Neuroanatomy
- DENT 1114.03: Histology
- DENT 1116.03: Basic Mechanisms of Disease
- DENT 1117.03: Pharmacology
- DENT 1118.01: Infectious Diseases
- DENT 1119.03: Physiology
- DENT 1211.06: Patient Care I
- DENT 1311.03: Growth and Development I
- DENT 1411.06: Cariology I
- DENT 1502.00: Elective
- DENT 1503.00: Periodontology Elective
- DENT 1511.03: Periodontology I
- DENT 1611.03: Occlusion and Neuromuscular Function I

### Second Year

- DENT 2111.06: Dental Biomaterials Science
- DENT 2117.01: Pharmacology II
- DENT 2119.03: Systematic Pathology and Immunology
- DENT 2211.03: Clinical Patient Care II
- DENT 2212.06: Patient Care II
- DENT 2311.03: Growth and Development II
- DENT 2400.01: Pediatric Dentistry II
- DENT 2411.09: Cariology II
- DENT 2504.00: Elective
- DENT 2505.00: Periodontology Elective
- DENT 2511.03: Periodontology II
- DENT 2512.01: Evidence-Based Dentistry
- DENT 2611.06: Removable Prosthodontics

### Third Year

- DENT 3116.01: General Medicine and Patient Health Assessment
- DENT 3117.01: Foundation Sciences in Clinical Practice
- DENT 3211.01: Patient Care III Professional Issues
- DENT 3212.06: Clinical Comprehensive Patient Care
- DENT 3220.03: Clinical Oral Diagnosis and Treatment Planning
- DENT 3400.03: Pediatric Dentistry III
- DENT 3500.06: Oral and Maxillofacial Surgery
- DENT 3505.00: Elective
- DENT 3512.01: Evidence-Based Dentistry
- DENT 3616.12: Prosthodontics III
- DENT 3617.01: Implant Dentistry
- DENT 3717.06: Endodontics III
- DENT 3719.06: Periodontology III
- DENT 3811.01: Oral Pathology, Medicine and Radiology
- DENT 3818.03: Orthodontics III

## Fourth Year

- DENT 4211.03: Patient Care IV Seminars
- DENT 4212.06: Clinical Comprehensive Patient Care
- DENT 4219.06: Periodontology IV
- DENT 4220.03: Clinical Oral Diagnosis and Treatment Planning
- DENT 4400.03: Pediatric Dentistry IV
- DENT 4500.06: Oral and Maxillofacial Surgery
- DENT 4507.00: Elective
- DENT 4508.00: ART Elective
- DENT 4509.00: Implant Elective
- DENT 4510.00: Surgical Periodontics Elective
- DENT 4512.00: Endodontics Elective
- DENT 4513.00: Oral Surgery elective
- DENT 4514.00: Becoming a Dental Educator Elective
- DENT 4611.01: Prosthodontic Seminars
- DENT 4616.12: Prosthodontics IV
- DENT 4711.01: Clinical Epidemiology
- DENT 4717.06: Endodontics IV
- DENT 4811.01: Oral Pathology, Medicine and Radiology
- DENT 4818.03: Orthodontics IV

## VI. Qualifying Programme Certificate Requirements

Students will be required to successfully complete the following courses and progress will be monitored by instructors, course directors and the Qualifying Programme Academic Standards Course Committees (QP I and II).

### Year I

- DENQ 2311.03: Growth & Development
- DENQ 3000.06: Foundation Sciences for Dentistry in Canada
- DENQ 3001.06: Clinical Dental Sciences for Dentistry in Canada
- DENQ 3116.01: General Medicine/Patient Health Assessment
- DENQ 3117.01: Foundation Sciences for Clinical Practice
- DENQ 3211.01: Patient Care III Professional Issues
- DENQ 3212.06: Clinical Comprehensive Patient Care
- DENQ 3220.03: Clinical Oral Diagnosis and Treatment Planning
- DENQ 3400.03: Pediatric Dentistry
- DENQ 3500.06: Oral and Maxillofacial Surgery
- DENQ 3505.00: Elective
- DENQ 3512.01: Evidence-Based Dentistry
- DENQ 3717.06: Endodontics
- DENQ 3719.06: Periodontology
- DENQ 3616.12: Prosthodontics
- DENQ 3617.01: Implant Dentistry
- DENQ 3811.01: Oral Pathology, Medicine and Radiology
- DENQ 3818.03: Orthodontics

### Year 2

- DENQ 4211.03: Patient Care Seminar
- DENQ 4212.06: Clinical Comprehensive Patient Care
- DENQ 4219.06: Periodontology
- DENQ 4220.03: Clinical Oral Diagnosis and Treatment Planning
- DENQ 4400.03: Pediatric Dentistry
- DENQ 4500.06: Oral and Maxillofacial Surgery
- DENQ 4507.00: Elective
- DENQ 4508.00: ART Elective
- DENQ 4509.00: Implant Elective
- DENQ 4510.00: Surgical Periodontics Elective
- DENQ 4512.00: Endodontics Elective
- DENQ 4513.00: Oral Surgery Elective
- DENQ 4514.00: Becoming a Dental Educator Elective
- DENQ 4611.01: Prosthodontic Seminars
- DENQ 4616.12: Prosthodontics
- DENQ 4711.01: Clinical Epidemiology
- DENQ 4717.06: Endodontics
- DENQ 4811.01: Oral Pathology, Medicine and Radiology
- DENQ 4818.03: Orthodontics

## VII. Classes of Instruction

### Policy Statement on Interprofessional Learning

Students in the Faculties of Dentistry, Health Professions and Medicine participate in interprofessional modules to discuss contemporary health and health care issues. The interprofessional modules are part of the curricula of individual programs. Participation is mandatory and the IPL supersedes all other regularly scheduled classes.

The objectives of these modules are to:

- Learn and develop skills and strategies for working effectively to address complex problems and issues with other professionals, colleagues and clients/consumers/patients.
- Develop an awareness of, and respect for, the expertise, roles and values of other professionals, colleagues and clients/consumers/patients.

Topics & Dates for Interprofessional Learning Modules 2004-2005	
Palliative Care Module (Senior level)	September 16, 2004 (Wednesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #1 Introduction (Entry level)	September 23, 2004 (Thursday, 1:00 - 5:00 p.m.)
Disability Module (Intermediate level)	November 2, 2004 (Tuesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #2 Professional roles (Entry level)	January 19, 2005 (Wednesday, 1:00 - 5:00 p.m.)
From Family Violence to Health (Intermediate level)	February 10, 2005 (Thursday, 1:00 - 5:00 p.m.)
Please note: PM sessions generally are planned to run between 1:00-5:00 pm in 2 or 3 separate (2hr) sessions depending on student numbers. Group/room/ building/ time assignments are posted on the Web site. An information desk will be available on site. Check Web site for location <a href="http://www.dal.ca/ipl">www.dal.ca/ipl</a> .	

### DENT 1112.01: Human Biochemistry.

This course covers a very broad spectrum of biochemistry. It highlights selected dental and related topics such as structures and biosynthesis of connective tissue macromolecules; endocrine control of tissue remodeling; fluoride, mercury, and calcium/phosphorus metabolism; pH, saliva and dental caries; genetics and molecular biology and cancer. A handbook of lecture material is provided.

### DENT 1113.06: Gross Anatomy/ Neuroanatomy.

This course presents an integrated description of the anatomical organization of the central and peripheral nervous systems, and the gross anatomy of the head and neck, thorax and abdomen. Lectures, laboratories and dissections, X-Rays, and clinical case presentations are used with special attention given to oral and dental structures. Texts: B. Liebgott, Anatomical Basis of Dentistry; Rohen/Yokochi, Color Atlas of Anatomy; and Crossman and Neary, Neuroanatomy: An Illustrated Text. Course Study and Dissection Guides are provided.

### DENT 1114.03: Histology.

This course describes the structure of the body at the level of tissues and organs as seen with the microscope. Oral structures and tissues are emphasized. It is a Foundation Course for Physiology, Pharmacology and Pathology. Text: Color textbook of, Histology; Tencafe, Oral Histology.

### DENT 1116.03: Basic Mechanisms of Disease.

This course uses patient cases in a modified problem-based learning format to introduce students to the basic concepts and fundamental mechanisms of disease. Supplementary lectures are provided as indicated. Topics include cell injury, adaptation and death, inflammation, repair, immunology, vascular disease and neoplasia.

### DENT 1117.03: Pharmacology.

This course is built on other Foundation Science courses and serves as a basis to Therapeutics (Patient Care) and Pharmacology and treatment planning in years 2 and 4. It emphasizes the basic principles of drug

action, with special attention given to drugs used commonly in dental practice (local anaesthetics, antimicrobial agents, analgesics, anti-inflammatories) and on drugs whose presence in the body may affect dental procedures.

#### **DENT 1118.01: Infectious Diseases.**

This course builds upon a required prerequisite in Microbiology and assumes a general knowledge of the major groups of clinically important bacteria and their properties. The course focuses on the etiology, pathogenesis, epidemiology, diagnosis and treatment of major infectious diseases by bacteria and viruses.

#### **DENT 1119.03: Physiology.**

This course addresses how physiological function at the molecular, subcellular, and cellular levels determines the activity of tissues, organs, and systems. As a lecture-based review course, it surveys seven essential areas of human physiology: cellular, CNS, cardiovascular, respiratory, renal, gastrointestinal, and endocrine physiology. Lectures emphasize the "hows" and "whys" of physiology, not just the "whats." Relationships between organ systems will also be covered to describe the integrative mechanisms for homeostasis. Each series of lectures is followed by a tutorial session.

TEXT: Costanzo, Physiology

#### **DENT 1211.06: Patient Care I.**

This is an introductory integrated pre-clinical course that will prepare students to safely and effectively care for their patients by developing skills that are common to all areas of dentistry. Students in this course will cover for major themes: 1) Professional issues: ethics, Canadian health law, organized dentistry and professional responsibilities; 2) Concepts of health: population health, health promotion and interdisciplinary health issues; 3) Evidence for care: basic concepts of evidence based decision-making and scientific review, and 4) Clinical care: introductory elements of chair-side care through observation and participation in infection control procedures, patient assessment and treatment that includes an understanding of the interrelationships of medication to diagnosis and treatment objectives. Using simulated and clinic patients, psychomotor and behavioral skills will be developed by learning clinic protocols, communication skills, and radiographic diagnosis and technique.

#### **DENT 1311.03: Growth and Development I.**

This course provides the student with basic concepts and principles of pre-natal and post-natal human physical growth and development. It includes study of growth and development of the body and detailed study of the growth of the dentofacial region. This course also provides an introduction to the application of this knowledge to clinical orthodontic practice.

#### **DENT 1411.06: Cariology I.**

This course introduces the etiology, diagnosis, prevention and operative management of dental caries. The course is designed to present the foundation for caries management in dental practice. The major areas covered include: histopathology, etiology, epidemiology, diagnosis, prevention and operative principles. Lectures, laboratory exercises and course discussions are used to present the topics covered in the class.

#### **DENT 1502.00: Elective.**

This course is designed to allow students to pursue in depth, dentally related and to a lesser extent other topics of particular interest to them that are not covered in other scheduled courses.

#### **DENT 1503.03: Periodontics Clinical Teaching Elective.**

This course is designed to provide students with an experience in clinical teaching.

#### **DENT 1511.03: Periodontology I.**

This course will provide students with a basic knowledge of the periodontium in health and disease. The identification of etiologic factors, their significance and methods for their control will be included. Clinical experience in basic identification of the features of health and disease, control of etiology and management of gingivitis will be provided as part of this course.

#### **DENT 1611.03: Occlusion and Neuromuscular Function I.**

This course consists of two parts. In the first term, a laboratory course in Dental Anatomy is designed for the study of tooth morphology and the structure of teeth and their parts. During the second term, in a clinical and laboratory setting, students will be exposed to the functional anatomy of the stomatognathic system. Cognitive and psychomotor skills will be developed while learning occlusal morphology related to mandibular movement.

#### **DENT 2111.06: Dental Biomaterials Science.**

This course aims to help the student develop critical thinking skills appropriate to the application of biomaterials science in dentistry. The student will acquire a fundamental background and be able to critically evaluate and optimize the selection, manipulation and long-term observation of clinical materials. In addition, the student will be able to interpret and apply the results of laboratory and clinical research papers. The course will involve the applied study of structure/property relationships, mechanical, physical and chemical properties of solids and biocompatibility. Course content will include a range of metals, polymers, ceramics and glass-like material, that have applications in dentistry.

#### **DENT 2117.01: Pharmacology II.**

This course builds on the student's foundation established in year 1. It will continue to emphasize the basic principles of drug action with special attention to drugs used commonly in dental practice (antimicrobial agents, analgesics, sedatives, centrally acting agents) and on drugs whose presence in the body may affect dental procedures management.

#### **DENT 2119.03: Systemic Pathology and Immunology.**

The systemic pathology course, for second year dental students uses patient cases in a problem-based learning approach. Cases involving the organ systems, such as cardiovascular, respiratory, hematopoietic, gastrointestinal, genitourinary, endocrine, central and peripheral nervous system, muscle, bone and joint will be presented. Cases focus on diseases important in the management of dental patients and those which illustrate important mechanisms of disease. Students will gain a deeper understanding of the basic mechanisms of disease and will apply knowledge acquired in basic science courses to the patient cases.

#### **DENT 2211.03: Clinical Patient Care II/ DENT 2212.06: Patient Care II.**

These courses are designed to familiarize the student with the basic principles and knowledge for patient care activities. In a clinical setting, students will gain experience in such basic patient care activities as: use of diagnostic aids, risk assessment, diagnosis, basic level treatment planning, pain control, utilization of dental auxiliaries, use of a dental computer system, preventative dental procedures and basic level dental restorative procedures. Students will also acquire skills for the diagnosis and management of patients with early stages of periodontal disease.

#### **DENT 2400.01: Pediatric Dentistry II.**

Pediatric dentistry is a didactic and laboratory course designed to prepare the students for their paediatric clinical experience beginning in third year. This course includes lectures related to the following topics in pediatrics: examination of the child, soft tissue pathology, dental anomalies, radiology, early childhood caries and infant oral health care, outcomes related to the use of various restorative materials and techniques that are used to therapeutically manage childhood dental caries, pulp therapy in the primary and young permanent dentition and dental trauma. The course also includes labs on paediatric radiographic technique and interpretation and advanced paediatric and restorative techniques.

#### **DENT 2411.09: Cariology II.**

This technique course will build upon Cariology I and will provide a foundation in restorative therapy by way of lectures, seminars, and preclinical demonstrations for the individual permanent tooth. Opportunity will be provided for practice to develop of judgment and psychomotor skills in restorative technique procedures, making use of plastic filling materials, cast metal restorative materials and provisional restorative materials. Theory and technique involved in the management of the diseased dental pulp will also be presented and practiced.

**DENT 2504.00: Elective.**

This course is designed to allow students to pursue, in depth, dentally related and to a lesser extent other topics of particular interest to them that are not covered in other scheduled courses.

**DENT 2511.03: Periodontology II.**

This course is designed to provide a foundation in the management of a patient with periodontal disease. This patient oriented clinical and didactic experience will provide an opportunity for the student to develop skills necessary for the diagnosis and prognosis of periodontal diseases, as well as the nonsurgical management of patients with early attachment loss.

Treatment planning for periodontal diseases as it interrelates with comprehensive dental care will also be introduced.

**DENT 2512.01: Evidence-Based Dentistry II.**

This course is designed to expand upon the principles from the Evidence-Based Dentistry component in Patient Care I. The student will learn to critically appraise therapy articles, develop a clinical question, and correctly write and reference a scientific review paper. They will be expected to critically appraise a clinical article on therapy, using examples from the dental literature.

**DENT 2611.06: Removable Prosthodontics II.**

A web CT based course that also uses, seminars, demonstrations, laboratory and clinical experiences to give students the fundamental principles and techniques of managing partially and completely edentulous patients.

**DENT 4510.00: Surgical Periodontics Elective.**

This course will provide clinical and didactic experience in the surgical treatment of periodontal disease. The emphasis of the course will be on non-osseous surgical pocket therapy, periodontal plastic and esthetic surgery, pre-prosthetic periodontal surgeries, principles of implants, and post-operative care. Classical and current literature on periodontal surgical procedures will be reviewed.

**DENT/DENQ 2311.03: Growth and Development II.**

A preclinical course that applies concepts and principles learned in Growth & Development I to clinical situations. The scope of this course includes the examination and diagnosis of growing and non-growing patients with specific reference to orthodontics. This course provides an opportunity to develop skills related to the fabrication and analysis of specific diagnostic records including impression and model fabrication; radiographic analysis; model analysis, and treatment options from space maintenance, and occlusal guidance through to various fixed and removable orthodontic appliances treatment.

**DENT/DENQ 3000.06: Foundation Sciences for Dentistry in Canada.**

Modules included in this course are: Foundation Sciences, Pharmacology and Biomaterials Science. These modules help the candidate to develop critical thinking skills. Lectures and patient care in a problem-based learning approach will be the norm. Candidates will review clinical presentation, differential diagnosis, approaches and management for specific diseases related to the practice of dentistry in Canada. The principle of patient health assessment will also be presented. The assessment level will be equivalent to that at the end of Year 2 of the DDS programme.

**DENT/DENQ 3001.06: Clinical Dental Sciences for Dentistry in Canada.**

Modules in this course are: Patient Care, Periodontology, Cariology A, Cariology B, Cariology C, Endodontics, Removable Prosthodontics (C), Removable Prosthodontics (P), and Pediatric Dentistry. These modules are designed as presented in years one and two of the DDS programme to familiarize the candidates with the basic principles and knowledge for treating the patient at the end of year 2 of the DDS programme. In a clinical setting, candidates will demonstrate such clinical activities as: use of diagnostic aids, risk assessment, diagnosis, treatment planning, pain control, utilization of allied dental personnel, use of the dental computer system, preventive dental procedures, basic restorative procedures,

diagnosis and management of early types of periodontal disease, removable dentures and endodontics.

**DENT/DENQ 3116.01: General Medicine and Patient Health Assessment.**

The first term is devoted to lectures by physicians and is designed to give the student a broad understanding of the problems and procedures involved in the practice of medicine and to prepare for intelligent cooperation with physicians and other health workers. The course also prepares the student to render a better health care service by recognizing the signs and symptoms of general diseases which require the services of a physician. This series of lectures is followed in the second term by seminars devoted to clinical management of patients with specific disease processes.

**DENT/DENQ 3117.01: Foundation Sciences in Clinical Practice.**

This course will use a case-centred, problem-based format to enable students to develop critical thinking skills and to apply basic science knowledge to the clinical decision making process. In this course students will integrate basic sciences (anatomy, physiology, biochemistry, pharmacology, pathology, biomaterials, immunology and microbiology) to hypothetical clinical situations.

**DENT/DENQ 3211.01: Patient Care III Professional Issues.**

This course provides an introduction to many of the professional issues facing dentists today. The major components of this course are dental practice management, dental law, organized dentistry, drugs in dentistry and forensic dentistry. The "Table Clinic" component of Scholarship Across the Curriculum is included in this class.

**DENT/DENQ 3212.06: Clinical Comprehensive Patient Care.**

This course is a comprehensive clinical course conducted during the third and fourth years of the dentistry programme. Students gain clinical experience while treating patients in a comprehensive care clinic. The experience gained is based on patient care treatment completions within the disciplines of Endodontics, Periodontics and Prosthodontics and is measured by relative value units (RVU's). Minimal experience in selected procedures is required.

**DENT/DENQ 3220.03: Clinical Oral Diagnosis and Treatment Planning.**

This third year course is designed to create an environment that promotes the philosophy of comprehensive patient care. This goal can be achieved by placing significant emphasis on the oral diagnosis and treatment planning of patients who present to our comprehensive treatment planning clinic. Each third year student will develop a comprehensive problem list for each patient assigned to him/her during the oral diagnosis/treatment planning clinic rotation. A comprehensive problem list will be developed after a thorough examination of the patient which will include a detailed medical/dental history, intra/extra oral examination and development of a diagnostic summary from which a properly sequenced and logical active/inactive problem list will be created. In this clinical environment students will gain experience by beginning at the basic level and progressing to the more advanced concepts of comprehensive treatment planning during his/her senior year.

**DENT/DENQ 3400.03: Pediatric Dentistry III.**

This clinical course builds upon the didactic course material in DENT 2400 - Paediatric Dentistry. Students will gain clinical experience in dentistry for children during rotations in the faculty clinics. Students will be assigned child and adolescent patients for comprehensive treatment. Students will also rotate through the faculty's satellite clinics at Harbour View School in Dartmouth, and the Nelson Whynder School in North Preston to obtain clinical and oral health promotion experiences. Primary and essential oral health care will be given with particular emphasis on prevention. Students will have a one-week rotation through the Dental Department IWK Health Centre. There will be additional didactic material presented through a series of lectures. Topics will include behaviour

management, local anaesthesia techniques for children, and management of medically compromised and special needs patients.

### **DENT/DENQ 3500.06: Oral and Maxillofacial Surgery III.**

Lectures/seminars each week throughout third year will cover topics pertaining to clinical oral surgery, management of temporomandibular disorders, and orientation to General Anesthesia. Examination takes place on completion of each component.

Students develop clinical skills in oral surgery by treating patients in the Oral Surgery Clinic. A hospital rotation permits a student to become familiar with surgical care for patients in an ambulatory and operating room setting.

### **DENT/DENQ 3505.00: Elective.**

This course is designed to allow students to pursue, in depth, dentally related and to a lesser extent other topics of particular interest to them that are not covered in other scheduled courses.

### **DENT/DENQ 3512.01: Evidence-Based Dentistry III.**

This course is designed to expand upon the principles for Evidence-Based Dentistry I and II. Students will learn to critically appraise clinical articles using examples from the dental literature.

### **DENT/DENQ 3616.12: Prosthodontics III.**

In addition to having students provide comprehensive patient treatment to assigned patients, this course is designed to expand and reinforce the knowledge base for the student's clinical experience. The course consists of a series of lectures, seminars, treatment sessions, and pre-clinical laboratories related to advanced dental management procedures. Various clinically related subjects in general patient care, treatment and prevention will be covered with particular emphasis on the management of caries as a disease and the repair or replacement of teeth destroyed by dental caries. The application of biomaterials in prosthodontics, caries prevention and management will also be presented.

### **DENT/DENQ 3617.01: Implant Dentistry.**

This is an introductory course in implant dentistry, which provides fundamental knowledge of the generalities of design of osseointegrated implants, diagnosis and treatment planning for their use and an outline of how they are employed and maintained. The course assumes that all graduates will have patients who want or already have dental implants. It therefore emphasizes "what the patient needs to know." The team approach to providing implant supported care is emphasized through teaching by specialists in Prosthodontics, Oral and Maxillofacial Surgery, Periodontics and Dental Materials Science.

### **DENT/DENQ 3717.06: Endodontics III.**

This course is an extension of the pre-clinical component of Cariology II and is designed to reinforce and expand the knowledge base for third year students' endodontic clinical experience. The course consists of didactic and clinical components. The didactic part provides a series of lectures dealing with the basic biological principles and techniques in the area of local anesthesia; endodontic emergencies; instrumentation and obturation; restoration of endodontically treated teeth; apexification and apexogenesis techniques and; vital and nonvital bleaching procedures. The clinical component focuses on diagnosis and the application of endodontic principles and techniques while providing comprehensive treatment to assigned patients. Students will be given the opportunity to practice their endodontic skills on a patient mannequin prior to treating clinical patients.

### **DENT/DENQ 3719.06: Periodontology III.**

While providing comprehensive treatment to assigned patients, students will develop experience and competence in designated periodontic procedures. Additionally, the didactic component of this course will emphasize surgical procedures used in management of periodontal diseases. It will assist the student in developing an appreciation and understanding for the interrelationships between periodontics and other disciplines.

### **DENT/DENQ 3811.01: Oral Pathology, Oral Medicine and Oral Radiology.**

This course is presented to third year dental students in the first and second terms. Students study the cause, pathogenesis, clinical, radiographic and microscopic characteristics of diseases affecting the head and neck. Emphasis is placed on clinical and radiographic recognition of abnormalities, detailed description of lesion features, summary of features as clinical descriptive categories, formulation of differential diagnoses, arrival at definitive diagnoses, patient management and above all, understanding the behaviour of important oral diseases. A foundation is provided for rotations through the Mouth Clinic, and the practice of dentistry.

### **DENT/DENQ 3818.03: Orthodontics III.**

This course aims to expose the students to the integration of theoretical and clinical growth and development and orthodontic treatment. The didactic portion of the course provides a theoretical and clinical knowledge underlying clinical orthodontic practice. Discussions are related to recognition, diagnosis, treatment planning, appliance selection and application, and treatment of a variety of orthodontic problems frequently encountered by general dentists. These include topics such as Class I malocclusion, oral habits and maxillary expansion. The clinical course is designed to expose the undergraduate dental student to the collection and analysis of orthodontic records, orthodontic diagnosis and minor orthodontic treatment through patient care.

### **DENT/DENQ 4211.03: Patient Care IV Seminars.**

This course is designed to provide senior students with additional knowledge in the subject areas of practice management, jurisprudence, clinical geriatric dentistry and case presentation. The course will be a combined lecture/seminar format with a lecture series in the first term and a seminar format in the second term. The seminars will use a case based learning method, with cases prepared by a cross section of faculty from the various disciplines. As well, a Geriatric clinic rotation to Mother Berchman Centre and a paper on the topic of their Table Clinic comprise a part of this course.

### **DENT/DENQ 4212.06: Clinical Comprehensive Patient Care.**

This course is a comprehensive clinical course conducted during the third and fourth years of the dentistry programme. Students gain clinical experience while treating patients in a comprehensive care clinic. The experience gained is based on patient care treatment completions within the disciplines of Endodontics, Periodontics and Prosthodontics and is measured by relative value units (RVU's). Minimal experience in selected procedures is required.

### **DENT/DENQ 4219.06: Periodontology IV.**

While providing comprehensive treatment to assigned patients, students will develop experience and competence in designated periodontal procedures.

### **DENT/DENQ 4220.03: Clinical Oral Diagnosis and Treatment Planning.**

This fourth year course is designed as a continuation and advancement from the previous year's course that promotes the philosophy of comprehensive patient care. This goal can be achieved by placing significant emphasis on the oral diagnosis and treatment planning of patients who present to our comprehensive treatment planning clinic. Each student will develop a comprehensive and timely treatment plan for each patient assigned to him/her during the oral diagnosis/treatment planning clinic rotation. Each treatment plan will be developed after a thorough examination of the patient, which will include a detailed medical/dental history, intra/extra oral examination and development of a diagnostic summary, from which a proper and logical active/inactive problem list will be created. Treatment planning experiences will encompass various degrees of patient complexities. In this clinical environment, students will continue to gain experience and apply more advanced concepts of oral diagnosis and treatment planning, in preparation for general practice.

### **DENT/DENQ 4400.03: Pediatric Dentistry IV.**

This full-year clinical/didactic course is offered through the Division of Pediatric Dentistry, Department of Dental Clinical Sciences. Throughout the class, students will be expected to apply didactic and clinical knowledge acquired in previous years to the diagnosis, treatment planning, and management of pediatric patients. Practical experience will be gained through rotations at the Harbour View School Clinic in Dartmouth, the North Preston Community Oral Health Clinic. Additional experience may be gained through a rotation at the Paediatric Dental Unit at the Health Centre on an elective basis. New topics discussed will include an introduction to sedation in the Paediatric population and child protection. Other topics will include a series regarding common questions asked by parents to general practitioners in practice. The emphasis will be on practical clinical management related to these topics. Topics will include grinding and attrition of primary teeth, ectopic eruption, management of the patient with hypoplastic six year molars, frenums and others.

### **DENT/DENQ 4500.06: Oral and Maxillofacial Surgery IV.**

Surgical Conferences are held weekly during the first term. These seminars stress topics of clinical relevance to the patient requiring surgery in the oral and maxillofacial region.

Senior students enhance their clinical skills by performing oral surgical procedures under supervision in the Oral Surgery clinic. On a rotational basis, minor and major oral and maxillofacial surgery is demonstrated in the following affiliated hospitals: Queen Elizabeth II Health sciences Center (Victoria General Hospital) and IWK Grace Health Care Centre (Izaak Walton Killam Hospital for Children). During the rotation an orientation to admission procedures, operating room protocol and support management of hospitalized patients is provided.

This course includes a clinical component for the diagnosis and management of temporomandibular disorders.

### **DENT/DENQ 4507.00: Elective.**

This course is designed to allow students to pursue, in depth, dentally related and to a lesser extent other topics of particular interest to them that are not covered in other scheduled courses.

### **DENT/DENQ 4508.00: ART Elective.**

This course will provide additional clinical and didactic experience in advanced restorative techniques. The course will allow the student to carry out advanced clinical procedures under close instructor supervision. The emphasis of the course will be on providing esthetic restorations that are in harmony with the patient's smile. Relevant classical and current literature on restorative techniques will be reviewed.

### **DENT/DENQ 4509.00: Implant Elective.**

The Implant Dentistry Elective in DDS IV builds on the DDS III Implant Dentistry course by providing more extensive study of the underlying principles and current research as found in the literature. It also provides opportunities for the students to treat patients with implant supported prostheses.

### **DENT/DENQ 4510.00: Surgical Periodontics Elective.**

This course will provide clinical and didactic experience in the surgical treatment of periodontal disease. The emphasis of the course will be on non-surgical pocket therapy, periodontal plastic and esthetic surgery, pre-prosthetic periodontal surgeries, principles of implants and post-operative care. Classical and current literature on periodontal surgical procedures will be reviewed.

### **DENT/DENQ 4512.00: Endodontics Elective.**

This course will provide clinical and didactic experiences in the use of rotary instrumentation in endodontic root canal preparation and vertical compaction of thermosoftened gutta percha for obturation of the prepared canal space. Although current literature on rotary instrumentation and thermosoftened gutta percha will be reviewed, the emphasis of the course will be on clinical techniques.

### **DENT/DENQ 4513.00: Oral and Maxillofacial Surgery Elective.**

This elective in DDSIV allows the student to gain extensive exposure to the speciality of oral and maxillofacial surgery. Students will be involved in research, scholarly activity and clinical care of surgery patients in the hospital setting.

### **DENT/DENQ 4514.00: Becoming a Dental Educator Elective.**

Many DDS graduates will incorporate teaching at a local Faculty of Dentistry in their professional lives. Whether the teaching is preclinical, clinical or didactic, new skills and competencies are required. This course introduces fourth year students to these skills and competencies through an examination of relevant literature as well as observing and critiquing in a variety of dentistry classes and clinics.

### **DENT/DENQ 4616.12: Prosthodontics IV.**

While providing comprehensive patient treatment to assigned patients, students will develop experience and competence in designated fixed/removable prosthodontic procedures, and operative dentistry procedures. Students in the implant elective program will gain experience with implant supported prostheses. Students will also receive didactic material in a lecture/seminar format during the first term. Management of fixed restorative treatment, aesthetic dentistry, dentin bonding principles and techniques for the construction of fixed and removable prostheses including communication with commercial dental laboratories will be discussed. Relevant biomaterials topics will be discussed. Students will be required to write a term paper in Evidenced-Based Prosthodontics.

### **DENT/DENQ 4711.01: Clinical Epidemiology.**

This course is designed to expand upon the principles from Evidence-Based Dentistry I, II, and III particularly with respect to systematic reviews and practice guidelines. Students will learn to search for and critically appraise these forms of evidence, using examples from the dental literatures.

### **DENT/DENQ 4717.06: Endodontics.**

The course consists of a clinical component supplemented by a series of lectures and seminars. Clinical content will focus on the application of endodontic principles and techniques while providing comprehensive treatment to assigned patients. Lectures will deal with the basic biological principles and techniques in the areas of diagnosis, treatment, endodontic failures and retreatment, perio-endo inter-relationships, endodontic surgery, new instrumentation techniques and management of dental traumatic injuries. Seminars will be a mixture of faculty presentations and case presentations by students. The purpose of these seminars is to provide students with an opportunity to share clinical experiences with one another. Students will also submit a written Case Report for evaluation.

### **DENT/DENQ 4811.01: Oral Pathology, Medicine and Radiology.**

Students will study the etiology, pathogenesis, clinical and microscopic characteristics of diseases affecting the head and neck area. Emphasis is placed on recognition of abnormalities, construction of differential diagnoses, arrival at definitive diagnoses and patient management. Appropriate topics in oral medicine, dental oncology and interpretation of oral radiology will be included. Students will attend a rotation in the Mouth Clinic in the dentistry building and a rotation to the Cancer Treatment and Research Foundation at the Oncology Clinic at the Camp Hill Medical Centre.

### **DENT/DENQ 4818.03: Orthodontics IV.**

This course consists of two parts: the clinical orthodontic component and the didactic orthodontic component. The clinical course is designed to expose the undergraduate dental student to the collection and analysis of orthodontic records, orthodontic diagnosis, treatment plan and minor orthodontic treatment appropriate for a general dentist thorough patient care. The didactic portion of this course is student seminar based and provides a forum for debate and exchange of ideas concerning current orthodontic topics involving the general dentists. It also reviews basic

treatment principles important to the general dentist and the role a general dentist plays in the provision of orthodontic treatment.

## VIII. Graduate Studies in Oral and Maxillofacial Surgery

The department of Oral and Maxillofacial Sciences offers a six-year combined graduate programme leading to the degrees of MD/MSc. Graduates of this programme are eligible for examination by the Royal College of Dentists (Canada). Details covering the programme are contained in the Calendar of the Faculty of Graduate Studies.

## IX. Graduate Studies in Prosthodontics Combined with Biomedical Engineering

Graduate Studies in Prosthodontics combined with Biomedical Engineering is a three-year programme designed to provide extensive clinical and research experience in the related fields of Prosthodontics and Biomedical Engineering. Students will provide treatment for patients with complex needs in areas of Fixed and Removable Prosthodontics. Implants and Maxillofacial Prosthodontics. Clinical and research work is conducted in dedicated space in the Faculty of Dentistry clinics and dental laboratories, as well as the fully equipped biomaterials research and the tissue engineering facilities. More information is contained in the calendar of the Faculty of Graduate Studies and at the following URL: [www.dentistry.dal.ca/programs/gradpros](http://www.dentistry.dal.ca/programs/gradpros).

Graduate training is primarily delivered through seminars, laboratory and clinical activities and a research thesis. Students require a minimum of 5 two-term courses in Prosthodontics and 6 one-term courses taken for the 5000-level courses offered by the School of Biomedical Engineering in addition to their research thesis.

There is potential for tailoring the focus of study depending on your area of interest by selecting from the 5000-level courses offered by the School of Biomedical Engineering [www.dal.ca/biomedical](http://www.dal.ca/biomedical).

A research thesis representing original work by the student will be carried out under joint supervision of a faculty member of the School of Biomedical Engineering and a member of the Faculty of Dentistry.

All students in the programme will be given the opportunity to teach in the undergraduate DDS programme. Stipends will be available. Graduates will meet all requirements for certification and licensure as dental specialists in Prosthodontics in Canada and the United States.

## X. Continuing Dental Education

Manager, Continuing Dental Education, Alumni Affairs and Development: Kelly Maher (494-1674)

The Faculty of Dentistry has an office for Continuing Dental Education which organizes short ADA CERP accredited courses for dentists, dental hygienists, and other allied dental health personnel. The principal objective of these courses is to assist in the maintenance of competence for the dental profession. Presentations include the review of basic knowledge and introduction of new concepts and techniques. Members of faculty, local resource people, and visiting clinicians are employed. Most of the continuing education programmes are offered in Halifax, but some are also presented in other centres. Current Dental and Dental Hygiene students are also allowed to attend regular sessions at no charge. The content, location, and scheduling of the various courses are based on advice received from professional associations, assessment of client needs, current trends, and the Faculty Continuing Education Committee, a sub-committee of the Faculty of Dentistry Curriculum Committee. Tuition fees are cost related and are set individually for each class.

Interested persons should address inquiries to:

Continuing Dental Education  
Faculty of Dentistry  
Dalhousie University  
Halifax, NS B3H 3J5  
Phone: (902) 494-1674  
Fax: (902) 494-5101

# Dental Hygiene

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## School of Dental Hygiene

Location: 5981 University Avenue  
Halifax, NS B3H 3J5  
Telephone: (902) 494-1672  
Fax: (902) 494-2111

### Director

Butt, G.M., DipDH (Dal), BA (SMU), MEd (Queen's)

### Academic Staff

#### Associate Professors

Clovis, J., PhD, DipDH (Dal)

#### Assistant Professors

Mitchell, T., DipDH, BSc, MEd (Dal)

Neish, N., DipDH (Dal), BA (Acadia), MEd (Dal)

#### Adjunct Assistant Professor

Hornett, P., DDS (WNSM), MSc (London)

### Lecturers

Blei Gregg, B., DipDH (Dal), LLBC (Dal)

Grant, P.D., DipDH, BA (SMU), MEd (Dal)

Kinncar, M.E., DipDH (Dal)

Lynch, P., BSc, MHE (MSVU)

Maillet, P.J., DipDH, BA (Dal), MEd (Dal)

Robb, C.L., DipDH (Dal), BA (Moncton), MEd (Dal)

Tax, C., DipDH, BA (Manitoba)

### Instructors

Bekkers, S., BSc (St.F.X.), DipDH (Dal)

Bouchard-Salyzyn, G., DipDH (Dal)

Burke, J., DipDH, BSc (Dal), MEd (MSVU)

Ernst, T., DipDH, BSc (Dal)

Flinn, K., DipDH (Dal)

Haslam, K., DipDH, BA (Dal)

Keating, M., Dip D.H. (Dal), BA (St. Fx)

Kohler, M. Dip D.H. (Dal)

MacDonald, S., DipDH (Dal)

MacIsaac, B., BSc (SMU), DipDH (Dal), MEd (MSVU)

Pitman-Locatelli, H.E., DipDH, BSc (Dal)

Thistle, C., DipDH, BSc (Dal)

Wilson, J., DipDH (Dal)

Yeadon, C., BSc (MSVU)

## I. Introduction

Dental Hygiene was first offered as a formal educational program in 1913 at the Fones School in Bridgeport, Connecticut, USA. Since then the profession has grown steadily and there are now more than two hundred dental hygiene programmes in North America. In recent years, the movement has spread to other countries as well. In 1961 a diploma programme in dental hygiene was established in the Faculty of Dentistry, Dalhousie University.

Dental Hygienists are health professionals educated to prevent dental disease and help people maintain oral health. Their activities in oral health promotion are both clinical and educational and take place in private dental offices, schools, clinics, hospitals and other settings in the community.

Most Dental Hygienists are employed in private dental offices. There are, however, other areas of practice such as local governments and schools, provincial and federal government departments, industry, hospitals and teaching in allied dental health programmes.

Courses in the dental hygiene programme are offered within the Faculties of Medicine and Dentistry. The educational programme is supplemented by student attendance in Faculty-operated community-based clinics. The School of Dental Hygiene is located on Carleton Campus at Dalhousie University.

University regulations applicable to the students of all Faculties are found in the general section of this Calendar.

### A. Provincial Regulations

Students are reminded that the Diploma in Dental Hygiene is not the only requirement for admission to practice in any province. The regulations for admission to practice are established by the licensing board of the province in which the person desires to practice. Information on these requirements may be obtained from the respective licensing boards whose names and addresses are available from the School of Dental Hygiene.

### B. Diploma

The two-year programme leads to a Diploma in Dental Hygiene.

### C. Transfer Credits from Dental Hygiene to the Faculties of Arts and Social Sciences and Science

Students who have completed the Diploma in Dental Hygiene may receive credit towards a BA or BSc with a concentration or Major in Biology for BIOL 2101.03 and BIOL 4320.03 and 4322.03. These courses are to be included within the 10 full credits (including the five required for admission) which the Dental Hygiene students are eligible to receive as credit towards a BSc or BA degree upon completion of the current diploma requirements.

Applicants should seek additional information from the Faculty of Science.

## II. Admission

Applicants must have completed before June 1 of the year of expected entry to Dental Hygiene, at least five full year university courses\*, including full-year courses in biology, psychology, sociology, an approved writing course\*\* and one elective. Applicants must have Nova Scotia grade 12 Chemistry or its equivalent.

\*a combination of two one-term academic courses in the same discipline is considered equivalent to one full-year academic class.

\*\*Writing course: a course which involves a significant written component which is evaluated for composition, structure, grammar (e.g., 2 major papers; 4-6 minor papers)

Applicants who have completed the entrance requirements and are members of a minority group may apply as "special category" applicants and may submit additional information (forms provided in application package) in support of their application for review by the Admissions Committee.

Selection of accepted candidates is primarily based on academic performance in the required courses and overall academic standing in university. The Admissions Committee also makes significant use of non-academic factors in the selection process including the candidate's questionnaire, personal statements for competitive applicants and information submitted by "special category" applicants. Males are encouraged to apply to the Dental Hygiene programme.

### A. Assessment of Applicants with an International Educational Background

The Faculty of Dentistry will consider applications to the Diploma in Dental Hygiene programme from individuals who have received their former education outside the Canadian educational system. Such applicants will be required to fulfil specific criteria, as outlined below.

1. If the applicant's first language is not English, he/she must complete an English language proficiency test such as the TOEFL (Test of English as a Foreign Language) with a minimum score of 580 or computer-based scored 237 or the TWE (Test of Written English) with a minimum score of 5.0 or IELTS score of 7.0; or MELAB score of 90.
2. Original supporting documents from previously completed education must be provided, including course descriptions, and explanation of the grading system used, and course standings. If this documentation does not clearly indicate completion of the prerequisite courses at a competitive level, the applicant must complete one year of prerequisite university study in North America.

### B. Application Procedure

Persons who have satisfied the entrance requirements may apply for admission. Applications must be made on the undergraduate application forms, and must be submitted to the Office of the Registrar by March 15 in order to be considered for admission in the following academic year. Applications must be complete with academic grades by March 15 to be considered by the Admissions Committee. However, applications filed by the deadline can be completed any time up to June 1st and will be considered when completed if unfilled places remain in the entering class. Preference will be given to residents of the Atlantic Provinces. While all applications will be reviewed by the Admissions Committee, the Committee will decide on an annual basis if any positions will be offered to applicants who are not residents of the Atlantic Provinces. To qualify as a permanent resident of any province, an applicant must meet the following criteria:

1. His/her parent(s), guardian, or spouse must reside in that province on a permanent basis;  
or
2. If the applicant is independent of his/her parent(s) or guardian, he/she must have lived and worked on a full-time basis in that province (not attending school on a full-time basis) for a minimum of one full year;  
or
3. An applicant whose parent(s), guardian, or spouse do not meet the residency requirements as a direct result of a recent employment transfer, either into or out of a particular province would be given the choice (either the province of immediate former or future residency) of his/her province of residence.

A new application form must be submitted each year in which application is made. Official transcripts in support of the academic record must be forwarded by the institution or institutions at which the applicant completed pre-profession studies. If the applicant is still engaged in university studies, an interim transcript should be submitted. However, a final transcript must be forwarded on completion of these credits. Dalhousie University regards an applicant's failure to disclose all his/her previous academic experiences to be an academic offence which could lead to subsequent dismissal from the University. Applicants must ensure that all successful or unsuccessful high school and/or university attendance is indicated on the application form.

An application will not be considered if the applicant has been required to withdraw from studies at any other School of Dental Hygiene at the request of the Faculty of that institution, unless the application is supported by a recommendation from the Director of that School.

Competitive applicants will be requested to make themselves available for an admissions interview or an orientation session.

These regulations may be amended without notice by the Faculty of Dentistry.

## III. Academic Regulations

The following section describes academic regulations within the Faculty of Dentistry. More detailed information is provided to each student at the beginning of the academic year in the Academic Policy Manual and the Clinic Policy Manual. These manuals contain information for students and faculty members on the following areas: Evaluation of Students, Grade Procedures, Remedial Opportunities, Supplemental Examinations, Promotion

## A. Academic Year

The academic year for the first and second year in Dental Hygiene begins in early September and continues until the latter part of April. Courses begin immediately after the regular registration date. Late registration will be permitted only under exceptional circumstances and with the approval of the Dean.

## B. Course Outlines and Programme Changes

Before the beginning of term, each Course Director must provide a copy of the course outline, according to University and Faculty format with any individual additions, to the Associate Dean for Academic Affairs.

Students will be provided with a course outline by the instructor at the first meeting of the class. Programme changes, as to content, requirements, etc., may be necessitated and may not be reflected in a given edition of the calendar. Such changes will be included in the course outline provided to students at the first meeting of the class. Instructors may make changes to course outlines at any time. If, however, these changes affect any of the following areas, at least two-thirds of enrolled students must approve the variations in order for them to be valid: (a) assessment components; (b) weight of individual assessment components; (c) examination requirements with a value of 10% or greater.

## C. Course Waiver Policy

Course waivers may be granted by the Academic Standards Class Committee upon the recommendation of the Course Director. Requests for such waivers must be directed to the Associate Dean for Academic Affairs, and must be accompanied by university transcripts and course descriptions. Such requests will not normally be considered after the course has been in progress for two weeks. Students must attend all classes and complete all course requirements until notified by the Associate Dean (Academic) that a course waiver has been granted.

Students should note that course waivers are considered only after students are enrolled in the School of Dental Hygiene and no guarantee of waivers can be granted until applications are reviewed by the Academic Standards Class Committee.

Individual course waivers for students repeating the year as a result of failing grades may be granted by the Class Committee and only for courses in which a grade of B- or higher was obtained. A student thus repeating a year is not permitted to register concurrently for courses in any other year of the Dentistry/Dental Hygiene programme.

Course waivers will not be normally granted for courses with preclinical/clinical components.

Students who are granted a course waiver shall, for the purpose of establishing grade point average, have their final grades computed using only the required courses being taken.

Students who are granted a course waiver must complete at least 80% of the programme to be eligible for prizes or awards.

Policies and procedures regarding application for and awarding of course waivers are outlined in the Academic Policy Manual.

## D. Review of Students

Student academic and professional progress is reviewed at least twice each term by the appropriate Academic Standards Class Committee (membership - Course Directors of the respective year of the programme), and each student is provided with his/her Achievement Classification (I to VI as described in the Academic Policy Manual). Appropriate remedial actions will be initiated for students with Classifications II to VI. Students with Classifications IV to VI may be placed on probation.

## E. Guidelines for Student Probation

1. A student may be placed on probation for academic or professional reasons, described in classifications IV, V, VI in the Academic Policy Manual.
2. Probation shall usually occur when there are multiple concerns in one or both of the above parameters.

3. Probation shall only be implemented following thorough review of a student's progress by the appropriate Academic Standards Course Committee.
4. Student(s) on probation must be reviewed regularly at the meeting of the appropriate Academic Standards Course Committee.
5. A student who has fulfilled all of the conditions of probation, in the opinion of the Course Committee, shall be removed from probation and permitted to proceed in the appropriate course as recommended by the Course Committee.
6. A student may not be eligible to sit final examinations and may not be promoted while on probation.
7. A student who has not met the conditions of probation shall be required to (a) enroll in a supplementary educational programme; or (b) repeat an academic year; or (c) withdraw from the Faculty.

## F. Academic Accommodation for Students with Learning Disabilities

See University Regulations, page 24. Dalhousie University is committed to providing equal educational opportunity and full participation for students with learning disabilities. Students wishing to discuss accommodations for disabilities within the Faculty of Dentistry should contact the Assistant Dean for Student Affairs, Faculty of Dentistry.

## G. Immunization Policy and CPR

The Faculty of Dentistry's immunization policy requires that all students show documented appropriate immunization for tetanus, diphtheria, polio, measles, mumps, rubella and chicken pox. Proof of immunization must be written documentation obtained from a physician and/or public health facility, including the date of the immunization. All students must be immunized against Hepatitis B, which will be made available in a three injection series in the autumn of first year. It is strongly recommended that all students be immunized against influenza. During week 1, students are skin tested to establish their tuberculin status.

Accepted students must obtain a current Level C CPR - Basic Rescuer Certificate prior to enrolment.

## H. Examinations and Course Grades

### 1. Admission to Examinations

In order to qualify for admission to examinations, candidates must attend the prescribed courses of the curriculum regularly and punctually. Students are expected to attend all lectures, seminars, preclinical and clinical sessions. A student may not be eligible to sit final examinations while on probation. The Examination Regulations of the University are followed, as well as specific Faculty of Dentistry regulations which are provided to students in the Academic Policy Manual.

### 2. Promotion and Graduation

A student will not normally be promoted or graduated unless a passing grade in all subjects and an overall grade point average of 2.3 has been achieved.

A student who has achieved an overall grade point average of 2.3 and received one or two failing grades may be offered the privilege of taking the required remedial steps to prepare for a supplemental examination(s). \*Successful passing of the supplemental examination(s) prior to commencement of the academic year will permit promotion. Failure to pass the supplemental examination may result in the student being offered the privilege of repeating the year or being required to withdraw from the Faculty.

A student who has passed all courses and failed to achieve an overall grade point average of 2.3, but has attained an overall grade point average of 2.0 or greater, may be offered the privilege of repeating the year. A student who has obtained an overall grade point average of less than 2.0, or who has obtained a F grade in more than two courses, or who has obtained an overall grade point average less than 2.3 with one or more failing grades, will normally be required to withdraw from the Faculty.

### Summary

Minimum GPA 2.30 and no failing grades = promotion, graduation

Minimum GPA 2.30 and one or two failing grades = supplemental privileges\*  
 Minimum GPA 2.00 and no failing grades = may be offered privilege of repeating year  
 GPA below 2.30 and one or more failing grades = required to withdraw  
 GPA below 2.00 (with or without failing grades) = required to withdraw  
 More than two failing grades (regardless of GPA) = required to withdraw

\*Supplemental examination privileges are not permitted for preclinical or clinical content. Students who have achieved a failing grade in a course as a result of failure to demonstrate competency in the required psychomotor skills will not be permitted supplemental privileges in the failed course.

As an academic requirement, students are assessed in each year on their aptitude and fitness for the profession of Dental Hygiene (professionalism). A student who, in the judgment of the Faculty, fails to attain satisfactory standard on this assessment may be retired from the Faculty.

Students must prepare exercises, reports, etc. as may be prescribed, and in-class laboratories or practical work satisfactorily before any credit for that course can be given. If Faculty deems it advisable, giving consideration to the student's overall performance and the constraints of time and resources, students may be given the opportunity to clear any deficiencies by means of remedial programmes.

Students who, in the judgment of the Faculty, are deficient for any reason in their clinical practice may be required to return for a special clinical session or to repeat the year. The satisfactory completion of this entire clinical session is required in order to allow students either to continue in their regular class or to graduate at the next subsequent Convocation.

Individual course waivers for students repeating a year as a result of failing grades may be granted by the Class Committee and only for courses in which a grade of B- was attained. A student thus repeating a year is not permitted to register concurrently for courses in any other year of the Faculty of Dentistry programme. Course waivers will not normally be granted for courses with preclinical/clinical components.

### 3. Course Grades

Upon completion of a class, a student is awarded a grade of A+, A, A-, B+, B, B-, C+, C, C-, D, F, T, ILL, or INCOMPLETE, or for courses designated a grade of PASS, FAIL.

In this system; A is the highest and D is the lowest passing grade; an INC grade allows an otherwise qualified candidate to fulfil the course requirements within a specified time in a programme determined by Faculty; an F is a failing grade which may allow an otherwise qualified candidate supplemental examination privileges, or may disqualify the student from further evaluation without repeating the course and/or the entire academic year.

The course directors concerned are responsible for defining the requirements for grades.

### 4. Grade Point Equivalents and Averages

The numerical percentage score-letter grade equivalency scale for all courses in the Faculty of Dentistry is as follows:

Numerical Score	Letter Grade	Grade Point Equivalent
95-100	A+	4.30
90-94	A	4.00
85-89	A-	3.70
80-84	B+	3.30
74-79	B	3.00
70-73	B-	2.70
67-69	C+	2.30
64-66	C	2.00
60-63	C-	1.70
50-59	D	1.00
0-49	F	0.00
N/A	INC	0.00
N/A	ILL	Neutral
N/A	Pass	Neutral
N/A	W	Neutral

INC - Incomplete: Students are expected to complete course work by the prescribed deadlines. Only in special circumstances may an instructor extend such deadlines. Incomplete work in a course must be completed by a time assigned by the relevant Academic Standards Course Committee, and in accordance with university regulations. Students who receive an incomplete will receive a Grade Point Equivalent of 0.00 for the class. An INC will be converted to the earned grade if completed by the deadline. Otherwise, the course grade point value will be calculated as a 0.00 on the student's grade point average.

ILL - Illness: Students who are given special consideration by the Academic Standards Committee for compassionate reasons, illness or other special circumstances may be given a grade of ILL. This grade has a neutral Grade Point Equivalent and will be converted to an earned grade upon completion of the class. If the course is not completed in the time period indicated by the Academic Standards Committee, the student will receive no credit for the work done in the class.

W - Withdrew with permission.

### 5. Calculation of Average

Each course, except courses with final grades of PASS or FAIL, is assigned a course weight based on its length and the mix of lecture, laboratory or clinical components. An individual student's point equivalent for each course is multiplied by the adjusted course weight. The student's yearly grade point average is calculated by dividing the sum of the weighted grade point equivalents earned for all the separately numbered courses for the academic programme year by the sum of the adjusted course weights for all courses.

A Cumulative Grade Point Average is calculated by adding the total weighted grade point equivalents earned and dividing by the sum of the adjusted course weights for all courses taken. The Cumulative GPA is used for awarding of certain prizes, awards and scholarships.

### 6. Supplemental Examinations

A candidate who has received failing grades in not more than two subjects of any year and who has attained the required overall grade point average of 2.30 may be offered the privilege of taking supplemental examinations in such subjects, provided he or she is qualified in attendance and class work for admission to examination.

Supplemental examinations are normally written after July 15 and before August 10, and are normally written at Dalhousie, unless approval is obtained to do otherwise.

Application for admission to a supplemental examination must be made on or before July 15th. Application forms may be obtained from the Dean of Dentistry's Office and must be accompanied by a supplemental examination fee.

On passing a supplemental examination or evaluation the candidate receives no higher than a D grade for the course. Failing grades must be replaced by passing grades before a student is promoted to the next year of the programme.

### 7. Illness or Absence

It is the student's responsibility to immediately inform the Office of the Dean and, when clinical activities are involved, any scheduled patients, of any absence due to illness, injury, or other serious cause.

In the case of illness or injury, the student may be required to present a valid medical certificate documenting the illness/injury. In the case of a student missing a test/examination, a medical certificate will be required before a make-up test/examination is planned. In the case of a serious personal problem, the student will be required to submit to the Associate Dean for Academic Affairs, a confidential written statement documenting the reasons for absence.

Students who fail to attend clinics as scheduled without providing proper notification and required documentation may have clinic privileges suspended for up to one week. Special consideration and make-up time will not be provided to students whose clinic privileges are suspended.

Failure to report to classes or clinic or to report an absence due to injury or illness as required may result in suspension of clinic privileges and may

limit a student's right to appeal an unsatisfactory course grade or the failure of an academic year. Written policies describing the responsibilities of students in such cases are available to all students in the Academic Policy Manual.

## 8. Appeals

Students have the right to appeal their assigned grade in a given course as well as decisions regarding promotion or graduation. Written policies describing the Faculty's appeal procedures are available to all students in the Academic Policy Manual.

## I. Instruments, Equipment, Textbooks

An user fee is charged for all required clinic instruments, equipment, and supplies. All student fees for such things as: vaccinations, manuals, clinic uniforms, name tags, locks for lockers and replacement supplies used during laboratory exercises are provided in the student 'instrument kit'. The costs of the 'kit' vary by year while the clinic 'user fee' remains constant and is only changed with advance notice to all students. See summary of typical fees below.

Many instruments and equipment items are signed out to students. Students are financially responsible for any lost or damaged items. Degrees are withheld pending the return of or payment for missing/damaged items.

The University obtains all kit and user fee items for all students in order to maintain minimum standards and to ensure on time delivery and availability for September or May classes.

**Student kit Refunds:** If for any reason, a student leaves their programme during the first week of the official start of the programme (of any year) the student will receive a full refund of the kit they received for that year of the programme. There will be no refunds after the first official week of the programme.

**User Fee Refunds:** There are no refunds of the User Fee.

Fees: School of Dental Hygiene 2003/2004

	*Instrument Fee	Textbooks
Year 1	\$608.00	\$800.00
Year 2	\$438.00	\$300.00

(\*Instrument Fee includes User Fee of \$313.00)

## IV. Academic Programme

### Policy Statement on Interprofessional Learning

Students in the Faculties of Dentistry, Health Professions and Medicine participate in interprofessional modules to discuss contemporary health and health care issues. The interprofessional modules are part of the curricula of individual programs. Participation is mandatory. The objectives of these modules are to:

- Learn and develop skills and strategies for working effectively to address complex problems and issues with other professionals, colleagues and clients/consumers/patients.
- Develop an awareness of, and respect for, the expertise, roles and values of other professionals, colleagues and clients/consumers/patients.

Topics & Dates for Interprofessional Learning Modules 2004-2005	
Palliative Care Module (Senior level)	September 16, 2004 (Wednesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #1 Introduction (Entry level)	September 23, 2004 (Thursday, 1:00 - 5:00 p.m.)
Disability Module (Intermediate level)	November 2, 2004 (Tuesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #2 Professional roles (Entry level)	January 19, 2005 (Wednesday, 1:00 - 5:00 p.m.)
From Family Violence to Health (Intermediate level)	February 10, 2005 (Thursday, 1:00 - 5:00 p.m.)
Please note: PM sessions generally are planned to run between 1:00-5:00 pm in 2 or 3 separate (2hr) sessions depending on student numbers. Group/room/ building/ time assignments are posted on the Web site. An information desk will be available on site. Check Web site for location <a href="http://www.dal.ca/ipl">www.dal.ca/ipl</a> .	

### DEHY 2601.00: Student Table Clinics.

Second Year Students will prepare and present a table clinic on a topic they have chosen. The topic may be based on an aspect of clinical practice or on a research project that the student has completed. The table clinic is graded on a pass/fail basis and presentations are judged for prizes during a public presentation.

### DEHY 2800.00: Elective.

This course is designed to allow students to pursue, in depth, dental hygiene related, and to a lesser extent, other topics of particular interest to them that are not covered in scheduled courses.

### DEHY 2803.03: Oral Anatomy.

A study of the gross anatomy and morphology of the structures of the mouth, with emphasis on primary and permanent dentitions, tooth anatomy, eruption patterns, and occlusion.

### DEHY 2804.03: Radiology.

This course includes the technical and theoretical aspects of radiology, preliminary interpretation of radiographs, as well as the hazards and safety of radiation. Course material will be presented through lectures, small group activities and laboratory sessions. Laboratory sessions include a "hands on" portion which allows students to take radiographs using prototype heads and placement on each other.

### DEHY 2805.01: Periodontics.

This course presents the basic clinical, histologic and radiographic parameters needed for the assessment of normal and diseased periodontal structures. Likewise, this course also covers the basic elements of the inflammatory process and the immune response, and the microbiologic and histopathologic changes associated with the initiation of gingivitis and its progression to chronic periodontitis. Finally, the course deals with the cellular interpretation of the clinical response of the periodontium to the initial phase of treatment.

### DEHY 2806.03: Dental Biomaterials Science.

This course involves the study of the composition and properties of dental materials that are relevant to dental hygiene practice. The application of biomaterials science to clinical practice is considered through lectures, demonstrations and laboratory exercises. Emphasis is focused upon instructing students on the reasons why specific materials are employed and how these materials interact with their environment.

### DEHY 2808.06: Communications.

The constructs, principles, and methods of effective communication and motivation in health education and behavioral change will be examined. Concepts covered include theories of motivation, principles of teaching and learning, the client centered approach to education and counselling, and aspects of psychology which are fundamental to dental hygiene practice. Emphasis will be on the one-on-one clinical setting with reference to the community environment. Learners will be prepared in this course

for the second year clinic course where they will critique their communication skills in clinical patient interaction using video tape.

### **DEHY 2809.03: Nutrition for Preventive Dentistry.**

This course provides information and an opportunity for discussion on nutrition, how it impacts on our way of life, our health and dental hygiene. The learner will be exposed to and given an understanding of how to interpret food intakes in relation to healthy eating and dental hygiene using the tools: Canada Food Guide for Healthy Eating and the new Dietary Reference Intakes (DRI).

### **DEHY 2812.03: Fundamentals of Clinical Dental Hygiene - Theory.**

This full year lecture course is an introduction to the knowledge and concepts necessary to understand and practice clinical dental hygiene as a process of care.

### **DEHY 2816.01: Dental Hygiene Ethics.**

Dental Ethics is presented in a series of lectures and problem solving exercises on the theory and important principles of ethics. Application of the CDHA and CDA Codes of Ethics are practiced.

### **DEHY 2817.09: Fundamentals of Clinical Dental Hygiene.**

This course is an introduction to the knowledge, concepts and skills necessary to understand and practice clinical dental hygiene as a process of care. This process of care involved four phases: assessment, planning, implementation and evaluation. This course is competency based, with an expectation that the student will master specified didactic (theory) material as well as laboratory and clinical competencies.

### **DEHY 2819.03: Embryology, Histology & Pathology.**

This course covers the areas of embryology, histology, and general pathology. The embryology portion of the course covers gametogenesis and fertilization, cleavage and implantation, formation of the bilaminar germ disc, establishment of body form, fetal membranes and placenta, orofacial development I and II, and branchial arch development I and II. A histological background is provided for the development of bone, cartilage, teeth, oral mucosa, and salivary glands. General pathology topics covered include: introduction to pathology, the nature, causes and mechanisms of development of disease, disturbances of blood flow and body fluids, inflammation and repair, immunity and infection, hypersensitivity, disturbances of growth and neoplasia. Medical conditions of importance to dental hygienists are discussed. Related basic clinical oral pathology will be covered in the first year Clinical Fundamentals course. Detailed clinical oral pathology will be covered in second year.

### **DEHY 2850.03: Introduction to General and Oral Microbiology.**

Introductory microbiology includes a study of the structure and physiology of microorganisms, the ways microorganisms cause diseases in humans and the ways they affect humans' well-being. Roles of microorganisms in oral health and diseases will be emphasized. Laboratory work provides experience in basic microbiological techniques including those used in oral microbiology.

### **DEHY 2851.03: Basic Human Anatomy.**

This class is offered by the Department of Anatomy and Neurobiology and is restricted to students in the School of Dental Hygiene. Upon successful completion of the class, the student will be able to explain and describe, at a basic level, the gross anatomy and histology of the human body. There are no formal laboratory sessions. However, a self-directed optional human anatomy laboratory will be provided throughout the year for independent study.

INSTRUCTOR(S): G.V. Allen

FORMAT: Lecture 3 hours

RESTRICTION: Restricted to Dental Hygiene students

### **DEHY 2852.03: Gross Anatomy of Head and Neck.**

This class is taught by the Department of Anatomy and Neurobiology in the Faculty of Medicine and is designed especially for, and restricted to,

Dental Hygiene students. It deals with the detailed gross anatomy of the head and neck. This class complements DEHY 2851.03 and DEHY 2853.06.

INSTRUCTOR(S): K. Semba

FORMAT: Lecture/lab 2.5 hours

RESTRICTION: Restricted to Dental Hygiene students

### **DEHY 2853.06: Human Physiology.**

This is an introductory human physiology course directed mainly to Health Profession and Dental Hygiene students. The functions of body organs and body systems and the integration functions of the whole organism are studied.

FORMAT: Lecture 3 hours, weekly assignments, and virtual labs

CROSS-LISTING: PHYL 1010.03

### **DEHY 3001.12: Dental Hygiene Clinic.**

This course is the clinical application of skills and knowledge to provide comprehensive dental hygiene care. Students will use the dental hygiene process of care: assessment, planning, implementation and evaluation. Students will gain additional experiences through rotations through pediatric, seniors, orthodontic, oral pathology and oral surgery clinics.

### **DEHY 3002.06: Population Health.**

An introduction to the promotion of oral health and the prevention of oral disease in populations. The population and health promotion approaches aim to improve the health status of the entire population and to reduce health inequities among population groups by taking action on the full range of health determinants. Course requirements include practical experience in community settings such as health centres, schools, and extended care facilities.

### **DEHY 3003.03: Care of Exceptional Patients.**

This is a lecture and seminar course about the provision of preventive oral health care for members of exceptional populations. There are three components to the class, each focusing on a particular population; the geriatric population; the exceptional population including but not limited to the visually, hearing and intellectually impaired as well as those who may be medically compromised, and the population representing people receiving treatment for cancer.

### **DEHY 3004.01: Clinical Periodontics.**

Continued study of the pathogenesis and microbiology of periodontal diseases affecting the supporting structures of teeth and dental implants. The course provides an overview of current and non-surgical therapies using a clinical and dental literature evidence-based approach.

### **DEHY 3005.03: Professional Issues.**

A study of the ethical, legal and practice management issues related to dental hygiene practice and regulation.

### **DEHY 3007.01: Pharmacology.**

A broad overview of the drugs which are used frequently in dental practice, and drugs used by dental patients which influence choice of treatment, may have significant interactions, may lead to complications during dental/dental hygiene treatment.

### **DEHY 3009.01: Dental Specialties.**

An introduction to six specialties of dental practice, particularly as they relate to the active roles of the dental hygienist in collaborative practice settings, and to the specific needs of patients. The six specialties are endodontics, fixed and removable prosthodontics, pediatric dentistry, orthodontics, and oral surgery.

### **DEHY 3011.03: Study Group - Clinical Cases.**

This course is designed to develop critical thinking skills in clinically based situations. Through case-based learning, students will be given an opportunity to demonstrate integration, application, synthesis and evaluation of didactic knowledge gained from a variety of disciplines and their clinical experience. They will be expected to research various issues that arise while working through the cases and present their findings within a study group learning situation. Initial cases will introduce the students to the process of case-based learning and the final cases will be of a more complex nature where the technique of "progressive disclosure" will be utilized.

**DEHY 3013.03: Dental Hygiene Restorative Technique.**

This course includes lecture, laboratory, and clinical experience in the placing, contouring, and finishing of restorations, placement of temporary restorations, and related supporting procedures.

**DEHY 3014.03: Fear, Pain and Anxiety Management.**

This course will provide an integrated overview of the psychology, anatomy, physiology and pharmacology associated with dental pain, fear and anxiety management for patients receiving dental care. Students will be educated at an appropriate clinical level to recognize and support the management of a dental patient's pain, fear and anxiety.

**DEHY 3015.01: Clinical Oral Pathology.**

This course is based on DEHY 2815.01 but differs from it in that it discusses diseases of the mouth based on their clinical presentation rather than the pathologic processes that produced them.

**DEHY 3016.01: Dental Hygiene Clinic Seminar.**

This course is an expansion and elaboration of material from the first year fundamental theory course. Students will be exposed to current research findings related to clinical evidence-based practice to assist in providing comprehensive dental hygiene care for their clients.

**DEHY 3900.00: Elective.**

This course is designed to allow students to pursue, in depth, dental hygiene related, and to a lesser extent, other topics of particular interest to them that are not covered in scheduled courses.

# Faculty of Law

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## The Law School

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## Dalhousie University - Faculty of Law 2003-2004

### Dean

Dawn A. Russell, Q.C., B.A. (St. Thomas), LL.B. (Dal.), LL.M. (Cambridge)

### Associate Dean, Academic

Teresa Scassa, B.A. (Concordia), BCL, LL.B. (McGill), LL.M., J.S.D. (Mich.);  
Associate Director Law & Technology Institute

### Associate Dean Graduate Studies and Research

Philip Vincent Girard, B.A. (Brock), LL.B. (McGill), LL.M. (Cal., Berkeley),  
PhD (Dal)

### Assistant Dean for Student Services

Sherifa Elkadem, B.A., LL.B. (U.N.B.), LL.M. (U. of T.)

### Professors

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Vaughan E. Black, B.A., M.A. (Carleton), LL.B., (U. of T.), LL.M. (Calif.,  
Berkeley) (L.O.A.)  
Richard Devlin, LL.B. (Queen's, Ireland), LL.M. (Queen's, Ont.)  
H. Archibald Kaiser, B.A., LL.B. (Dal.), LL.M. (L.S.E.)  
Hugh M. Kindred, LL.B. (Bristol), LL.M. (London), LL.M. (Illinois)  
A. Wayne MacKay, B.A. (Mt. Allison), M.A. (Florida), B.Ed. (Mt. Allison),  
LL.B. (Dal.), Leave of Absence  
Moirra L. McConnell, B.A. (Victoria, B.C.), LL.B. (Dal.), Ph.D. (Sydney)  
Dianne L. Pothier, B.A. (Dal.), M.A. (Carleton), LL.B. (Dal.) (Sabb. &  
L.O.A.)  
Paul Thomas, LL.B. (Wales), LL.M. (Yale)  
D.A. (Rollie) Thompson, B.A. (McGill), LL.B. (Dal.)  
Esmeralda M. A. Thornhill, B.A.(McGill), Dip.Ed. (McGill), LL.B.  
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### Lecturer in Law

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M.C.I.T., F.N.I., FOI, Master Mariner FG (UK & Canada)  
Edwin C. Harris, Q.C., BCom, LL.B (Dal), LL.M (Harvard), RIA, CA  
Douglas M. Johnston, LL.B. (St. Andrews, Scotland), LL.M., J.S.D. (Yale)  
Leon E. Trakman, B.Comm., LL.B. (Cape Town), LL.M., S.J.D. (Harvard)

### Research Associate

Martina Munden, B.A.C.S. (U.C.C.B.), LL.B. (Dal)  
Karen McEwen, LL.B (Dal)

### Part-Time Faculty

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Nancy Barteaux, LL.B. (Dal.)  
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 Timothy Hill, LL.B. (Dal)  
 Christene Hirschfeld, B.A., LL.B. (Dal.)  
 Gordon Johnson, B.Comm., LL.B. (Dal), M.B.A. (St. Mary's)  
 Peter Lederman, B.A. (Queen's), M.A. (Dal.), LL.B. (Queen's), B.C.L. (Oxford)  
 Stanley MacDonald, B.B.A. (St.F.X.), LL.B. (Dal)  
 Dennise Mack, B.A. (McGill), LL.B. (U.B.C.)  
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 Timothy Matthews, Q.C. B.Sc., LL.B. (Dal), B.C.L. (Oxford)  
 M. Kathleen McManus, B.Sc., B.A., LL.B. (Dal.), Ph.D. (London)  
 Aidan Meade, B. Eng. (McGill), M.Sc. (Queen's), P. Eng. (Assoc. of Prof. Eng.), LL.B. (Dal)  
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 Eric Slone, B.Sc. (McGill), LL.B. (Osgoode)  
 Lyle (Chip) Sutherland, B.A. (Trent), LL.B. (Dal.)  
 Wyman Webb, B.Sc. (Mount Allison), LL.B./M.B.A. (Dal)  
 The Honourable R. James Williams, B.Sc. (Alta), M.S.W., LL.B. (Dal.)  
 G.R. Winham, B.A. (Bowdoin), Dip. Int'l Law (Manchester), Ph.D. (North Carolina)  
 Hugh Wright, B.A. (Queen's), LL.B. (Dal.)

### Legal Aid Clinic

Jeanne Fay, B.A. (U. of New Hampshire), MSW (Dal)  
 Donna Franey, B.A. (St. Mary's), LL.B. (Dal), Director Legal Aid Clinic  
 Shawna Y. Hoyte, B.A., B.S.W., LL.B., MSW. (Dal)  
 Susanne Litke, B.S.W. (Dal) M.S.W., LL.B. (McGill)  
 Claire McNeil, B.A., LL.B. (Dal)  
 Heather McNeill, B.A., (M.St. V), LL.B. (Dal)  
 Angela Peckford, B.A., LL.B. (Dal.)  
 Susan Young, B.A (SMU), LL.B. (UNB)

### Librarians

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 Joan Simpson, B.A. (U.P.E.I.), M.L.I.S. (Dal.), Cataloguer

### Administrative Officers

Donna Beaver, B.B.A. (Mt.St.V.), M.B.A. (Dal.) Administrator (Finance, Personnel & Payroll)  
 Rose Godfrey, Director Admissions and Career Development  
 Candace E. Malcolm, B.A., LL.B. (Dal.), Secretary to the Faculty and Director of Studies  
 Karen Kavanaugh, Director Alumni & Development

## I. Introduction

Dalhousie Law School is the oldest university common law school in the British Commonwealth, and in 1983 celebrated the 100th anniversary of its founding. From its inception in 1883, the school has sought to perpetuate the vision of its founder and long-term Dean, Richard Chapman Weldon, a vision which encompasses a solid preparation for the practice of law and which encourages respect for and participation in public life. Despite its regional base, Dalhousie is perceived as a "national" law school, and encourages applicants from all parts of Canada. Indeed, over the years graduates of Dalhousie have had a distinguished influence on the development of law, legal education and public institutions throughout

Canada. The LLB degree from Dalhousie is recognized for the purposes of Bar admission in all Canadian provinces.

The Law School is located in the Weldon Law Building on the main university campus. Designed to meet the special needs of law students and staff, the building contains class and seminar rooms, faculty and administrative offices and lounge space for students and staff. The Law Library, opened in October 1989, houses our collection of over 202,000 volumes of common law materials and legal periodicals which includes a very good selection of international legal materials, and a fast-growing marine and environmental law section. Our marine and environmental law holdings represent one of the best collections of its kind in the world, attracting scholars from many countries. The law school publishes the Dalhousie Law Journal, a well-respected legal periodical.

The full-time LLB programme at Dalhousie entails three years of study. The first year programme is entirely compulsory, while the second and third year programmes are, for the most part, optional. The first year programme consists of the following seven classes: Judicial Rule-Making and the Law of Contract, Criminal Justice: The Individual and the State, Orientation to Law, Fundamentals of Public Law, Legal Research and Writing, Property in its Historical Context, and Tort Law and Damage Compensation. The second year required classes are Civil Procedure and Constitutional Law. The third year required class is The Legal Profession and Professional Responsibility. As well, students in second and third year are required to complete at least one "major paper" class per year. A more detailed description of all our class offerings follows.

A limited number of students are permitted to complete their LLB on a part-time basis, subject to more detailed regulations set out below. The intent of this programme is to accommodate the special needs of individuals for whom three years of full-time attendance at Law School could cause hardship or even inability to attend at all.

The Law School is home to the Dalhousie Health Law Institute. It is an interdisciplinary Institute of the Faculties of Law, Medicine, Health Professions and Dentistry. The Health Law Institute is committed to the advancement of health law and policy and the improvement of health care practice and delivery in Canada through scholarly analysis, professional education, and public service. Institute objectives include:

1. fostering strong and innovative health law and policy scholarship by
  - contributing to the literature in health law and policy, and
  - providing external consultation services on matters having a significant impact on health law or policy;
2. advancing health law and policy education by
  - designing and implementing education programs for law students and health care professionals in training and
  - providing continuing education opportunities for health care professionals and legal practitioners;
3. serving the public in their areas of expertise by
  - contributing to societal understanding of health law and policy issues
  - providing expertise to organizations in the public sector
  - engaging in the policy-making process at local, regional, and national levels.

Of particular interest to students is the Health Law and Policy Programme (HLPP) (for more information on this programme refer to Section V: Academic Programmes).

Dalhousie Law School has an active clinical law programme, Dalhousie Legal Aid Service. Through its community law office in downtown Halifax, the Clinic provides a legal aid service for low-income clients in the Halifax-Dartmouth area. Students, lawyers and paralegals conduct cases for individual clients and also work in areas of community development, preventive law and law reform, all under the supervision of staff lawyers and faculty members. The Clinic also acts as a teaching centre for third-year students. The law school offers another type of clinical experience, dealing solely with criminal law, in which, to complement special classes and seminars, students are assigned to either a judge, a Crown Counsel, or a defence lawyer, to observe and participate in criminal law work. Students receive academic credit for both clinical programmes.

The Law School, in conjunction with several other faculties, offers five combined degree programmes. The LLB/MBA programme allows students to obtain the Bachelor of Laws degree and the Master of Business Administration in four years instead of the five which would be required to take the degrees separately. The LLB/MPA (Bachelor of Laws/Master of Public Administration), the LLB/MLIS (Bachelor of Laws/Master of Library and Information Studies), and the LLB/MHSA (Bachelor of Laws/Master of Health Services Administration) are similarly structured to permit the completion of the two degrees in four years instead of the usual five. Students intending to make application to any of the combined programmes should inquire directly to the Registrar's Office, Dalhousie University.

Students are able to participate in several mooting programmes. All second and third year students are required to participate in Moot Court, second year students as counsel, and third year students as judges. The best second year counsel compete in their third year for the Smith Shield, a prestigious Dalhousie award. As well, students can participate in the Jessup International Moot Court Competition, a world-wide competition on a problem of international law, the Canadian-American (Trilateral) Moot Court Competition (among Dalhousie, the University of New Brunswick and the University of Maine), the Laskin Moot (an administrative-constitutional moot), a Securities Law Moot and the Gale Cup Moot Court Competition (among all Canadian common law schools), and the Sopinka Trial Advocacy Competition.

Dalhousie, in cooperation with the Supreme Court of Nova Scotia, offers a voluntary Judge's Clerkship Programme for third year students. This programme, which is in addition to regular classes and not for credit, allows qualified students to spend one week during the term with a Supreme Court Justice in Chambers, and offers a valuable and practical learning experience. Some students each year may also have the opportunity to act as student assistants, for credit, to the N.S. Appeal Court and some may do the same with the Nova Scotia Supreme Court.

Dalhousie Law School has established exchange programmes with the University of Maine School of Law at Portland, National University of Singapore, the Canadian civil law schools, the EU Consortium of Law Schools and the North American Consortium on Legal Education with law schools in the United States and Mexico. Third year students may do one term at these schools for academic credit at Dalhousie. There is also the possibility of directed research classes to be taken at the Vrije Universiteit, the Netherlands, for academic credit at Dalhousie.

The law school has an active graduate degree programme, offering both the Master of Laws (LLM) and the JSD (Doctor of Laws) degrees. The Master's degree is normally acquired on the basis of thesis and class work, and can be taken either full-time in one year or part-time over two years. The Master's degree may also be taken on the basis of class work only, which is particularly appropriate for part-time students. In recent years, supervision has been offered in the following areas, among others: international law, human rights law, health law, administrative law, constitutional law, taxation, business law, labour law, law of the sea, maritime law, fisheries law, environmental law, critical race and legal theory and feminist legal scholarship. A particular interest has been developed in marine and environmental law, which has been designated as a field of special emphasis in the faculty. More detailed information on the graduate degree programme follows.

## A. Student Life

The first year class normally consists of 160 people, and the total student population in the LLB programme is approximately 460. Many of our students, usually 50%, are residents of provinces outside the Atlantic region. In addition to the LLB students, approximately 20 students are in the LLM programme, and several students are enrolled in the JSD programme each year. The student body is very diverse, with students from a wide variety of backgrounds and experience. We are sometimes able to accept, for advanced standing, a small number of students who wish to transfer to Dalhousie from another Canadian law school, or who have received their law degree in Québec or in a common law jurisdiction outside Canada. Application for advanced standing may be made to the Director of Studies, Dalhousie Law School, Halifax, B3H 4H9.

All law students are members of the Law Students' Society which appoints representatives to faculty committees, arranges for speakers to visit the school, and organizes social events and programmes. It also oversees publication of a law students' newspaper, *The Weldon Times*, *The Dalhousie Journal of Legal Studies*, and the annual yearbook. Dalhousie has an active sports and social programme with something to appeal to most students. Some of the student organizations active at the school are the Association of Women and the Law, the Environmental Law Students' Society, the Dalhousie Aboriginal Law Students Association, the Dalhousie Black Law Students Association, the John Read International Law Society, and the Speakers' Committee. The Domus Legis Society, a pub open for membership to all law students and graduates, occupies a house which provides accommodation for a few students and serves as a social centre for law students generally. Dalhousie University features a major athletics and sports complex known as Dalplex. Indoor facilities there include a 50 metre swimming pool and a gymnasium/field house the size of a football field.

## B. Scholarships and Bursaries

Dalhousie Law School administers a very generous scholarship and bursary program. Well over 50% of the students enrolled at Dalhousie Law School receive some sort of financial support form programmes administered by the School. Besides entrance and in-course scholarships, discretionary awards and bursaries are offered annually to students with financial need. Eligible students may apply for discretionary awards and bursaries in October, when application forms and information are distributed. More detailed information on scholarships and bursaries can be found in the section on Awards on page 130 of the calendar. Funding may also be available for students who are Mi'kmaq or Indigenous Black Nova Scotians and who are part of Dalhousie Law School's Indigenous Black and Mi'kmaq (IB and M) Programme. For further details, please see the description of the IB and M Programme on page 38 of this calendar.

## C. Dalhousie Law Alumni Association

President: Pamela Clarke

The association has over 4,000 members composed of graduates and faculty of the Dalhousie Law School. In addition, current students are considered non-voting members until graduation. The aims of the Dalhousie Law Alumni Association are to promote and encourage active participation of graduates in the life of the school and to establish and maintain strong relationships among alumni.

The Dalhousie Law Alumni mission statement: To promote cohesion of the community of Dalhousie Law graduates and support the Law School in its mission to provide a first class legal education incorporating liberal and professional elements, to students interested in the study of law.

The association has established branches in Alberta, British Columbia, Saskatchewan, Manitoba, New Brunswick, the Yukon and the Northwest Territories, Southern Ontario, Southeastern Ontario, Québec, Newfoundland, Prince Edward Island, and Cape Breton, Nova Scotia. Each branch organizes its own local activities. Association members participate in admissions interviews. They act as firm contact persons for articling applicants, and take part in student information seminars on practice and law-related careers. In addition, each year the Association organizes an Alumni dinner, held in conjunction with class reunions.

The law alumni magazine and newsletter, *Hearsay* and the *Ansul* respectively, are each sent out once a year to all graduates of the school to keep them informed of the latest events at the law school. In conjunction with the Law Students Society, the Law Alumni Association administers the Award for Excellence in Teaching Law. The Dalhousie Law Alumni Association also sponsors The Weldon Award for Unselfish Public Service. This annual award is given to a graduate for recognition of their unselfish public service to the community, and serves as a tribute to the school's first dean, Richard Chapman Weldon.

## D. Career Development Office

Director, Career Development: Rose Godfrey

The Career Development Office provides resource materials to assist students and graduates in finding articling positions, permanent jobs, summer jobs, and law-related opportunities. Individual career and job search counselling is also available to students. Some law firms, particularly from the Atlantic Provinces and central Canada, conduct interviews at the law school. Career Development Office materials and notice boards communicate information on specific jobs, scholarships and clerkships and about graduate law study programmes and awards.

Articling opportunities surveys are conducted for most provinces in Canada and articling receptions are held in a couple of major cities to introduce students to practicing lawyers in those provinces while students are interviewing there.

Students on the Career Development Committee participate in organizing placement seminars and recruitment days to assist students in pursuit of the diverse range of opportunities available to graduates with a legal education.

Preliminary placement surveys of students conducted in June of their graduating year indicate that placement has been well over 96% for the past several years.

## II. Admission

Director of Admissions: Rose Godfrey

Students are admitted to classes as regular or part time undergraduates in law, as occasional students, or as graduate students.

### A. General Information

All applicants must have completed their applications (subject to filing LSAT scores, the current year's academic transcript, and letters of reference) and sent them to the Admissions Office, by February 28. LSATs written in June will not be considered for positions in the class commencing the following September. It is the responsibility of the applicant to ensure that all materials relevant to the application are received by the committee. Applicants who have failed first year law and are applying for readmission in the year immediately following the failure must do so by September 1.

### B. Bachelor of Laws (Full and Part Time)

#### 1. Regular Applicants

The Admissions Committee of the Faculty of Law may admit applicants as regular candidates for the LLB degree if they meet the following qualifications:

- a. The applicant must have received, with standing satisfactory to the Admissions Committee, the degree of Bachelor of Arts, Science or Commerce, or an equivalent degree from Dalhousie University or from another degree-granting college or university recognized by the Senate.
- b. An applicant with no degree within rule (a) must have completed, with standing satisfactory to the Admissions Committee, at least three full years' studies after junior matriculation or two full years after senior matriculation of a class leading to the degree of Bachelor of Arts, Science or Commerce or an equivalent degree at Dalhousie or at another degree-granting college or university recognized by the Senate. Normally, this means that the applicant is within one year of receiving a degree in the undergraduate programme followed. For the purposes of this rule junior matriculation means Nova Scotia Grade XI or equivalent and senior matriculation means Nova Scotia Grade XII or equivalent.

#### 2. Special Status Applicants

An applicant who is considered as a regular applicant may also be considered as a special status applicant if the application indicates a significant amount of non-academic involvement to which the Admissions Committee is prepared to direct special consideration. Generally, a special status applicant will be a person not less than twenty-five years of age who has had at least five years' experience in a significant employment capacity

or in a significant community activity. A special status applicant must submit a Personal Statement and should arrange to have additional Reference Statements forwarded to the Admissions Committee from persons familiar with the applicant's non-academic experience.

Applicants who, despite economic, cultural, racial, or ethnic disadvantages, have made significant contributions to the community or who have shown exceptional capacity to respond to the challenges of employment, may be given special consideration.

### 3. Mature Applicants

Where the applicant has not met the foregoing formal educational requirements the Admissions Committee may, in very exceptional circumstances, admit a limited number of applicants as mature students where it is of the opinion that, in all the circumstances, the applicant has demonstrated by the length and quality of non-academic experience the equivalent in substance of the formal education specified in paragraph (b). Mature applicants must normally be twenty-six years of age on or before September 1st of the year for which they seek admission to law school. Mature applicants are also required to write the Law School Admissions Test, to have an interview with the Admissions Committee, and to submit to the Committee a detailed resume of their non-academic experience along with letters of assessment from persons who are familiar with their contributions and achievements. The Committee is particularly interested in gathering information with respect to the candidates' ability to organize their life and their work in order to cope with the demands of law school, their ability to reason and analyze, their ability to express themselves orally and in writing, and their potential for contribution to the community. Generally, the Committee requires, as a minimum, an accumulation of five or more years of experience in a candidate's particular field of endeavour.

### 4. Applicants to Indigenous Black and Mi'kmaq Programme

#### Admissions

In July of 1989, Dalhousie Law School implemented the Indigenous Black and Mi'kmaq (IB and M) Programme, aimed at attracting more students from these communities. The Programme has the following components:

- the Admissions Committee is prepared to apply broader criteria when assessing applicants from these communities;
- there is a one month prelaw course, usually held in May;
- IB and M students who meet the definitions of "Indigenous Black" or "Mi'kmaq" set out below are eligible to apply for some financial support, based on need;
- academic support, primarily in the form of tutoring, is available as needed.

Applicants to the IB and M Programme are required to write the LSAT and most students who are admitted will have completed an undergraduate degree. If the Admissions Committee is persuaded that an applicant who has not completed a full undergraduate degree has sufficient academic background to complete a law degree successfully, the Committee may accept that applicant if she or he has completed at least two years of an undergraduate degree. Furthermore, a very limited number of applicants may be admitted to law school through the Programme as mature students, where it is determined that the applicant has demonstrated that the length and quality of his or her non-academic experience is the equivalent in substance to the formal education required of other applicants.

The documentation required for applicants to the IB and M Programme is similar to that required in the regular admissions process. The Admissions Committee will conduct interviews with those applicants who appear to have the qualifications necessary to succeed in law school.

The primary focus of the IB and M Programme is on students who are either:

- Indigenous Black Nova Scotians; that is, individuals who are Black and
  - were born and raised in Nova Scotia or
  - have a substantial connection with a Black community in Nova Scotia, or
- Mi'kmaq; that is, individuals who are Mi'kmaq and

- were born and raised in Mi'kmaqi or
- have a substantial connection with a Mi'kmaq community in Mi'kmaqi.

If in any given year all qualified Indigenous Black and Mi'kmaq students have been admitted and there are still spaces available in the IB and M Programme, the Admissions Committee may decide to admit Black students who are not indigenous to Nova Scotia or Aboriginal students who are not Mi'kmaq. As is set out below, such students are not eligible for funding through the IB and M Programme, but are eligible for all other aspects of the Programme.

#### **Prelaw**

The prelaw course is a 4 week course for IB and M applicants who are considered by the Admissions Committee to have the qualifications necessary to succeed in law school. It is usually held in the month of May. On occasion, the Admissions Committee may decide to offer an IB and M student with particularly high academic qualifications the choice of whether or not to take the prelaw course. For most IB and M students, however, prelaw will be required. Students in prelaw must successfully complete the course in order to attend Dalhousie Law School.

#### **Funding**

Limited funding may be available for Indigenous Black and Mi'kmaq students, on the basis of need. Students in the IB and M Programme who do not meet the definitions of Indigenous Black or Mi'kmaq set out above are not eligible for funding from the IB and M Programme.

### **5. Native Applicants**

Those native applicants who are not eligible for the Indigenous Black and Mi'kmaq Programme and whose previous academic background does not meet the admissions standards, are eligible to apply for admission to the Faculty of Law through successful completion of the Programme of Legal Studies for Native People at the University of Saskatchewan, College of Law. Application forms and further information are available from Professor Ruth Thompson, Director, Programme of Legal Studies for Native People, University of Saskatchewan, College of Law, Saskatoon, Saskatchewan, S7N 0W0.

### **C. Additional Information for Part Time Applicants**

Students interested in pursuing a part-time LLB at Dalhousie should do the following:

1. In addition to completing the regular admissions package, submit a brief written statement outlining your reasons for seeking admission to the Part-time Studies Programme and indicating whether you wish to do First Year on a full-time or half-time basis. This statement should be in addition to the Personal Statement which forms part of the regular application material. Admission to the Part-time Programme is limited. Not all students who meet the standards for acceptance to the LLB programme will be permitted to do the degree on a part-time basis. You should note that, in considering whether to admit an applicant into the Part-time Studies Programme, the Committee in its discretion will give special consideration to factors such as family responsibilities, financial hardship, employment commitments, health problems, physical handicap, age, racial and ethnic background or economic disadvantage.
2. Students already accepted into the full-time LLB who wish to enter the Part-Time Studies Programme should write a letter supplying the information requested in the previous paragraph and send it to Ms. Rose Godfrey, Admissions Office, Dalhousie Law School, Halifax, Nova Scotia, B3H 4H9. This letter may be sent along with your confirmation of acceptance and your deposit. It may also be sent at any time before registration, though earlier applications are likely to fare better than later ones. Take note that, even for those already accepted into the full-time LLB, acceptance into the Part-Time Studies Programme is by no means automatic.
3. When you decide to do the Part-Time programme you should contact the bar society of any province in which you might want to practice law, in order to ascertain whether they will accept a Part-time LLB from Dalhousie as meeting their requirements.

### **D. LLB/MBA, LLB/MPA, LLB/MLIS, LLB/MHSA.**

Students intending to make application for any joint programme should inquire directly to the Registrar's Office, Dalhousie University.

### **E. Admission From Another Law School**

Students seeking admission from another law school, who have failed to satisfactorily complete studies there, must submit with their application a letter from the Dean or Registrar stating that in all respects they are eligible to repeat or continue studies at that school. A student not permitted to continue will be considered ineligible for admission at Dalhousie. Undergraduates of other law schools who satisfy the standards for admission to the LLB programme may be admitted with advanced standing, provided they are in good standing where previous studies have been undertaken, the work they have completed is satisfactory to the Studies Committee, and the classes to be completed for an LLB degree can be arranged. To qualify for a degree the student must normally complete two full years at Dalhousie. In some cases, a degree may be granted after one full year. Well qualified graduates of a Québec law school or persons with a law degree from outside Canada may be admitted into a special one or two year programme. Enquiries should be directed to the Director of Studies at the law school.

### **F. Admissions Policy**

In assessing applications, emphasis is placed primarily on an applicant's academic record and LSAT score. The Admissions Committee also considers non-academic experience, letters of reference and other factors in making its decisions. Interviews by the Admissions Committee of applicants with significant non-academic experience may be held at the discretion of the Committee.

### **G. Students with Learning Disabilities**

Dalhousie University is committed to providing equal educational opportunity and full participation for students with learning disabilities. See University Regulations, page 24 for details.

### **H. Admissions Procedure**

Students seeking admission to the Law School for the first time must complete an application on the form provided, and forward this to the Admissions Office, Dalhousie University, Halifax, N.S. B3H 4H6. An application fee, which is not refunded, must accompany each application. Students applying for admission are required to submit results of the Law School Admissions Test of the Educational Testing Service, Princeton, New Jersey. Students inquiring about admission are advised of arrangements to take the test at Canadian universities.

The Admissions Committee may consider applications as soon as they are received or it may postpone consideration of some or all applications until June. A **non-refundable** deposit of \$200 is required to hold a place in the law programme. All prepaid deposits are applied to the first installment due for tuition fees. Prospective applicants should confirm from the faculty that this information has not been changed subsequent to this printing.

### **I. Admission as an Occasional Student**

Subject to University and Law School regulations, a student may be admitted as an occasional student to attend one or two classes. Attendance or performance in classes or any examinations is not credited for degree qualifications. As a general rule, occasional students are not permitted to attend first year law classes. Those wishing to be admitted as occasional students should apply to the Law School Studies Committee.

### **J. Exchange Programmes**

Dalhousie Law School is committed to promoting student opportunities to study in other countries and in civil law traditions. Exchanges are normally for one term and open to third year students. Home tuition arrangements generally apply where Dalhousie students are allowed to study at exchange partner institutions without additional tuition fees.

The application deadline is on or about March 15 each year and students wishing to undertake an exchange must forward a letter of interest and CV to the Chair of the Studies Committee. Selection may be competitive and

the following criteria may be considered: fluency in local language of instruction; demonstrated interest in a particular field of law which is an area of emphasis or specialization at the exchange law school in question; reasons for studying abroad; how the exchange experience will enhance career plans; academic performance (students should have at least a B grade average in law school). No student shall receive credit for participation in more than one exchange programme.

Students wishing to obtain further details on existing exchanges, listed below, are advised to consult the latest information available at the Law Library's Reserve Desk (listed under Exchange Programmes). A public information session about available exchange opportunities is normally held in the Law School each January. Appropriate web sites, faculty liaison persons and the Chair of the International Linkages Committee may also be consulted.

### **1. Semester at a Québec Law School (Civil Law)**

Students may receive credit for a semester of study at any civil law faculty in Quebec.

Students interested in getting involved in such a programme must have sufficient capacity in the French language to attend classes given in French, although examinations could be written in English. Interested students should contact the Associate Dean at Dalhousie Law School.

### **2. The Vrije Universiteit Amsterdam Exchange Programme**

The Vrije Universiteit Amsterdam (VU) offers its classes in three trimesters, the normal class load being for four 4-credit classes in the Autumn, three in the Winter and three in the Spring, for a total of 40 credits. Students can go there for the third trimester without missing any class time at Dalhousie and can earn seven Dalhousie credits for one Amsterdam trimester.

Exceptionally, a student who has planned his or her classes properly may be granted 14 credits for the equivalent of a full term's work at VU. Such a student would have to attend both second and third trimesters at VU in third year. It may also be possible to attain this level of Dalhousie Law School credit by attending VU twice, in the third trimester after completion of Dalhousie's second year and in the second or third trimester in Dalhousie's third year, with the permission of the Studies Committee.

### **3. Semester at the University of Maine Law School**

Students who have completed half the work needed for graduation from the Faculty of Law are eligible to spend one semester at the University of Maine School of Law in Portland and receive full credit towards their degree at Dalhousie. The programme received the approval of the Qualifications Committee of the Nova Scotia Barristers' Society. This opportunity to live in the United States and study at an American Law School should interest both students who contemplate graduate work in the United States and those who would find background in American law helpful.

### **4. National University of Singapore**

Up to four Dalhousie students per year may study at the Faculty of Law, National University of Singapore (NUS), which has wide offerings in commercial law, environmental law, maritime law and international law. Further information may be obtained at [www.nus.sg/NUInfo/LAW/handbook/index.html](http://www.nus.sg/NUInfo/LAW/handbook/index.html), and from the faculty liaison for the exchange, Professor Keith Evans.

### **5. European Exchanges**

The Faculty of Law has established exchanges with the University of Maastricht in the Netherlands, Lund University in Sweden, and with the private Bucerius Law School in Germany. Up to two Dalhousie students may study in one term at any of these three institutions, although the students going to Bucerius may do so only in the Fall Term as Bucerius runs a special Fall Section for all incoming students.

### **6. North American Consortium on Legal Education (NACLE)**

Dalhousie Law School, in collaboration with McGill and the University of Ottawa, has entered into an exchange agreement with partner institutions

in the United States and Mexico. Dalhousie students may study for a term at the University of Arizona James R. Rogers College of Law, the University of Houston Law Centre (which has a noted Health Law programme and may therefore be of great interest to Dalhousie students interested in Health Law), George Washington University National Law Centre, Universidad Panamericana (Mexico City) and the Instituto Tecnológico de Estudios Superiores de Monterrey, Escuela de Derecho (ITESM). (Please note: even though an exchange agreement is in place, the need to achieve equal numbers of incoming and outgoing students may mean places at George Washington and Arizona may not be available.) Fluency in Spanish is required for Panamericana and highly recommended for Monterrey. In addition, special research exchanges, preferably at the graduate level, may be arranged with the Universidad Nacional Autónoma de México, Instituto de Investigaciones Jurídicas. Consult [www.nacle.org](http://www.nacle.org) for further information. Funding assistance of approximately \$3,000.00 may be available for two students per year.

### **7. Queensland University of Technology (QUT)**

Located in Brisbane and one of Australia's largest law schools, QUT Faculty of Law offers a broad range of courses with particular strengths in business law, information technology, environmental law and property law. Up to four Dalhousie students may study for a full academic term at QUT per year. For further information consult [www.qut.edu.au/](http://www.qut.edu.au/).

### **K. Admission to the Practice of Law**

Prospective students are advised to consult the Law Society in the law district where they hope to practice for specific information on qualifications for admission to the Bar. Some bar societies may require more extensive university training for admission to the Bar than is required for admission to Law School. Specific inquiries should be directed to the appropriate bar society.

Under the Rules and Regulations of the Nova Scotia Barristers' Society a student desiring admission to the Bar of Nova Scotia must serve under articles of clerkship with a practicing solicitor for a period of twelve consecutive months after receiving a degree in Law from Dalhousie or any other approved University. Students are also required to complete the Bar Admission Course, and to pass examinations given during the Course.

Students who complete a period of articles in another province may apply to the Qualifications Committee of the Barristers' Society for credit towards the twelve month requirement.

The Law Society of Upper Canada admits holders of the Dalhousie Bachelor of Laws degree to the Bar Admission Course conducted by the Society for candidates for admission to the practice of law in Ontario.

In other provinces of Canada where the common law system is in effect the degree of LLB from Dalhousie is recognized as fulfilling academic qualifications and as preparation for practical training for admission to the Bar. Information concerning particular elective classes recommended by the law society of a Province for inclusion in a student's class of studies is available from the Placement Office.

## **III. Faculty Regulations**

Associate Dean: Teresa Scassa

Director of Studies: Candace Malcolm

Note: The Legal Studies Committee oversees the implementation of the faculty academic regulations in specific cases. Students may address requests for accommodation under or exemptions from particular regulations to the Legal Studies Committee. The Associate Dean is the Chair of the Studies Committee.

The Academic Year consists of one session of two terms\* covering a period of about thirty weeks. Please consult the faculty for final confirmation of start and end dates.

\*There is a third term in the summer for Dalhousie Legal Aid Clinic students only, the dates of which are May 1 - August 31 inclusive.

## A. Registration

Students are registered for the whole session only and not for one or other of the terms. Late registration requires the approval of the Dean of the Faculty, and payment of an extra fee.

## B. Class Work and Attendance

In order that their class work may be recognized as qualifying for a degree, candidates must conform to the following requirements:

1. All students are expected to attend the classes of their prescribed classes regularly and punctually.
2. They must appear at all examinations and prepare all essays and assignments satisfactorily.
3. In determining pass lists the standings attained in prescribed class exercises and research work and in the various examinations are taken into consideration.

## C. Class Outlines

Students will be provided with a class outline by the instructor at the first meeting of the class. Changes to the outline which affect assessment components, the weight of individual assessment components, or examination requirements with a value of ten percent or more must have the unanimous approval of all enrolled students in order to be valid. Within four weeks after the beginning of each term class outlines will be placed on file with the Faculty of Law Office.

## D. Classes from Another Faculty for Law School Credit

Law students may take a university class(es) from another faculty for credit at the Law School, if that class (or classes) is sufficiently relevant to the student's law programme. The non-law class(es) should be at the graduate level, and may be the equivalent of no more than a total of 3 hours per year credit, as determined by the Director of Studies. The grades awarded in non-law classes will be on the basis of Pass/Fail, and a student's average will be computed on the basis of law classes only. Non-law classes cannot be included in a student's programme to satisfy the major paper requirement. Students wishing to take non-law classes must obtain the written consent of the particular university department, and arrange to have the class description sent to the Director of Studies. Normally, students may take non-law classes in their third year only. (Please note that students registered in the combined LLB/MBA, LLB/MPA, LLB/MLIS, and LLB/MHSA programmes are governed by separate regulations.)

## E. Auditing Classes

A law student may audit a class by sitting in on classes with the permission of the Director of Studies and the instructor. The instructor may require a student to keep up with class work and may record attendance. Only one class may be taken as an audit in each of second and third year. First year students are not permitted to audit.

## F. Examinations and Pass Requirements

Regular Examinations and Assignments: Final examinations are held immediately before the December vacation and after the completion of lectures in the spring.

### 1. Special Examinations and Assignments

Where it can be established that, for medical or personal reasons, a student's ability to pursue a class or to write an examination or complete an assignment for credit was significantly hampered, the Faculty may allow the student to write a special examination or complete a special assignment.

Where the Studies Committee has received a request from a student in two or more consecutive semesters for deferral of exams or assignments due to an ongoing medical condition, the Studies Committee may require the student to provide further medical documentation regarding his or her ability to continue with his or her course of study, and may determine that the only appropriate accommodation is a medical withdrawal from the academic year or term. (Effective date: November 2001)

A student who wishes to petition the Faculty for permission to write a special examination or complete a special assignment must, if possible, notify the Dean or his/her nominee prior to, and in no case later than the end of the examination or assignment in question.

## 2. Supplemental Examinations and Assignments

A student who attains the required average of 55% by regular and special examinations or assignments and who has failed not more than two classes is entitled to write supplemental examinations or to complete supplemental assignments in the classes failed. The student must pass the supplemental examination(s) before advancing to the next year, unless the student is in Second Year and is eligible under one of the other rules relating to pass requirements.

Students permitted to write special examinations or complete special assignments will be entitled to write supplemental examinations or complete supplemental assignments should they fail the special, provided they otherwise meet the requirements for entitlement to write supplementals. Moreover, a student who encounters medical or personal difficulties in preparing for or writing a supplemental assignment may, upon petition, be granted permission to complete the class requirements by supplemental procedures at a later date.

All special and supplemental exams for any course must be completed by the end of the Fall term exam period in the academic year following the academic year in which the course was taken. (Effective date: November 2001)

Where a student fails a class and writes a supplemental examination, both the mark in the final examination and the mark in the supplemental examination appear on the record. Supplemental examinations and assignments are marked "Pass" or "Fail". A student's mark in the regular examination or assignment is used for all purposes connected with the computation of the average, including class standing. Marks in supplementals are used for all purposes relating to the satisfactory completion of a particular class.

## 3. Dates for Supplemental and Special Examinations

Supplemental and special examinations are written in July and, in exceptional circumstances, on other occasions specially arranged. Application to write a supplemental examination must be made on a form to be obtained from the Office of the Dean and must be accompanied by the proper fee.

## G. Examination Regulations

1. Students writing examinations in Dalhousie Law School are expected to act honourably, in accordance with the spirit as well as the letter of these regulations. Invigilation is provided primarily to assist students with problems. Where there is no invigilation, and particularly in the case of supplementals, specials and other examinations not written in the normal course of events, these rules apply with such variations as are practically required.
2. Time for Writing Examinations - All examinations in the Law School shall commence at the appointed hour and, in the absence of an extension of time granted to the class generally by the instructor who sets the paper, they shall end at the appointed time. Except for justifiable cause, a student will not be permitted to enter the examination room after the expiration of one hour from the commencement of the examination nor will any student be permitted to leave the examination room during the first hour or the last half hour of the examination except as provided by Regulation (9). In the event of a student being late for an examination for justifiable cause, he or she shall report this fact as soon as is reasonably practicable to the Associate Dean or his or her nominee, and the Associate Dean, or nominee, in consultation with the examiner, shall have authority to make immediate alternative arrangements for the student to sit the examination. The term "justifiable cause" includes, but is not restricted to, temporary illness, delay caused by a snowstorm or transportation difficulties.
3. (i) Identification of Examination Booklets - Examinations in the Law School are written by "code number" only and students will not write their names on booklets or otherwise seek to indicate their authorship. Students will be provided with code numbers before the

commencement of examinations and must record their code number on each examination booklet. Students should also indicate the name of the class, the professor's name and the date of the examination in the space provided on the first page of the examination booklet, and nothing else should appear on the first page.

(ii) It is a serious matter for a student to attempt to circumvent the anonymity of the examination process by identifying themselves on a Law School exam. An obvious case of self-identification is the placing of one's name on the cover or on any other part of the exam booklet. Self-identification may take an indirect form as where a student informs a professor after the exam that he or she has written the exam in a particular distinctive ink colour. Where a professor believes that a student has self-identified, they should report the matter to the Associate Dean. The Associate Dean shall then refer the matter to the Studies Committee.

Gratuitous references in an exam answer to personal identifying information shall constitute self-identification with the meaning of this regulation. However reliance on and reference to personal background or experience relevant to answering the question shall not constitute self-identification.

A student who is granted an accommodation by the Studies Committee which results in an exam written at a time or in a format which might identify the student will not be found to have self-identified within the meaning of this policy.

Where the Studies Committee determines that a student has deliberately or carelessly identified him or herself on an exam, the Committee will impose a five per cent penalty. The imposition of the penalty does not depend on finding of intent to self identify. The fact of self-identification is sufficient to warrant the imposition of the penalty. (Effective date: September 1, 2001)

4. Answering Examination Questions - Unless otherwise instructed, students shall write their answers on the right hand pages of the answer booklet only, reserving the left hand pages for sketching answers and making rough notes. Each question should be correctly numbered.
5. Use of Materials by Students - Unless otherwise specified by the instructor concerned, no printed or written materials may be consulted by a student during the examination. When reference to printed or written materials by a student during the examination is permitted the instructor or nominee will indicate this fact to the class in advance and will list at the beginning of the question paper all permitted materials.
6. Disposition of Prohibited Materials - Briefcases (i.e., carrying cases and attaché cases) and notes, books and other materials not permitted for reference in an examination must be left outside the examination room but not in the hallways or lavatories in general use during the examinations.
7. Communication Between Students - Students shall not communicate or attempt to communicate with other students during examinations.
8. Smoking and Noise in the Examination Room - Smoking is not permitted in the Law School. Students are reminded that any noise is distracting to others writing an examination.
9. Leaving the Examination Room During Examination - A student may, with the permission of the invigilator, but only then, be permitted to leave the room and return to the examination. Only one student may be excused at a time, and, when permitted to leave, must do so as quietly as possible. The only areas considered "in bounds" for students outside the examination room are the hallways adjacent to the room, and corridors and stairways connecting student lavatories. All other areas are out of bounds, including lockers.
10. All examinations shall be written in blue or black ink unless otherwise permitted by the professor in the particular course.
11. Submission of Examination Papers to Invigilator at end of Examination - Students must submit their answer booklets promptly when the invigilator signifies that time has expired, whether the answers are completed or not. Students are responsible for keeping track of time and must organize themselves to answer the examination questions in the time allotted.

## H. Late Penalties (Approved: Faculty Council, October 2001)

In order to ensure that all students are treated equally and that no student is allowed to profit from taking extra time to complete an exam, paper or assignment, late penalties will be imposed for work that is not completed on time. The quantum of penalty imposed will vary depending on the amount of time allowed for the student to complete the assignment, the degree of lateness, and the existence of any mitigating circumstances.

Please consult the Dalhousie Law School Regulations Handbook or the Associate Dean's Office for specifics.

## I. Academic Accommodation for Students with Learning Disabilities

Students are expected to self-identify that they have a learning disability with the Advisor to Students with Disabilities as early as possible and preferably before the beginning of the term and to provide the Advisor with a current (within three years) psychoeducational report documenting the presence of a learning disability. They should make this initial contact during office hours and be prepared to discuss strengths, weaknesses and the types of accommodation that may be necessary.

The types of academic accommodation provided for students with learning disabilities may vary depending on the nature of the learning disability and the class content.

It is not unusual for there to be an initial trial and error period of finding the best way to evaluate a student's ability to demonstrate a mastery of class material.

The policy on release of information about students with learning disabilities is consistent with the University Regulation on the Release of Information as detailed on page 8.

**NOTE:** Where self-disclosure or prior arrangements have not been made with the University, Dalhousie is not liable to accommodate your special needs due to your disability.

## J. Grading Information

**Grade Equivalents** - Letter grades are used for all purposes at the Law School; however, the numerical equivalent is used to determine the student's weighted average. The numerical equivalents to the letter grades are as follows:

Letter Grade .....	Equivalent
A+ .....	85-100
A .....	80-84
B+ .....	75-79
B .....	70-74
C+ .....	65-69
C .....	60-64
D+ .....	55-59
D .....	50-54
F .....	Below 50 (clear failure)
INC .....	Incomplete

The grade 'INC' is a transitional grade and will be replaced by a letter grade upon the student completing the requirements of the academic year. Subject to writing supplemental examinations, a student must attain a grade of 'D' or better in each class, and in any event an overall weighted average of 55% to complete the work of any year. Pass or Fail grades are assigned to exchange courses, supplemental examinations and non-law classes for LLB credit, as well as to some Clinical Law classes. Non-law classes (except classes by students registered in the combined LLB/MBA, LLB/MPA, LLB/MLIS, and LLB/MHSA programmes) are not used to determine a student's average. Honours/Pass/Fail grades are assigned to Clinical Law and the Criminal Clinic. An Honours or Pass grade in these classes is not used in determining a student's average, except in certain circumstances where the student would otherwise fail the year, and a Fail grade in these classes is assigned a numerical value and is used in determining a student's average.

## K. Dean's List

The Dean's List recognizes superior academic performance by Dalhousie students in each year at Dalhousie Law School. Please check with the Director of Studies for details.

## L. Pass Requirements

### 1. First Year

The pass mark in a class is 50%, but an overall weighted average of 55% is required for advancement. A student who fails to attain the required average of 55% by regular and special examinations or assignments fails the year. Students in first year must attain an overall weighted average of 55% and pass every subject, either by regular, special, or supplemental examination, before advancing to Second Year. A student who fails in more than two classes also fails the year regardless of overall average. Students who fail the year are not permitted to advance to Second Year or to write the supplementals. They may apply for readmission. The success of any such application depends on all the factors considered by the Admissions Committee. Readmission in the year immediately following failure is only possible if vacancies develop in the first year class after the Admissions Committee has closed its wait list, but not later than the first Friday in October. The Admissions Committee has imposed a deadline of September 1 for receipt of applications for readmission in the year immediately following failure.

In December, 1993, the following grade distribution scheme for First-Year marks was adopted by Faculty Council. Any variation from the permissible range of marks must be approved by Faculty Council:

#### Permissible Grade Distribution

First-Year .....	Grades
A .....	10-20%
B .....	35-55%
A & B together .....	50-65%
C .....	15-30%
D .....	5-20%
F .....	0-5%

Median grade 70-72 for exam courses; for non-exam courses, although a grade distribution curve is not used, a median of 72-74 is enforced.

### 2. Second and Third Year

The pass requirements for Second and Third years are the same as for First Year, except in the following respects:

- a. **Applicable only to Third Year** - The University "up-and-down" Rule: A Third Year student who, without recourse to supplementals, fails only one class and attains an average on the work of the year that exceeds 50% by twice as much as the failure in the class is below 50% is permitted to graduate.
- b. **A Part-time Rule for Those with One Failure:** A student in Second or Third Year who fails only one class and who is not eligible for or does not opt for advancement or graduation under (a) supra, may take the class again on a part-time basis and may write the next regular examination or assignment in the class. Where the failed class is optional, the student may petition the Committee on Studies for permission to take a class or classes other than the one that was failed. This part-time year counts as one of the four years during which a student must complete the full-time LLB class to qualify for the degree.
- c. **Supplemental Privileges - Clinical Law, Clinical Class in Criminal Law**
  - (i) For the purposes of paragraphs (a) and (b) of these Pass Requirement rules, a failure in Clinical Law or in the Clinical class in Criminal Law shall be deemed to be a failure in more than one class.
  - (ii) Except as provided in clause (iii) hereof, a student who fails Clinical Law or the Clinical Class in Criminal Law shall not be entitled to supplemental privileges and shall be deemed to have failed the academic year.
  - (iii) The Committee on Studies may permit supplemental privileges to a student who has failed either Clinical Law or the Clinical Class in Criminal Law where:

- d. The basis of a failing grade is the student's paper, in which case a written memorandum may be authorized as the mode of supplemental examination; or
- e. The failure is recorded on the basis of a discrete evaluative device of which replication is feasible in the opinion of the Committee.

## M. Grade Distribution

**NOTE:** Students are advised that while second and third year grades are not strictly governed by a grade distribution curve, several requirements are in place which encourage uniformity of grades between sections.

1. The bell curve will continue to apply to the evaluation of first year classes.
2. Those teaching second and third year classes should take note of the first year grade curve in their evaluation and use it as a general guiding principle. The larger and more traditional (i.e. lecture method, examination) the class, the more likely it is that some rough concordance with the first year curve will emerge.
3. The Studies Committee should perform an overseeing function with respect to second and third year grades. Prior to the Faculty marks meeting, the Studies Committee should be provided with a breakdown of the grades awarded in each of the second and third year classes and should make appropriate enquiries concerning any obvious anomalies. In the event that the committee is not satisfied with the explanation offered by a faculty member for an apparent anomaly, the committee should direct him/her to reconsider his/her marks and the Committee may bring the matter to the attention of the Faculty marks meeting.
4. A full breakdown of marks awarded in individual classes should be available to members of the faculty at the Faculty marks meeting.

#### Excessive Disparity Between Sections:

1. A faculty member who teaches any class in which there is an "examination", must provide a draft of the "examination" to colleagues for their comments.
2. Before handing in his/her grades, a faculty member teaching any sectioned class must provide to his/her colleagues the best, an average and the worst (including all failures, if any) papers for their consideration. (This also applies to those teaching major paper classes).
3. The Studies Committee will again have an overseeing role in the matter.
4. Before submitting grades to the administration, a faculty member teaching any non-sectioned class must provide a sample of his/her papers or examinations (i.e. the best, an average and the worst) to a colleague for review.

## N. Major Paper Classes

Each second or third year student must take at least one class which has been designated as a major paper class per year. Some classes are available on the basis of evaluation by examination, or by major paper, the difference being that when the class is evaluated by examination, two credit hours are earned, and where a major paper is written, three credit hours are earned. In choosing one of these classes, please indicate which method of evaluation you choose, by including it for 3 hours (paper) or 2 hours (examination)

## O. Major Paper Guidelines

Students are reminded that guidelines for major papers were adopted by Faculty Council on March 31, 1980, amended on November 23, 1984, amended in Summer 1991 and again in December 1993 as follows: A "major paper" is a writing requirement worth not less than 60% of the final mark awarded in a class.

**Major Paper Guidelines Table**

Research		Out-standing	Thorough	Not Quite Thorough	Serious But Un-successful Canfaxx Of Sources	Mere Attempt To Consider The Issues	No Serious Research Effort
Excellent Organization	Excellent	A+	A	B+	B	C+	F
^	Very Good	A	B+	B	C+	C	F
^	Average	B+	B	C+	C	D+	F
^	Weak	B	C+	C	D+	D	F
^	Poor	C+	C	D+	D	F	F
Well Organized	Excellent	A	B+	B	C+	C	F
^	Very Good	B+	B	C+	C	D+	F
^	Average	B	C+	C	D+	D	F
^	Weak	C+	C	D+	D	F	F
^	Poor	C	D+	D	F	F	F
Moderate Disorganization	Excellent	B+	B	C+	C	D+	F
^	Very Good	B	C+	C	D+	D	F
^	Average	C+	C	D+	D	F	F
^	Weak	C	D+	D	F	F	F
^	Poor	D	D+	F	F	F	F
Substantial Disorganization	Excellent	B	C+	C	D+	D	F
^	Very Good	C+	C	D+	D	F	F
^	Average	C	D+	D	F	F	F
^	Weak	D+	D	F	F	F	F
^	Poor	D	F	F	F	F	F
Incoherent	Excellent	C+	C	D+	D	F	F
^	Very Good	C	D+	D	F	F	F
^	Average	D+	D	F	F	F	F
^	Weak	D	F	F	F	F	F
^	Poor	F	F	F	F	F	F
Literary Style							
Excellent	Raise table mark by one alphabetical grade e.g. B to B+						
Average	No change in table grade level as determined above						
Weak	Reduce table mark by one alphabetical grade e.g. B to C+						
Originality	Raise table mark by one or two alphabetical grade levels e.g. B+ to A, or B+ to A+						

No method of evaluation in any class may require a major paper unless that requirement has received the approval of Faculty Council. Students should not be faced with a method of evaluation different from that which appears in the latest published description of the class. Any student may, however, be given the option of writing a major paper in any class, provided the current rules on numbers of major papers are respected. Obviously, all of these constraints can be evaded by assigning papers worth only slightly less than 60%, assigning several papers, and so on; but the wish of Faculty Council is that their spirit is to be respected.

**1. Objective of Major Paper Requirement**

The major paper requirement is intended to assist in the improvement of the legal research and writing skills the student already has. It is to be, in effect, an extension of the first year legal writing program. The topics upon which the written assignments are undertaken should be of a type suitable for in-depth research in a limited field of inquiry and substantial Faculty input is essential.

**2. Performance Expectation**

The aim should be writing of publishable quality. It is to be expected that most students will not achieve such a high level of quality, just as most students will be unable to achieve an A standing in other classes. Papers should exhibit at least some level of legal analysis and not consist of a mere recitation of decisions and facts. Supervision should be sufficient to make the writing requirement a real learning experience. This necessarily involves feedback to the student during the preparation of the paper and after its completion.

**3. Curve Does Not Apply**

The curve does not apply as a guideline in the marking of major papers, although median grade range of 72-74 is enforced.

**4. Criteria**

The criteria of (a) Research; (b) Organization: Logic/Coherence; (c) Analysis-Insight-Synthesis; (d) Literary Style and (e) Originality are adopted explicitly as the ones relevant to evaluation of major papers. The definition of these criteria and the alphabetical grade equivalents and weights assigned to them as set out in the following table are adopted.

Please see Major Paper Guidelines Table.

**a) Research** involves the ability to find, select and use effectively all primary materials (case, statutes, regulations) and secondary sources (books or articles) relevant to the topic. In many classes, a comparative analysis of material from other jurisdictions (e.g. Britain and the United States) is appropriate or even essential. Students should not rely exclusively on secondary sources, but should read the original text of major cases and statutes referred to in the literature. Research materials should include, where appropriate, non-legal sources. Empirical research by students ought to be encouraged.

The table adopts the following descriptors for research (horizontal axis):

- i) Outstanding - as defined above
- ii) Thorough- no important area of research has been missed but there are a few loose ends or other sources that ought to have been explored.
- iii) Not quite thorough - an important area of research has been missed or there are both loose ends and other sources to be explored.
- iv) Serious but Unsuccessful canvass of sources contains the failings of (iii) only more so.
- v) Mere attempt to consider sources - distinguishable from (iv) as being cursory rather than serious in considering main sources or there are clear errors in research, e.g. student fails to check for appeals of relevant decisions, and bases much of the analysis on a

court of appeal case that has been reversed by the Supreme Court of Canada.

vi) No serious research effort - self explanatory

**b) Organization: Logic/Coherence** relates to the logical and coherent presentation of the subject matter, so that it is readily intelligible to the reader.

The introduction should assist the reader by providing both a clear statement of the problem that the student has chosen to analyze, the goal she/he seeks to achieve and a brief overview of the subjects she/he intends to discuss. The conclusion should play a similar role at the end of the paper, except that it should also summarize the student's conclusions. Topics should appear in a logical sequence. Legal and factual material that provides the foundation for discussion of a particular issue should be set out before that issue is reached. The student should use headings to structure the paper and indicate when she/he is moving to a new topic or subtopic. There should also be transitional text to justify the shift to a new topic, explain its connection to issues previously discussed, and the like.

The table adopts the following descriptors for Organization (vertical axis):

- Excellent Organization
- Well organized: A few minor flaws, but generally good logical flow
- Moderate Disorganization throughout, but paper is generally intelligible
- Substantial Disorganization: paper hard to follow
- Incoherent: Disorganization is so great that paper is unintelligible

**c) Analysis-Insight-Synthesis:** These criteria relate to the evaluation of the student's ability to understand and utilize effectively the materials that she/he has found through research. They require an understanding of the subject matter that goes beyond the ability to merely recite the rationales of cases, the conclusions reached by other authorities or bare statistics.

Analysis relates to the student's detailed use of cases, statutes, and secondary sources within the paper to explore particular issues that she/he has identified. Good analysis will assist the reader to achieve a sophisticated understanding of the issues and relevant legal authorities without the need to read all the various sources that the student had identified through research. The student should provide a factual background adequate to permit the reader to understand the context in which legal problems arise. She/he should describe relevant legal material (cases/statutes) and important policy analysis (for example, Law Reform Commission materials) in sufficient detail to provide the reader with a clear view of any legal controversies that exist and reasoning that has been put forward to support the various positions. There are a wide variety of analytical weaknesses that may be displayed by students. Examples include missing a relevant issue or legal argument, identifying legal problems but not exploring available legal principles that may have a bearing on their solution, or stating the conclusions of cases significant to analysis of an issue without setting out the reasoning that the court used to justify its conclusions.

"Insight" involves an in-depth understanding of the fundamental issues. Good "Synthesis", which usually demonstrates this understanding, reflects the ability of the student to integrate the diverse material that she/he has found into a conceptual framework that is clearly explained to the reader. Insight and synthesis would probably show up in a strong statement of thematic material at the outset, its use as an organizing device in the paper, and a serious attempt in the conclusion either to determine whether the initial hypothesis had been proven or to assess the conceptual apparatus for its explanatory power. Weak insight and synthesis may be demonstrated by a student's failure to integrate relevant authorities for some or all of the paper.

A better paper will draw inferences from the digested material as to the present state and future development of the law in the area researched, as well as formulating recommendations for legal changes that might improve the situation and serve appropriate policy goals. Good analysis without much insight or synthesis may be average depending on the complexity or the novelty of the topic or research method. For instance, good analysis of an original topic (see Originality *infra*) may be as much as can be expected and should be rewarded highly. The same quality of analysis of a topic on which there is already a body of published critical

writing that provides a framework or platform for the student's paper would have to show its own insight and synthesis to rate equally highly. A paper that sets out numerous cases or articles or otherwise merely describes the results of the student's research efforts, however extensive, without attempting to extract common principles or create an analytical basis is likely to be judged as poor.

The table adopts the following descriptors for analysis-insight-synthesis (vertically within each box in the table):

- Excellent
- Very Good
- Average
- Weak
- Poor

**d) Literary Style:** This criterion relates to the linguistic style in which the paper is written. Most Dalhousie law students do a competent job with grammar and spelling and many have excellent literary style. The stylistic problems present in papers are of two sorts. Legal writing should be formal but clear and straightforward. Some students tend to be too colloquial, using slang or contractions such as "won't". Other students try too hard to be formal, producing convoluted sentences, making excessive use of the passive voice, and the like.

Because most students are competent in terms of literary style, this criterion is used to make adjustments in the grades produced by the table set out above only in extreme cases. The professor may increase or reduce the alphabetic grade result produced by the table set out above by one grade level for exceptionally strong or exceptionally weak literary style as described below:

Descriptors for literary style:

**Excellent:** Literary style is significantly above the norm for Dalhousie Law students.

Raise table mark by one alphabetic grade level, e.g. B to B+

**Average:** Literary style is consistent with that demonstrated by the majority of Dalhousie law students, i.e. some stylistic weaknesses but basically competent

No change in table grade level as determined above

**Weak:** Student's literary style falls significantly below the norm for Dalhousie Law Students and demonstrates serious, persistent weaknesses in grammar, spelling, or style

Reduce table mark by one alphabetic grade level, e.g. B to C+

**e) Originality:** A highly prized, all-too-rare quality that cannot be easily defined, is used in the Table to raise the alphabetic grade that would have been assigned otherwise by a maximum of two grade levels. A paper may demonstrate good "analysis-synthesis" but still be lacking in originality. There are two different kinds of originality: topic originality and substantive originality.

The first sort of originality relates to the topic itself. This kind of originality exists when the student selects a topic where no research has been previously undertaken in Canada (i.e. there are no Canadian secondary sources that deal with the issue that the student has selected). There may or may not be articles or books that have been published on the topic in foreign jurisdictions (e.g. the United States or Britain), but even when such foreign sources do exist, a significant degree of creativity and extrapolation is required on the part of a student who undertakes to write on a topic where no previous Canadian research is available to help with all or part of the topic. This kind of originality may exist in major papers that display weaknesses in other areas. Indeed, some kinds of analytical or organizational problems may be attributable precisely to the fact that the student is working in an area where no guidance is available from previous research carried out by more experienced scholars. The professor may recognize this kind of originality relating to topic by increasing the alphabetic grade produced by the table above by one level (e.g. from a B to a B+).

The second kind of originality may appear in the way the research is approached or in the understanding that the writer has gained of the topic and is able to convey to the reader, or in the form of new and convincing

insights that are unique to the student author. This kind of originality, which is the hallmark of a paper of “publishable quality”, is not mere novelty although in other contexts the word may have that meaning; the new position advocated by the student must be credible, as well as novel. A major paper may demonstrate this kind of originality, even though the topic has been previously considered by other researchers in Canada. Originality of this kind will normally be associated with good “insight-synthesis- analysis”. The professor may recognize this kind of substantive originality by increasing the alphabetic grade produced by the table above by either one or two levels depending on the extent of the originality demonstrated by the paper (e.g. from a B+ to an A, or from a B+ to an A+ grade).

The cumulative effect of increases for originality is restricted to a jump of two grade levels. In other words, a professor cannot award a student an originality increase of three grade levels by accumulating an award of one grade level for topic originality, and two grade levels for substantive originality.

## 5. Guidelines for Major Paper Classes

- a. Normally the paper will not be shorter than 25 pages.
- b. Normally a paper of a general descriptive nature will not meet the standards.
- c. Normally the topic undertaken will be suitable for in-depth research with legal emphasis in a limited field of inquiry.
- d. Normally the supervisor should approve the topic and the outline or draft of the paper.
- e. Faculty members should make themselves available to meet with students to discuss the graded papers.
- f. At each stage of the supervision of major papers, both the supervising faculty member and the student should pay explicit attention to each of the criteria relevant to the evaluation of the paper.
- g. Copies of the major paper guidelines should be made available to students.

## P. Appeals Process

The following review procedures were passed by Faculty Council in October 1980, as amended March 1987, and March, 2001 and are now in effect.

The Studies Committee, chaired by the Associate Dean, is delegated by Faculty Council to perform an oversight role in administering Appeal Regulations. In these regulations, reference to the Associate Dean may include a person who, in the particular circumstances, has been designated by the Associate Dean to act in his or her stead.

Note: There are several procedures in place at Dalhousie Law School to ensure fairness in evaluation and consistency in grading. All exam questions are vetted by a faculty member teaching in the same area. Selected exams are co-read after marking is complete, but before the marks are submitted. Because of the checks, the Committee does not provide for appeals which amount merely to seeking a second opinion. Students bear the burden of establishing the elements of an appeal. In addition, no appeal can be based upon the fact that a grade was lowered by Faculty Council in order to comply with the Grade Distribution rules.

### Part I

#### A. Informal Review

1. A student who believes there is an error in a grade received in a class or in a component of a class should discuss the grade informally with the faculty member responsible.
2. A faculty member who, as a result of the informal review, acknowledges that an error in grading exists must, within five (5) working days of the informal review, inform the Studies Committee in writing of the nature of the error, and should indicate how the error should be rectified.
3. Upon receipt of such notification from a faculty member, the Studies Committee shall review the written explanation and shall take whatever action it considers appropriate in the circumstances.

#### B. Formal Grade Reviews and Appeals of Grades

4. A student, having received the **final** grade in a class, may seek a formal review of the grade given in any written component of the class on the basis that an error has been made in grading.
5. A student may seek a formal review of the result of a special or supplemental examination on the basis that an error has been made in grading.
6. The Request for Review shall be made by letter to the Associate Dean not later than 15 working days following the making available of the grade through the University online distribution system. If special circumstances or cause can be demonstrated, the Associate Dean may permit a Request for Review to be filed after the 15 working day period has elapsed.
7. The written Request for Review shall be accompanied by the sum of \$50.00 (refundable if the appeal succeeds). The Studies Committee may waive the \$50.00 fee where it can be demonstrated that the payment would cause financial hardship. The written Request shall also contain:
  - (i) The student’s name and exam code number;
  - (ii) The name of the class and of the faculty member(s) who taught and/or evaluated it; and
  - (iii) A reasonable explanation of the nature of the error in grading which the student believes affected the mark or grade received; (**Note: An error in grading must be a demonstrable error, as opposed to a general sense that the exam or assignment deserved a higher grade. Example: Where a student can demonstrate *prima facie* that his/her answer accorded with the faculty member’s marking guide but the faculty member gave insufficient credit for it, an error in grading may be alleged.**)
  - (iv) A copy of the assignment or exam questions;
  - (v) The exam answer booklets or assignment originally submitted by the student.
8. Upon receipt of a Request for Review, the Associate Dean shall:
  - a) return to the student any Request for Review that, in the opinion of the Associate Dean, does not include any of the elements set out in section 7 or that does not provide a sufficient allegation of an error in grading; or
  - b) refer the Request for Review to the Studies Committee.
9. Where a student contests the decision of the Associate Dean under 8 a) that a Request for Review does not provide a sufficient allegation of an error in grading, the student may ask that the Request for Review be referred directly to the Studies Committee, and the Associate Dean shall so refer the request.
10. Where the Associate Dean refers a Request for Review to the Studies Committee under s. 8(b) or 9, the Studies Committee may refuse to allow the Review to proceed, where in the opinion of the Committee the Request for Review does not provide a sufficient allegation of an error in grading.
11. A student whose Request for Review is refused by the Studies Committee on the grounds set out in section 10, shall be given an opportunity to make a further written submission to the Committee requesting a reconsideration.
12. Where the Studies Committee decides to permit a Review to proceed, the Associate Dean shall notify the faculty member(s) and student(s) involved.
13. Where a Request for Review is to proceed, the Associate Dean shall forward to the professor who assigned the grade in question the student’s Request for Review as set out in section 7.
14. Subject to section 17, within five (5) working days of receipt of notification of a Review pursuant to section 12, the faculty member shall advise the Associate Dean whether he or she agrees that an error in grading occurred and shall recommend to the Studies Committee that:
  - (i) The grade or mark remain unchanged;
  - (ii) The grade or mark be lowered, and by how much; or
  - (iii) The grade or mark be increased and by how much.
15. The faculty member’s decision under s. 14 shall include a report of his or her explanation of grading, containing *inter alia*, an indication:
  - i) of the mode of grading the assignments in the class; and
  - ii) an assessment of the student’s work.
16. The Studies Committee shall either accept the recommendation of the faculty member under s. 14, or shall forward the decision to an Appeal Board, as described in s. 21.

17. When, in the opinion of the Associate Dean it is impossible or impractical within the time limits set out in s. 14 to obtain from the faculty member the decision called for in s. 14, the Associate Dean may extend the time within which the faculty member shall make the decision and recommendation required.
18. Where the decision and recommendation of the faculty member affected cannot be obtained at all or cannot be obtained within a time-frame that would not prejudice the student, the Studies Committee may proceed with the Review by requiring another member of faculty to evaluate the written component in respect to which the Review has been requested and to comply with section 14.
19. The Associate Dean shall write to the student indicating the result of the Review and enclosing a copy of the report by the faculty member and the decision of the Studies Committee.  
The student may discuss the report with the faculty member but the faculty member's unavailability or unwillingness to participate in a discussion shall not justify the student's failure to meet the requirements of s. 20 should the student decide to appeal the result of the Review.
20. Any student may initiate an appeal from the decision of the Studies Committee by giving written notice to the Associate Dean within five (5) working days of its receipt, which shall indicate the basis for the appeal. If special circumstances or cause can be demonstrated, the Associate Dean may permit a Notice of Appeal to be filed after the five working day period has elapsed.
21. Upon receipt of the Notice of Appeal, the Associate Dean shall appoint two persons, preferably with expertise in the subject, as an Appeal Board, to review the grade assigned and to determine whether an error has been made in evaluating the student's work.
22. (a) The Associate Dean shall provide the Appeal Board and the student with copies of all documents relevant to the appeal including a copy of the faculty member's report and the decision of the Studies Committee.  
(b) The Associate Dean shall also provide the Appeal Board with the following, where applicable:
  - i) a copy of the relevant exam or assignment written by one other student whose mark or grade was five (5) or more higher than that obtained by the student seeking the review;
  - ii) a copy of the relevant exam or assignment written by a student whose mark or grade was five (5) or more lower; and
  - iii) a copy of the relevant exam or assignment written by the student whose mark or grade was the best in the class.

Note: Where the exam or assignment under appeal offered choice as to questions or topics, care should be taken to ensure that as far as possible the papers chosen for comparison reflect similar choices.

23. (a) The members of the Appeal Board shall independently review the grade assigned to determine whether, in their opinion, an error has been made in grading the work of the student in the context of the mode of grading and the grades assigned the other students whose work is being used for comparison.  
(b) Subject to sub-paragraph (c), the members of the Appeal Board, after completing their independent review under (a), shall meet and determine that:
  - i) The grade or mark remain unchanged;
  - ii) The grade or mark be lowered, and by how much; or
  - iii) The grade or mark be increased and by how much.
- (c) Where only one member of the Appeal Board believes that there is an error in grading, the mark or grade under review shall remain unchanged.
- (d) The Appeal Board shall report its decision to the Associate Dean within fifteen (15) working days of its appointment. If special circumstances or cause can be demonstrated, the Associate Dean may permit an Appeal Board to report its decision after the fifteen (15) working day period has elapsed.
- (e) The Associate Dean shall report the decision of the Appeal Board to the student and provide a copy of its decision.
24. The Associate Dean shall report on the decision to Faculty Council as part of its annual report.

## Part II

### A. Other Academic Matters

1. Student appeals and grievances on all other academic matters relating to academic standards, class requirements, examinations and other evaluative procedures, grades, pass requirements, advancement requirements, graduation requirements and other University or Faculty academic regulations, including matters decided in the first instance by the Studies Committee, may be made by notice in writing to the Studies Committee.
2. A student who is seeking a reconsideration of a decision of the Studies Committee, or who is bringing a grievance to the Studies Committee under this Part shall be given an opportunity to meet the Committee or, at the student's option, to make written submissions on the matter.
3. The Studies Committee shall decide each such appeal or grievance and shall provide written reasons for its decision to the student. The decision shall be reported to Faculty Council.
4. If the Studies Committee by reason of its own delays has not decided an appeal or grievance within two months after receipt by the Committee of the notice in writing, the student may appeal the matter to Faculty Council.

### B. Appeals in Relation to Grades or Evaluation

Note: A Part II Appeal of a grade or evaluation succeeds where it is shown that the evaluation was not conducted fairly, was not conducted properly or was not conducted by competent evaluators. For the purposes of this section, "conduct" will include the setting, administration and marking of the evaluative device.

5. Where a Part II Appeal relates to a grade, the appeal shall be initiated no later than fifteen (15) working days after the making available of the grade through the online distribution system by a notice in writing to the Associate Dean, and shall be accompanied by:
  - a) a concise statement identifying the faculty member and class that is the subject of the appeal;
  - b) the sum of \$50.00 (refundable if the appeal succeeds). The Studies Committee may waive the fee where it is demonstrated that payment would cause financial hardship;
  - c) a statement of the reasons why the student alleges that the evaluation was not conducted (i) fairly; (ii) properly; or (iii) by competent evaluators;
6. If special circumstances or cause exists, the Associate Dean may permit a Part II appeal to be filed after the fifteen (15) working day period provided for in section 5 of this Part has elapsed.
7. Where a Part I appeal on the same grade/class or a related matter has also been initiated by the student, the Associate Dean, in consultation with the student, shall determine the order in which the appeals should be heard.
8. Part II Appeals relating to matters other than grades must be brought in a timely fashion.
9.
  - a) As soon as possible after receipt of the Notice of a Part II Appeal, the Associate Dean shall forward the Notice of Appeal to the faculty member concerned.
  - b) The faculty member will respond to the Notice of Appeal within fifteen (15) working days from the forwarding date.
  - c) The Associate Dean may extend the period in which the faculty member must respond if appropriate circumstances exist.
  - d) Where the faculty member is unavailable, the Associate Dean may designate another faculty member to respond to the Appeal.
  - e) The faculty member's written response shall be forwarded to the student within five (5) working days of its receipt by the Associate Dean.
  - f) If after reading the faculty member's response the student requests a hearing before the Studies Committee, the Associate Dean shall arrange for a hearing to be held at a mutually convenient time and date.
10. The Studies Committee shall hear and decide the Appeal and shall provide written reasons for its decision. Where it allows the appeal, it shall grant such remedy or remedies as it deems to be appropriate in the circumstances.
11. The Studies Committee shall notify the student and faculty member affected of its decision and shall report on the same to Faculty Council as part of the Studies Committee annual report.

## Part III

### Senate Appeals

The attention of students in the Faculty of Law is directed to the Minutes of the Senate of the University for March 21, 1983 adopting the following recommendation:

1. That Senate appoint a Senate Academic Appeals Committee to hear student academic appeals beyond the Faculty level and that:
  - a) the Senate Academic Appeals Committee be vested with the jurisdiction by the Senate to hear student appeals on academic standards, class requirements, examinations and other evaluative procedures, grades, pass requirements, advancement requirements, graduation requirements and other University or Faculty academic regulations, and
  - b) the Senate Academic Appeals Committee be given authority to develop hearing procedures and policy guidelines relating to said student appeals, and
  - c) the Jurisdiction of the Senate Academic Appeals Committee to hear said student appeals would only exist in those instances when the approved appeal regulations and procedures of the respective Faculty had been fully exhausted by the student, and
  - d) the Senate Academic Appeals Committee would have no jurisdiction to hear student appeals on a matter involving a requested exemption from the application of Faculty or University regulations or procedures except when irregularities or unfairness in the application thereof is alleged.

## IV. Academic Programmes

The degrees in law conferred by the University are the Bachelor of Laws (LLB), the Master of Laws (LLM), and the Doctor in the Science of Law (JSD).

### A. Bachelor of Laws

#### 1. Full-Time Studies in Law

The LLB class is designed to train students in those qualities which distinguish the educated lawyer, whether engaged in the practice of law, in government service or elsewhere. Among the qualities stressed are an understanding of the process of ensuring order in a complex and evolving society, precision of thought, an appreciation of the use of the English language in writing and speaking, thoroughness, and the avoidance of superficiality.

The full-time class extends over three academic years, from September to May. A student who has failed the work of a year may, subject to the limitations of space, be readmitted, but the class must be completed in four academic years. Any academic session in which a student has registered and has not formally withdrawn by the date of the first Fall term examination constitutes an academic year. Where a student establishes, to the satisfaction of the Committee on Studies, that for medical or personal reasons, ability to pursue the class was significantly hampered, the Committee on Studies may rule that a student has not used up one of the four academic years.

The regular class requires the full time attendance of students. In the first year all subjects are prescribed; in second and third year most subjects are optional. Second and third year students must complete at least 29 credit hours, including a major paper writing requirement, each year. Permission is required before any regular law student may undertake classes in another Faculty of the University.

The policy of maintaining fairly small classes reflects the nature of teaching at the Law School. Classes are conducted by the "case method" or otherwise but with emphasis upon discussion between teacher and students, based upon assigned materials and topics that students are expected to have considered in advance. Research and written assignments are required of all students. These may involve substantial time in addition to regular class periods. The work submitted is carefully examined and then critically assessed by the teacher concerned and whenever possible a detailed criticism is provided in an oral interview.

In addition to class and writing requirements all students are required to participate in mooted exercises. Third-year students may be required to attend legal aid clinics, the law courts, and special lectures.

### 2. Degree Requirements: Full-time programme

#### (a) First Year Required Classes

- LAWS 1000X/Y.06: Contracts & Judicial Rule-Making
- LAWS 1001X/Y.06: Criminal Justice
- LAWS 1002.01: Orientation to Law
- LAWS 1003.05: Fundamentals of Public Law
- LAWS 1004X/Y.03: Legal Research and Writing
- LAWS 1005X/Y.06: Property in Historical Context
- LAWS 1006X/Y.06: Tort Law and Damage Compensation

#### (b) Second Year Required Classes

- LAWS 2061X/Y.05: Civil Procedure
- LAWS 2062X/Y.05: Constitutional Law
- An elective class with evaluation by major paper (i.e. a "paper" class)\*. A student must include at least one major paper class per year.
- Additional elective classes to make up a full year of studies of approximately 15 hours per week in each term. A student must have a minimum of 29 hours and may have a maximum of 31 hours per year; each term's work must include a minimum of 12 and a maximum of 17 hours. Where a student chooses the maximum load of 31 hours, he or she must achieve a passing grade in all classes, subject to the normal requirements.

#### (c) Third Year Required Classes

- LAWS 2099.02: The Legal Profession and Professional Responsibility
- Electives: As for second year, above

### 3. Part-Time Studies in Law

Dalhousie Law School has instituted a part-time LLB programme in order to facilitate legal studies for those unable to take the full-time programme. Students admitted to the part-time programme may complete their degree by one of two methods:

#### (a) Full-Time First Year

Students may take their first year programme on a full-time basis, and thereafter apply to be admitted to the part-time programme for the remainder of their LLB studies. After first year, students in the part-time programme are required to complete a minimum of 58 hours over a maximum of six academic years, with a minimum class load of 8 hours in each academic year. Part-time students must complete at least one optional class involving a major written paper in each 29-hour block over the period of part-time study.

Students who enter the programme after completion of first and second years on a full-time basis are required to complete their minimum of 29 hours over a maximum of three academic years, with a minimum class load of 8 hours in each academic year.

#### (b) Half-Time First Year

Part-time students who choose to do first year on a half-time basis are required to complete 17 hours of the first-year programme in their first year, completing Contracts and Judicial Rule-Making, Tort Law and Damage Compensation, Fundamentals of Public Law and credit of Legal Writing. The remaining 15 hours of the first year programme consisting of Property in its Historical Perspective, Criminal Justice: the Individual and the State, Orientation to Law, and the remaining 2 credits of Legal Writing must be completed in the second year. Thereafter, students in the part-time programme are required to complete a minimum of 58 hours over a maximum of five academic years, with a minimum class load of 8 hours in each academic year. Part-time students must complete at least one optional class involving a major written paper in each 29-hour block over the period of part-time study. The Faculty encourages part-time students, wherever possible, to do first year on a full-time basis.

Please note that the regulations requiring that students successfully complete the work of second year before advancing to third year apply to part-time as well as full-time students.

#### 4. Class Hours (Second and Third Year): Full-time programme

Each student must complete a minimum of 29 and a maximum of 31 hours per year, and a minimum of 13, maximum of 16 hours each term. A student enrolled in the Clinical Class in Criminal Law may take 17 hours in the term in which the Clinical Class is taken. This is also true of the Legal Aid Clinic, with permission of the Clinic Director.

\* See Major Paper requirements.

PLEASE NOTE: Teaching assignments are subject to change. Please consult the current Law School timetable for an update.

#### B. Master of Laws (LLM) and JSD

A graduate programme in Law, leading to a Master of Laws (LLM) degree, is offered at the Law School. Candidates register with the Faculty of Graduate Studies, and are normally expected to remain in residence as full-time students for one year or as part-time students for two years. The programme may consist of either a combination of class work, seminars and a thesis, or a combination of class work and seminars involving substantial written papers. Thesis topics may be concerned with any area of law for which the faculty and library resources will support original work. In recent years, supervision has been provided in the following areas: international law, administrative law, labour law, human rights law, commercial law, tax law, torts, health law, criminal law and criminology, law of the sea, maritime law and environmental law. Special interests have been developed in maritime and environmental law, which has been designated as a field of special emphasis in the Faculty of Law, and in Health Law under the Health Law Institute which is a joint initiative of the faculties of Law, Medicine, Dentistry and Health Professions. Students may also enroll in a special programme for graduate students in Family Law. The Faculty's academic plan recognizes particular research capacity in the areas of public law and feminist legal scholarship.

To be admitted to the programme, an applicant must normally have obtained a high second-class standing (B average) in completing the Bachelor of Laws (LLB) degree from Dalhousie University, or commensurate standing and completion of a corresponding degree from another recognized Law School inside or outside Canada.

Applicants who plan to write a thesis are required to submit an outline of their proposed thesis topic at the time of application.

The doctoral (JSD) programme is offered to a very limited number of highly qualified candidates seeking a doctorate as the peak of their legal education. Four areas of the Dalhousie law curriculum have been designated as being especially suited to the advanced research required at the JSD level: marine law, environmental law, international law and comparative law.

Applicants for admission must have:

- i) Attained a first degree in law with at least an A- average, First Class honours, or the equivalent;
- ii) Completed a Master's degree in law;
- iii) Submitted an outline of their proposed dissertation and a detailed description of their research plans with their application. Preference will be given to candidates with established credentials in published scholarship of a professional calibre. The ability to conduct independent research and to converse fluently in the English language are prerequisites to admission.

The requirements for the doctoral degree are as follows:

- i) Continuous residence at Dalhousie for at least one full year (usually September to August);
- ii) Fully supervised research work leading to a substantial and significant dissertation;
- iii) Preliminary examination on and oral defence of the dissertation;
- iv) Class work and other examinations as required by the Graduate Studies Committee.

More detailed information on the requirements for the graduate law degrees offered at Dalhousie may be found in the calendar of the Faculty of Graduate Studies. There are two graduate law classes described below.

- LAWS 3069.03: Graduate Directed Research Paper

- LAWS 3000.03: Graduate Seminar on Legal Education and Legal Scholarship

#### C. Combined LLB/MBA

This is a four-year programme which enables students to select classes leading to degrees of Bachelor of Laws and Master of Business Administration. The usual order of the programme is:

##### Year 1

- Full First Year MBA classes

##### Year 2

- Full First Year LLB classes.

##### Year 3

- Civil Procedure
- Constitutional Law
- A major paper class
- 7-9 hours of law classes from the "Business Law" area (see below).
- Other elective classes for a total of 25 law credits
- 3 half classes from the MBA programme given a total of 6 credits at the Law School.

##### Year 4

- The Legal Profession
- A major paper class
- Three to five hours of law classes from the "Business Law" area
- Other elective law classes for a total of 23-25 law credits.
- Two half classes from the MBA programme
- Strategy 1 and Strategy 2 done over the whole year and given 4 credits at the Law School

The third and fourth year programmes may be done in reverse order, with permission, except for the required law classes Civil Procedure and Constitutional Law (3rd year) and the Legal Profession (4th year).

#### Classes in the "Business Law" area:

- Bankruptcy & Insolvency, 2 credits
- Business and Environment, 3 credits
- Business Associations, 4 credits
- Commercial Law, 4 credits
- Taxation of Corporations, 2 credits
- Creditors Rights, 2 credits
- Insurance, 2 credits
- Corporate Transactions, 3 credits
- Corporate Finance, 3 credits
- Competition Law, 3 credits
- Information Technology Transactions, 3 credits
- International Trade Law, 3 credits
- International Trade Transactions, 3 credits
- Law of Succession, 2 credits
- Legal Accounting, 2 credits
- Oil & Gas Law, 2 credits
- Real Estate Transactions, 4 credits
- Taxation I, 4 credits
- Taxation II, 2 credits
- Taxation III, 2 credits
- Securities Regulation, 3 credits
- Regulation of Financial Institutions, 3 credits
- Additional recommended classes: Evidence, Trusts

Students intending to make application for the joint LLB/MBA programme should inquire directly to: mba.admissions@dal.ca (MBA) and to admissions@dal.ca (LAW).

#### D. Combined LLB/MPA

This is a four-year programme which enables students to select classes leading to degrees of Bachelor of Laws and Master of Public Administration. The suggested order of the programme is:

##### Year 1

- First year classes of the MPA programme (9 half credits) required classes.

## Year 2

- First year classes of the LLB programme.

## Year 3

- One half class from the MPA programme.
- Civil Procedure
- Constitutional Law
- 16 credit hours of classes from the LLB programme including a major paper class.

## Year 4

- Two half credits from the MPA programme
- A minimum of 23 credit hours of classes from the LLB programme, which must include The Legal Profession and Professional Responsibility, and a major paper class.

Candidates for the LLB/MPA programme must satisfy the entrance requirements of both the LLB and MPA programmes, and may obtain further information about the combined programme by writing to the Faculty of Law and to the Coordinator of the MPA programme. For admission, students must apply to both the Law School and the School of Public Administration individually. Students applying for the MPA programme may submit LSAT results in lieu of GMAT results.

## E. Combined LLB/MLIS Programme

Students who apply for the combined LLB/MLIS programme (Masters of Library and Information Sciences/Bachelor of Laws) must meet the admissions standards of both the Faculty of Law and the School of Library and Information Sciences. At the end of the four year programme, they will have obtained both degrees. The programme consists of the following:

### Year 1

- First year classes of the MLIS programme (7 required, 1 elective)

### Year 2

- First year classes of the LLB programme

### Year 3

- Two of 3 remaining required MLIS classes
- 25 hours of LLB classes

### Year 4

- 1 MLIS class each term (1 required, 1 elective)
- 23 hours of LLB classes

## F. Combined LLB/MHSA Programme

Students applying for this programme must meet the admission standards of both the Bachelor of Laws and the Masters of Health Services Administration programmes. The combined programme is structured as follows:

### Year 1

- First year of HESA Programme

### Summer

- HESA 6390X/Y.06: Health Services Residency

### Year 2

- First year of LLB Programme

### Year 3

- Three half credit courses (total 1.5 credits) chosen from HESA 6330.03, HESA 6365.03, HESA 6340.03, and HESA 6310.03
- 25 hours of classes from the LLB programme, including Civil Procedure, Constitutional Law, a major research paper, and Health Law, LAWS 2132.03, or its equivalent at the School of Health Services Administration, Health Care Law: HESA 6360.03

### Year 4

- 1.5 credits HESA elective
- HESA 6380.03: Senior Seminar
- HESA 6360.03: Health Care Law or Health Law from the Law School (if not completed previously)

- Minimum 21 hours of classes from the LLB programme, including Professional Responsibility and a major research paper.
- Note: With the exception of HESA 6380, students may change the order of the MHSA course requirements in years 3 and 4.

## G. Health Law and Policy Programme (HLPP)

### Introduction

The Health Law Institute is an interdisciplinary Institute supported by and serving the Faculties of Law, Medicine, Health Professions and Dentistry.

### Educational opportunities include the following:

Dalhousie offers one of the largest curricular collections within this field in Canada:

- LAWS 2115.03: Health Care Ethics and the Law
- LAWS 2127.02/2128.03: Mental Disability Law
- LAWS 2132.03: Health Law
- LAWS 2159.03: Health Systems Law and Policy
- LAWS 2167.03: Health Law Placement
- LAWS 2192.03: Advanced Negligence: Medical Malpractice
- LAWS 2069.03; 2070.04; 2071.05; 2072.06: Directed Research Paper
- LAWS 2193.03: Health Law and Policy: Current Issues

Students may also take a limited number of classes for credit towards their law degree in related subjects offered in other academic departments of the University e.g., Dept. of Bioethics and Philosophy. Students with such interests should seek the permission of the Department or School involved as well as the Legal Studies Committee of the Law School. Students wishing assistance in the selection of classes within the area of Health Law are advised to consult the Director or faculty members of the Institute.

### I. LLB Specialization Certificate

LLB students may specialize in Health Law and Policy and the specialization will be recognized on their academic transcript. To specialize in Health Law and Policy, a student must take Health Law and three additional elective classes from Health Care Ethics and the Law; Mental Disability Law; Health Systems Law and Policy; Advanced Negligence: Medical Malpractice; Health Law and Policy: Current Issues; Health Law Placement or a Directed Research Paper. All four classes must be completed with an average grade of no less than B and no grade below C.

NOTE: For the purposes of any Dalhousie Law School Certificate program, only those courses pursued at Dalhousie Law School during the student's LLB studies which lead to successful completion of a Dalhousie University LLB degree will be recognized.

### II. LLM

The Health Law Institute is in receipt of a training grant from the Canadian Institutes of Health Research that provides scholarship and other capacity - building funds to promote graduate studies in health law and policy. While there is no Health Law and Policy specialization annotation for LLM transcripts, all of the classes (with the exception of LAWS 2167.03: Health Law Placement and LAWS 2157.14: Health Law Exchange) are open to LLM students. In addition, LLM students may do their supervised thesis research within the Health Law and Policy field. Health Law Institute faculty members offer a breadth of experience in areas such as reproductive technologies, death and dying, research involving humans, licensing and regulation of health professionals, health reform, resource allocation, women's health, and the effects of health regulation and reform on vulnerable populations. Students interested in pursuing an LLM are encouraged to visit or call the Institute to discuss research interests.

### III. Interdisciplinary PhD

It is possible to pursue an interdisciplinary PhD drawing on such disciplines as philosophy, law, and medicine. Each programme of study will be unique and must be negotiated with the Faculty of Graduate Studies and prospective faculty supervisors.

For further information on the Health Law Institute and the Health Law and Policy Programme contact the Health Law Institute directly at:  
6061 University Avenue  
Halifax, Nova Scotia

Canada B3H 4H9  
Telephone: (902) 494-6881  
Fax: (902) 494-6879  
E-mail: hli@dal.ca  
Internet: <http://www.dal.ca/hli>

## H. Law and Technology Institute

Director: Michael Deturbide  
Associate Director: Teresa Scassa

The Law and Technology Institute was established at Dalhousie Law School in 2001 to provide teaching, research, and continuing education on IT law issues to students, faculty members, and the practicing Bar. The Institute participates, with the faculties of the Computer Science and Management, in Dalhousie Master of Electronic Commerce Program, and has commenced collaborative projects with the private sector and governments on information technology issues. Its faculty members provide graduate supervision to students interested in the developing field of information technology law, and are active in law and technology organizations, such as ITCAN, and the International Society for Law and Technology. The Institute hosts the McCarthy Tétrault Eminent Speakers Series, which brings leading IT lawyers and academics to Dalhousie to share their expertise. The Institute is home to the Canadian Journal of Law and Technology, edited by Professors Deturbide and Scassa. The CJLT, which is published three times per year, is the pre-eminent technology law review in Canada.

### Classes Offered:

- Law and Technology
- Internet and Media Law
- Privacy Law
- Intellectual Property Law
- Information Technology Transactions

Students also have the opportunity to pursue specialized interests in fields such as health law and alternate dispute resolution, as they relate to information technology. For further information, contact the Law and Technology Institute at:

Telephone (902)494-1469  
Fax (902)494-1316  
E-mail: [Michael.Deturbide@Dal.Ca](mailto:Michael.Deturbide@Dal.Ca)  
Web site: [Http://www.dal.ca/law](http://www.dal.ca/law)

## I. Marine and Environmental Law Programme (MELP)

In 1974 the Faculty of Law initiated the Marine and Environmental Law Programme (MELP) in recognition of the increasing importance to society of marine and environmental law and policy. MELP provides a range of educational opportunities for students, a forum for the exchange of views among scholars and a focus for interdisciplinary research. MELP has worked towards the progressive development of the national and international regimes which govern marine and environmental issues through public interest oriented research and education.

The Programme currently involves several full and part-time faculty members.

Dalhousie now offers more than a dozen classes in marine and environmental law and cognate areas - the largest curricular offering within this field in Canada.

The classes offered in MELP are:

- LAWS 2119.02/2120.03: First Nations Law
- LAWS 2001.03: Maritime Law and Practice
- LAWS 2020.02: Fisheries Law
- LAWS 2022.03: Law of the Sea
- LAWS 2041.03: Coastal Zone Management
- LAWS 2051.03: International Environmental Law
- LAWS 2068.03: Ocean Law and Policy
- LAWS 2104.03 or B: Environmental Law I
- LAWS 2124.03: Marine Environmental Protection
- LAWS 2133.03: Environmental Law II - Environmental Law as Regulatory, Political and Social Process

- LAWS 2164.03: Advanced Maritime Law and Policy
- LAWS 2153.03: Business and Environmental Law
- LAWS 2015.03: Planning Law
- LAWS 2079.02: Oil and Gas Law
- LAWS 2012.03: International Law
- LAWS 2130.03: International Trade Transactions

A detailed description of each class appears in the list of Classes of Instruction set out below.

### MELP Law Certificates

LLB students may specialize in Marine Law or Environmental Law and the specialization will be recognized on their academic transcript. To specialize in Marine Law, a student must take Maritime Law and Practice, Law of the Sea and two additional elective classes from Maritime Law and Policy, Ocean Law and Policy, Marine Environmental Protection Law, Fisheries Law, Oil and Gas Law and Coastal Zone Management. At least one of the elective classes must be Maritime Law and Policy, Ocean Law and Policy or Marine Environmental Protection.

To specialize in Environmental Law, a student must take Environmental Law, International Environmental Law and two other elective classes from Business and Environmental Law, Environmental Law II, Marine Environmental Protection, Fisheries Law, Oil and Gas Law, Coastal Zone Management, and Land Use Planning. At least one of the elective classes must be Environmental Law II or Business and Environmental Law. One class for either specialization may be replaced by suitably equivalent work, with the consent of the Director of MELP and the Legal Studies Committee. For both specializations, all four classes must be completed with an average grade of B and no grade below C.

Students interested in either specialization are required to submit a letter of intent to the Associate Dean's office in their second year.

NOTE: For the purposes of any Dalhousie Law School Certificate program, only those courses pursued at Dalhousie Law School during the student's LLB studies which lead to successful completion of a Dalhousie University LLB degree will be recognized.

Law students may also take a limited number of classes for credit towards their law degree in related subjects offered in other academic departments of the University, such as the Marine Affairs Programme. Students with such interests should seek the permission of the Department or School involved as well as the Legal Studies Committee of the Law School. Students wishing assistance in the selection of classes within the area of MELP are advised to consult the current director or an instructor in the programme.

In the years since its foundation, MELP has also been active in library development. The maritime and environmental law holdings at Dalhousie's Law Library represent one of the best collections of its kind in the world, attracting scholars from many countries. Moreover, with shelf listings from over a dozen major libraries in Europe and North America, computer-assisted access to an extensive listing of marine-related materials is now possible.

As a consequence of these curricular and library developments, and of a steady involvement by faculty members in research, writing and conference activities in the field, a growing number of students are attracted to Dalhousie in order to undertake specialized studies in maritime, marine, and environmental law. In most years over half of the LLM students at Dalhousie do their supervised these work within MELP. In addition, opportunities exist for students to pursue their marine and environmental interests beyond the academic programme. Two students associations, the Environmental Law Students' Society and the John E. Read International Law Society, organize a range of activities, including speakers, meetings and symposia on topics of current concern. The journal *International Insights* is also written, edited and published by law students, together with political science students. MELP faculty edit the *Ocean Yearbook* in cooperation with the International Ocean Institute.

## J. Business Law Certificate

LLB students may specialize in Business Law and the specialization will be recognized on their academic transcript. To specialize in Business Law, a student must take:

- a. Business Associations, Taxation I and Commercial Law
  - b. Classes totaling at least three credit hours chosen from the following list:
    - Securities Regulation
    - Taxation of Corporations
- Other classes specifically designated from time to time.
- c. Additional classes chosen from the following list (at least one of which must be a major paper class or equivalent) which, together with all classes taken to satisfy requirements (a) and (b) above, total at least 23 credit hours:
    - Banking Law and Negotiable Instruments
    - Bankruptcy and Insolvency Law
    - Business and Environment
    - Competition Law
    - Corporate Finance, I and II
    - Corporate Transactions
    - Creditors' and Debtors' Rights
    - Employment Law
    - Information Technology Transactions
    - McInnes Cooper Seminar in International Trade Law
    - Insurance Law
    - Intellectual Property
    - International Trade Transactions
    - Internet and Media Law
    - Labour Law I
    - Labour Law - Administration of the Collective Agreement
    - Legal Accounting
    - Oil & Gas Law
    - Real Estate Transactions
    - Regulation of Financial Institutions
    - Securities Law Moot
    - Taxation II
    - Taxation III
    - Approved DRPs, and other classes specifically designated from time to time

All classes counted toward satisfaction of the Business Law Specialization requirements must be completed with no grade below C, and an average of B.

NOTE: For the purposes of any Dalhousie Law School Certificate program, only those courses pursued at Dalhousie Law School during the student's LLB studies which lead to successful completion of a Dalhousie University LLB degree will be recognized.

## V. Classes Offered: LLB and LLM

PLEASE NOTE: Every class listed may not be offered each year. As well, teaching assignments may be subject to change. For an up-to-date listing, please consult the current law school timetable.

### A. First Year Classes (all compulsory)

#### LAWS 1000X/Y.06: Contracts and Judicial Rule-Making

This class has two primary objectives: the first is to provide an understanding of the process of development of the common law through judicial decisions; the second is to provide a basic knowledge of the doctrines and precepts of the law governing the making and performance of contracts. As a means of attaining the first objective, the "case method" of teaching is used to enable students to acquire a lawyer-like understanding of such concepts as "stare decisis", the use of precedent, and the technique of distinguishing. A critical evaluation of judicial law-making is undertaken through an examination of the developing phenomenon of legislative intervention in the field of contract law. In order to fulfil the second objective, substantive rules of contract law are examined.

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

#### LAWS 1001X/Y.06: Criminal Justice-The Individual and the State:

Relationships among the state, individuals, and communities are considered in the context of Canadian criminal law. The legal rights provisions of the Charter of Rights and Freedoms, selected topics in criminal procedure and the principles of the substantive criminal law will be the main focus of this class. The latter concentrates on elements of offences, justifications, excuses, non-exculpatory defenses, inchoate crimes and secondary liability for offences. Teaching is conducted by lecture and discussion of assigned materials including the Criminal Code (which is also used to illustrate methods and problems of statutory interpretation) and a volume of cases and materials.

First year students should note that there are a few places available in the intensive Deferred Course in Criminal Law which replaces the regular all-year course. Students who are enrolled in this course do not take Criminal Law during the regular term and must be prepared to extend their academic year for about six weeks, from approximately late April until early June. Students wishing to select this option must apply to the Studies Committee and must demonstrate that they are facing exceptional circumstances whereby they would benefit from enrolment in the course. Factors such as mature student status, parenting responsibilities, illness, disability, the need for employment during the regular term and other personal circumstances may be taken into consideration. Contact Professor Kaiser for further information.

EVALUATION: For large group classes written examination in December (with option to count as 30% of final mark), and a final examination.

For small group classes, the mark is composed of a combination of an oral advocacy exercise, class participation and written examinations.

NOTE: Students taking the class taught during the regular academic year must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

#### LAWS 1003X/Y.05: Fundamentals of Public Law

This class provides students with an understanding of the constitutional and administrative structures of Canadian law and government. An emphasis is placed on developing the skills required of lawyers whose public law work may range from appearances before administrative tribunals, to giving advice on the formulation and articulation of policy. Primary among the emphasized skills is the ability to work with and interpret constitutional, statutory and regulatory texts. A perspective on the administrative model of decision making will also be developed. As a necessary background for the development of these skills and for the general study of law, this class introduces students to the Canadian governmental and constitutional system. Students will explore the legislative process, statutory interpretation, and the administrative system using human rights legislation as a model. Further, students will develop an understanding of the analytical framework of the Canadian Charter of Rights and Freedoms, through the study of the interpretation and development of equality rights.

EVALUATION: Written examination in December (with option to count as 30% of the final grade), and a final examination which may have both a take-home and in-class component

#### LAWS 1004X/Y.03: Legal Research and Writing

The main objectives of this class are to familiarize students with source materials commonly used by lawyers, to acquaint students with the generally accepted principles of proper citation in legal writing, and to assist students in acquiring a degree of proficiency in legal writing and research by introducing them to the techniques of discovering authorities and applying them to the solution of legal problems. The class is conducted by lectures, reading of assigned materials and individual research. During both terms, students are introduced to computer-assisted legal research through lectures and sessions in the computer laboratory.

EVALUATION: Three assignments

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

### **LAWS 1002.01: Orientation to Law**

The objective of the class is to orient students to the study of law by introducing them to four fundamental perspectives in the law: the comparative, the historical, the philosophical and the professional. Within each perspective several Faculty members will lecture, both to convey information deemed essential and to give a sense of the variety and contingency within each perspective. Mandatory readings will be presented in advance by each faculty speaker.

EVALUATION: Pass/Fail oral conducted by a faculty member. If the oral is unsatisfactory the student will be re-examined by a three person group: class co-ordinator (the Dean), and two others

### **LAWS 1005X/Y.06: Property in its Historical Context**

The purpose of this class is two-fold: first, to provide a basic understanding of property concepts and principles in both real and personal property; second, to provide a sense of the historical development of the law of property.

This class introduces the student to the concept of property, its evolution, types and fundamental principles. It illustrates ideas such as possession and ownership by reference to the law of finders and bailment and to various transactions in which land or goods are the common denominators. It also explores the doctrines of aboriginal title and the principles of real property, including tenure, estates, future interests, matrimonial property, private and public controls on land use, the registry system and adverse possession.

EVALUATION: Written examination in December (with option to count as 30% of the final mark), and a final examination

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

### **LAWS 1006X/Y.06: Tort Law and Damage Compensation**

The major objective of this class is to provide a basic understanding of the manner in which losses from injuries to personal, proprietary and economic interests are distributed through tort law. Materials to be studied include cases, appropriate legislation and doctrinal writings related to the problems of tort law and damage compensation in a diverse society.

EVALUATION: For large-group classes, written examination in December (with option to count as 30% of the final mark), and a final examination. For small group classes, the mark is composed of a combination of class assignments, an oral advocacy exercise, class participation and written examinations.

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

## **B. Second Year Required Classes**

### **LAWS 2061X/Y.05: Civil Procedure**

Civil Procedure is a required second-year class, as this course is the major law school vehicle for teaching procedural law as an essential part of our legal system. Although the conduct of a Supreme Court action and the Nova Scotia Civil Procedure Rules serve as the backbone of the course, the basic issues of procedure are canvassed in sequence: the civil court system, commencing proceedings, pleading, interlocutory applications and affidavits, territorial jurisdiction and convenient forum, standing, limitation of actions, suing the government, joinder of parties and claims, discovery, dispositions without trial, trials, orders and enforcement, appeals, costs. The course concludes by considering improvements in access to civil justice (including class actions) and reforms to the civil justice system (including alternative dispute resolution and case management). In addition to regular classes, students will take part in "workshops," small groups of 10-12 students instructed by civil litigation practitioners. In the workshops, the students draft pleadings, documents and briefs and argue a simulated chambers application, acting for opposing parties in a hypothetical case. By this combination of classes and workshops, students should acquire both a theoretical and practical understanding of procedure, the civil justice system and the roles of lawyers within that system.

EVALUATION: Written examination, drafting assignments and workshops.

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

### **LAWS 2062X/Y.05: Constitutional Law**

This required 2nd year class concerns itself with three main themes; the distribution of powers under the Constitution Act 1867, the Canadian Charter of Rights and Freedoms, and Aboriginal rights. This will follow from the basic introduction to and foundation for the class laid during first year by the class in Public Law. The class makes an effort to integrate division of powers, Charter and Aboriginal rights discussion to highlight both points of overlap and points of departure. Throughout the class emphasis will be placed on the roles of the constitution in our governmental structure and of the courts as its elaborator and guardian, and on constitutional litigation as a problem-solving process through which fundamental values are examined.

EVALUATION: Written final exam with an opportunity for students to earn partial marks through other components during the term

NOTE: Students taking this class must register in both X and Y in consecutive terms; credit will be given only if both are completed consecutively.

## **C. Third Year Required Class**

### **LAWS 2099.02: The Legal Profession and Professional Responsibility**

This required 3rd year class examines various aspects of the nature and organization of the legal profession in Canada, including its history and evolution, the legal and ethical responsibilities of lawyers and the influences of the adversary system on the pursuit of justice. In particular, the class covers specific ethical rules which affect all lawyers in their practices and also the wider public protection issues which face the organized legal profession. The class will be conducted by lectures and discussions involving the whole class (1 hour per week) and by small group discussions (1 hour per week). These will include special presentations, simulations and problem-solving projects. Serious attention will be given to dilemmas facing lawyers and the legal profession today. EVALUATION: Based partially on the results of a final examination and partially on small group performance

## **D. Second and Third Year Optional Classes**

### **LAWS 1500.06: Introduction to Law**

This class, offered by the Law School to non-law students, is designed to introduce students to the workings of the Canadian legal system, and to the basics of several fundamental areas of law. The focus of the class will be the decisions which have actually been made by courts in Canada. There will be discussion of what the law should be, but that will occur in a context of understanding how courts reason, and the principles that they bring to bear in reaching their decisions. The class will look in particular at introductory case law concerning tort law (wrongs by one person against another), personal property, criminal law, equality rights, and the law as it relates to Aboriginal peoples. Enrolment is limited to students in their second year of undergraduate studies and beyond.

### **LAWS 2000.04: Administrative Law**

This class is an advanced study of the public law process. It studies external controls upon the exercise of statutory authority, primarily through the vehicle of judicial review. It also attempts to develop an inside perspective upon the exercise of administrative discretion. The purpose of the class is to introduce the student to the general principles of procedural and substantive judicial review as well as to develop an understanding of the workings of the administrative process and the role of the subordinate legislation. Materials include a case book, scholarly commentary and accounts of the administrative process at work.

EVALUATION: Three hour examination or determined by the instructor at the beginning of the term

### **LAWS 2001.03: Maritime Law and Practice (Maritime Law I)**

This is an introduction to Canadian Admiralty Law and practice, including the history of admiralty; the subject matter of admiralty claims (ships, vessels, cargo, etc.); the status of admiralty claims (maritime liens, statutory rights to proceed in rem, etc.); the admiralty jurisdiction of the Federal Court of Canada and provincial courts; collision; carriage of goods by sea; marine towage and pilotage; salvage, marine pollution; etc. The class complements other classes, such as Ocean Law & Policy, Environmental Law, and Law of the Sea.

EVALUATION: Written examination and class project

### **LAWS 2002.04: Business Associations**

This class provides an introduction to the law governing the conduct of business in the corporate form. The class deals with the following topics: the choice of form of business enterprise; the legal effect of incorporation; disregarding the corporate entity; the different systems of incorporation; the corporate constitution; contracts between corporations and outsiders; the control and management of the corporation, especially the relationship among promoters, directors, executive committees, officers and shareholders; the raising and maintenance of a corporation's capital; the liability of directors and officers and remedies available to shareholders. An introduction to the principles of partnership will also be included. The class is taught by discussion of selected cases, statutes and other materials which students are expected to read carefully in advance of class.

EVALUATION: Problem-oriented closed-book written examination

### **LAWS 2003.13: Clinical Law.**

Dalhousie Legal Aid Service (the Clinic) provides 3rd year students with an opportunity to practice lawyering skills in a community law office located in north-end Halifax. This 13 credit course can be taken over the Fall, Winter or Summer terms. Students can take one other course along with the clinic.

While studying clinical law, students will conduct themselves as lawyers in a social justice context. As such, students will be responsible to counsel clients, negotiate with other lawyers, prepare cases and conduct hearings in Provincial and Supreme Courts as well as before administrative tribunals. Students are also exposed to files employing law reform and community development as related to poverty law issues. All casework is supervised by staff lawyers or community legal workers. Each student initially receives 10-15 client files and one community file.

Formal seminar and skills training sessions take place on Monday, Tuesday and Thursday afternoons. Skills training includes, interviewing and counselling, issue identification, building a theory, negotiation, direct examination, cross examination and basic trial skills. Seminars cover the topics of social assistance, residential tenancies, child protection, family and criminal law (YCJA), and law reform as well as other topical areas. Paper writing requirement: Preparation of a 15-20 page memo related to the work of the Clinic

ENROLMENT: 16 students Fall and Winter. 12 students summer.

NOTE: An application process and selection criteria are applied.

Information sessions are provided at the law school in January and March. Students are always welcome to visit the clinic site. To make arrangements call (423-8105).

PREREQUISITE: Civil Procedure. Family and Evidence are recommended

EVALUATION: Pass/Honours/Fail. Written feedback is provided at mid-term and final.

### **LAWS 2004X/Y.04: Commercial Law**

This class deals with sales of goods and secured transactions in personal property, and is taught in two modules, one each term. The sales module reviews three aspects of the law relating to the supply of goods: the rules applicable to sales contracts under the provincial Sale of Goods Act and relevant consumer protection legislation; matters relating to the payment obligations arising from the sale (the relevant law of negotiable instruments); and cross border issues relating to sale, namely sales across international borders, including the International Sales Convention and payment settlement through letters of credit. The secured transactions module considers consensual arrangements to finance the supply of goods, together with other competing interests. The operation of the

modern provincial personal property security statutes will be examined, as well as their relation to security interests under the federal Bank Act. EVALUATION: Closed-book or modified closed-book examination  
FORMAT: 2 hours per week

### **LAWS 2005.04: Conflict of Laws**

This class is concerned with legal issues in private law arising out of transactions and occurrences with connections to two or more legal units (provinces or countries). Examples would be contracts made in one country but to be performed elsewhere, torts with a cross-border element (such as goods negligently manufactured in one country which injure persons in another) and international child custody disputes. The type of problems associated with such occurrences include (1) which law applies to the determination of liability in such situations, (2) which country's or province's courts have jurisdiction to entertain such disputes, and (3) the enforcement in one country or province of court judgments and arbitral awards emanating from another. The objective of the class is for students to learn to recognize conflict of laws situations, to deal with those situations by accepted methods, and to appreciate the results from a variety of points of view. The extent to which the federal nature of Canada affects such matters will be critically examined.

EVALUATION: Final exam and optional mid-class assignment

CO-REQUISITE: Constitutional Law

### **LAWS 2008.04: Evidence**

As an introduction to the law of evidence, the course examines basic concepts of relevance, admissibility and weight, in criminal and civil cases. Topics covered include: burden and standard of proof, judicial notice, competence and compellability of witnesses, examination of witnesses, opinion evidence, character evidence, credibility, hearsay and hearsay exceptions, confessions, unconstitutionally-obtained evidence, and privilege. The policy considerations underlying particular rules, as well as the origins, development and constitutional significance of such rules are examined and critically assessed.

EVALUATION: Written examination

### **LAWS 2009.03: Comparative Criminal Law**

The aim of this class is to examine criminal law and the administration of criminal justice in Canada by means of comparison with analogous aspects of the legal systems of selected foreign countries. The particular countries emphasized are the United States, France, the People's Republic of China and Islamic countries, since they represent a spectrum of models which differ in varying degrees from the Canadian legal system. They include common law, continental European, Communist and religious traditions which when compared with Canada can bring the most important characteristics of our own system into sharp focus. An opportunity will be given for students to explore issues of restorative justice and Canadian aboriginal justice in this comparative context. All systems examined will be viewed in the light of international human rights standards thought to be applicable to criminal justice.

EVALUATION: Class participation and the writing and presentation of a major term paper

### **LAWS 2010.02: Insurance Law**

This class examines the basic principles underlying the law relating to various types of insurance, e.g., fire, life, sickness and accident, motor vehicle, liability and marine. Attention is directed particularly to: (a) the nature of the insurance contract and its formation, (b) agency principles applying to insurance agents or brokers, (c) the insurable interest, in property or in liability for damage to property or persons, that a person must have to enter into a valid contract of insurance, (d) the effects of nonrepresentation in applying for insurance, or omission of necessary information, and of failure to meet the special conditions made part of the contract under legislation, and (e) rights of third parties against the insurer. Students must critically examine existing law, its function in modern society and its fairness to the insured person, and consider desirable reforms. Class materials include an examination of insurance cases, the Nova Scotia Insurance Act and pertinent standardized insurance contracts. In addition, students will be introduced to common law actions for passing off, appropriation of personality and injurious falsehood. EVALUATION: Examination; to be clarified by the instructor at the beginning of the term

### **LAWS 2012.03: International Law**

Public international law is about governance of the world in that it regulates the legal relations of states and the individuals who compose them. The class begins by exploring the foundations of the international legal system. Methods of creating and applying international law are examined in comparison with municipal machinery. Processes of international dispute resolution and the interaction of international and Canadian law are discussed. Later, the application of substantive principles of international law are considered in selected areas such as law of the sea, international protection of the environment, international criminal law, the protection of human rights and the use of force. EVALUATION: Written examination; possibly a combination of examination and written assignment, where numbers permit

### **LAWS 2013.03: Judicial Remedies**

This class deals with the law of damages and the equitable remedies of injunction and specific performance. Roughly two-thirds of the time is devoted to damages in contract and tort. The remainder is spent on an overview of the equitable remedies already mentioned. A detailed outline of the class content is available from the instructor. EVALUATION: Three hour examination and optional paper

### **LAWS 2014.03: Labour Law I**

This is a survey of the institutions and legal concepts related to labour-management relations in Canada: union organization and certification, unfair labour practices, collective bargaining, conciliation, the collective agreement and arbitration, industrial conflict and internal union affairs. An attempt is made to examine the law of labour relations as an example of a response by the legal system to a social problem. EVALUATION: Written examination; there may be an option to have 50% of the evaluation based on short weekly memoranda and 50% on a written examination

### **LAWS 2015.03: Planning Law**

The class introduces students to the planning process through study of the legal tools used to regulate the use of land. While the legal aspects of the planning process will dominate, students will also be expected to appreciate the perspective which planners bring to the subject. The class is usually composed of both law and planning students. There is consideration of the basic legal regime governing planning (including private law remedies, constitutional law and the role of the federal government, official plans, zoning by-laws, non-conforming uses, development permits and judicial review of planning decisions. Administrative law is a desirable but not necessary pre-requisite or co-requisite. EVALUATION: Class presentation, assignments and final examination.

### **LAWS 2018.03: Children and the Law**

The class focuses upon the position of children within the legal system. Focus is on the role of lawyers, inter-disciplinary perspectives upon children. Topics include: private custody, access, enforcement of custody and access orders, domestic violence and custody access, gay/lesbian issues and custody, mediation, parenting plans, sexual abuse allegations, child protection, adoption, and young offenders. Throughout the emphasis will be upon the respective roles of parents, children, the state, lawyers and the judiciary in decision-making concerning children. EVALUATION: Major paper, book review and class participation  
PREREQUISITE: Family Law I

### **LAWS 2019.03: Law and Technology**

This is a paper class in which students will have the opportunity to explore issues relating to law and technology in a seminar format. Classes will focus on a range of topics drawn from the following areas: regulating the Internet, doing business on the Internet, developments in telecommunications and the law, privacy and access to information, law, ethics and technology, and technology and the practice of law. While no technical background or expertise is required as a prerequisite to the class, students will be expected to use electronic mail as a supplement to in-class discussions. In addition, students should expect to use the World Wide Web to access class-related materials and research resources. EVALUATION: Major paper, presentations, class participation

### **LAWS 2020.02: Fisheries Law**

This seminar is designed to acquaint students with the public and private law aspects of fishing and fishery management in Canada. While the central focus is on law and the regulatory framework, questions of policy frequently arise for discussion. The class is taught by a combination of questioning, lectures and guest speakers. Problems unique to fisheries regulation and methods of fishery management will be discussed to set the context in which the law operates. International considerations, constitutional problems, fisheries legislation, the interplay between private rights and public rights, and problems of enforcement and environmental protection will be the central topics discussed. EVALUATION: Minor paper and class participation

### **LAWS 2022.03: and 2021.02: Law of the Sea**

The conclusion of the Third U.N. Conference on the Law of the Sea was the result of the world's most ambitious law reform movement in the form of the Third United Nations Conference on the Law of the Sea (UNCLOS III), which was in preparation and in session from 1969 to 1982. The result is a new treaty which governs almost every conceivable aspect of ocean use, establishes a new regime for ocean jurisdictional zones and provides a global administrative and regulatory structure for the oceans. This seminar will undertake a detailed analysis of the "new law of the sea" by examining the Convention and other materials. Included in the analysis will be an examination of navigational issues (territorial sea, international straits, archipelagoes), resource issues (exclusive economic zone, fisheries, non-living resources; maritime boundary delimitation); protection of the marine environment; transfer of marine technology; marine scientific research; dispute settlement; international ocean development. The Canadian interest in the new law of the sea will also be examined. The class will be conducted as a seminar and students are expected to make contributions based on substantial reading. 75% of the assessment is on the basis of an exam on a major topic. 25% of the assessment is based on a small group project or problem. EVALUATION: Major paper, presentation and class participation for 3 credits; examination for 2 credits

### **LAWS 2023.02: Legal Accounting**

This is a basic class in the business law area and is recommended background for work in the corporate, taxation, and estate planning fields. It is not designed to produce accountants but rather to equip the lawyer to act effectively as a professional adviser to business and to be able to use principles of accounting and the services of accountants to enhance his/her effectiveness. The class is also an example of interdisciplinary study, considering areas where the law and accounting overlap. Even students who have been exposed to accounting in their college work should benefit from the class, the latter two-thirds of which is taught as a law class with an approach not duplicated elsewhere in either business school or law school. No mathematical knowledge beyond simple arithmetic is required. The class begins with a study of elementary principles of double-entry bookkeeping and financial statement presentation, concentrating more on the underlying principles than on detailed drill in procedure. Next comes an examination of the structure and functions of the accounting profession. The remainder of the class concentrates on a consideration of generally accepted accounting principles, their interrelationship with the law, and their relevance to the resolution of certain legal problems. This includes discussion of the attitudes of the courts to accounting concepts; financial statements, their uses and limitations; inventory valuation; valuation of tangible fixed assets; public utility rate regulations; treatment and valuation of goodwill; allocation of income taxes; and measurement of revenues and expenses. EVALUATION: Final examination

### **LAWS 2026.04: Real Estate Transactions**

This class provides a comprehensive and practical introduction to real estate transactions. Legal principles underlying all aspects of the real estate transaction are examined in the context of a real estate conveyancing practice. Topics discussed include: real estate agency law; fixture; conditional contracts; risk of change; defect in the land and buildings; title problems; time is of the essence; merger on closing; deposits and part payment; the Registry Act; possessory title; restrictive covenants; surveys and mortgages. The class is conducted by lecture and class discussion. EVALUATION: Final examination

### **LAWS 2029.04: Taxation I**

This is a basic class in the method and content of Canadian income tax law - including historical background, statutory provisions and cases, and a consideration of the function of the lawyer as an adviser on income tax matters. Discussion covers the interpretation of taxing statutes, tax avoidance, residency issues, sources of income, including employment income, business income and capital gains and losses, and tax credits. The class emphasizes the analysis of assigned cases, statutory provisions, general readings and problem situations. Throughout the study of these materials, the underlying philosophy and policy considerations are subject to constant examination.

EVALUATION: Problem-oriented written examination, with the possibility of optional in-term written work counting for a certain percentage of the work

### **LAWS 2030.02: Taxation II**

This is a class in certain specialized areas of income tax law. Subjects covered in the course are the taxation of trusts, partnerships, capital property and eligible capital property. The class is taught by lecture and discussion of illustrative problems.

EVALUATION: Written examination and class participation  
PREREQUISITE: Taxation I

### **LAWS 2031.02: Torts II**

The purpose of the class is to study how the courts decide tort cases and to give students a realistic understanding of the judicial decision making process in the context of tort law. Students will explore in detail areas of tort law that are currently being developed by the courts as well as the fundamental legal rationale and concepts that are used to determine the imposition of tort liability. The class will deal with a number of actual factual situations that will have to be decided by the student. The teaching method relies on class discussion and participation

EVALUATION: Class participation 30% and a term paper 70%. The assignment will comprise a written decision dealing with a factual problem which will be assigned at the beginning of term. This course does not fulfil the major paper requirement.

### **LAWS 2033.03: Equity and Trusts**

This class surveys the historical evolution of equity, and its emergence as a separate jurisdiction. It also analyzes the principal doctrines of equity, the distinction between legal and equitable interests and the meaning of the statutory fusion of law and equity. The class also surveys the historical development of the trust, its conceptual nature, the certainties necessary for creation, the types of trusts; the appointment of trustees and their principal rights and duties; the tracing of trust assets and some modern uses of the trust.

EVALUATION: Written examination

### **LAWS 2039.03: Laskin Moot**

This class is a national moot court competition to which every law faculty in Canada is invited to send a team. The actual event takes place in late February or in March at a host Faculty somewhere in Canada. This class requires collaborative work on a hypothetical moot problem in the area of federal administrative and constitutional law. It will include extensive research culminating in the preparation of a factum. It will also include preparatory oral advocacy sessions and the eventual pleading of the problem before a bench consisting of sitting judges, administrative law practitioners, and law professors. This class is open to third year students. Participants will be selected on the basis of a "moot-off" competition. It will be necessary to have at least one team member capable of mooting in French. The selection will be conducted by a committee of three professors.

EVALUATION: Research and factum, as well as oral advocacy.  
Participation in the class satisfies the major paper writing requirement  
CO-REQUISITE: Administrative Law; Constitutional Law

### **LAWS 2040.03: Civil Trial Practice**

This seminar provides an intensive introduction to civil litigation. It requires students to have knowledge and understanding of substantive law in basic common law fields, e.g., Torts, Contracts, and Remedies, and of procedural law from Civil Procedure and Evidence. The class is designed to develop the students' awareness of the procedures required to

prepare a civil case for trial and to develop their skills in interviewing parties and witnesses, conducting discovery examinations, conducting direct and cross-examination at trial, evaluating evidence in the case and considering settlement. The class is conducted on a seminar method involving in-class participation by the students in the various aspects covered in the class while at the same time developing the model case for trial. Out-of-class work consists of readings which are provided, preparations for class performance and preparation of various aspects of the model case. The seminar is conducted one night per week, the model trial being held on a Saturday. Attendance at all classes is essential.

EVALUATION: In-class participation and participation at the model trial. Some portion of the final mark will be based on a written component.

Evaluation will be clearly explained at the first class

PREREQUISITE: Evidence and Civil Procedure

RESTRICTION: Open to third-year students only

### **LAWS 2041.03: Coastal Zone Management**

Coastal areas, home to nearly three quarters of the world's population, support some of the most biologically diverse and productive ecosystems. The number and variety of uses and user groups competing for this land, air and sea space is ever-increasing; resource-use conflicts are increasing and are often difficult to effectively resolve; whilst the resources in these coastal environments are decreasing and deteriorating. As a result, there is an urgent need for integrated coastal management (ICM) in Canada and other coastal States to plan, manage and regulate multiple uses and achieve sustainable use of the coastal environment. This is a complex challenge and raises many legal and policy issues at all levels, from community-based efforts to global initiatives.

This seminar examines the legal framework, concepts, principles, tools and models associated with coastal zone management worldwide. The approach will be comparative and inter-disciplinary, examining coastal zone management from a community, national, regional and international perspective. The various legal and theoretical concepts, legislative and administrative responses will be analyzed through lectures (including guest lecturers from Canada and abroad), case studies, simulation exercise(s) and class discussion. There will be specifically assigned readings for each class and general class materials. Class outline is available.

EVALUATION: Major paper (80%) and class participation (20%)

### **LAWS 2044.02: Creditors and Debtors Rights**

This class is designed to provide a comprehensive introduction to rights and remedies of debtors and creditors. It includes, among other elements, techniques of prejudgment collection, debtor harassment, the role of the courts and the execution order in with respect to real and personal property. There is a general discussion of rights of secured creditors, fraudulent transfer by insolvent debtors and an introduction to bankruptcy as an ultimate collection remedy. The class is conducted by lecture and discussion of cases, statutes, and other materials.

EVALUATION: Final examination

### **LAWS 2046.03: Criminal Trial Practice**

This class uses lectures and simulated court proceedings, including arraignments, bail hearings and trials, to develop skills of advocacy and trial preparation. Trials later in the term are heard before Judges of the Provincial Court, and the final case is heard by a judge of the Supreme Court. Each student assumes the role of prosecutor, defence counsel and witness on different occasions. Preparation for classes involves some research in matters of evidence and criminal procedure. Presentations are discussed at the conclusion of each proceeding for the purpose of providing constructive criticism. Classes are held one night per week during the fall term.

EVALUATION: Class participation 75%, written examination 25%

PREREQUISITE: Evidence

RESTRICTION: Students taking this class cannot take the Clinical class in Criminal Law

### **LAWS 2047.02/2048.03: Employment Law**

This class will review Canadian employment law. Areas to be covered may include: constitutional jurisdiction, the primary components of the employment relationship, Employer and Employee status, basic elements of the employment relationship, employment contracts, implied rights and

obligations in the employment relationship, the right to terminate the employment relationship, reasonable notice of dismissal, constructive dismissal, cause for summary dismissal, fiduciary obligations, and employee obligations express and implied. Additional topics may include current employment law problems, Occupational Health & Safety legislation, Human Rights legislation and Workers Compensation legislation.

EVALUATION: Class participation, paper presentation for those doing a paper, and exam or paper, at the student's option. The paper or exam will be worth at least 60%. Evaluation will be reviewed at the first class.

### **LAWS 2051.03: International Environmental Law**

The progression of international environmental law from "customary" co-

existence to "conventional" cooperation is explored through nine topics:

(1) State Responsibility and Liability for Transboundary Pollution; (2) "Soft Law" and Sustainable Development Principles: From Stockholm to Rio; (3) The Legal Waterfront of Marine Environmental Protection; (4) The International Law of the Atmosphere: Climate Change, Ozone-Depletion; (5) The Protection of Biodiversity; (6) The International Framework for Controlling Transboundary Movements of Hazardous Wastes and Toxic Chemicals; (7) The Protection and Management of International Watercourses; (8) Polar Regions and the Environment: The Arctic and Antarctica; and (9) Free Trade and the Environment.

EVALUATION: Major paper 80%, class presentation 15%, and class participation 5%

CO-REQUISITE: International Law or Environmental Law

### **LAWS 2052.02: Labour Law - Administration of the Collective Agreement**

The objectives: (1) understanding labour arbitration jurisprudence; and (2) advocacy skills in arbitration. Students read materials and participate in mock labour arbitrations; examine a witness; cross-examine another and present legal argument.

EVALUATION: As counsel 35%; brief of law 25%, award 30%, attendance and participation 10%

CO-REQUISITE: Labour Law I

### **LAWS 2056.03: International Trade Law**

This class examines the World Trade Organization (WTO) and the North American Free Trade Agreement (NAFTA), and prepares the student to understand generally the role of international and domestic law in modern trading relations. Emphasis is placed on the issues raised by recent trade agreements, such as non-discrimination (e.g. MFN and national treatment), trade rules and unfair trade remedies, services and intellectual property, trade and environmentalism and so forth. Special attention is given to the dispute settlement mechanism, which emphasizes a legal approach to trade relations. The class will be conducted as a seminar, based on regularly scheduled readings.

EVALUATION: Major paper 65%; class participation and minor assignments 35%

### **LAWS 2059.02: Taxation III**

This class provides a detailed analysis of the income tax treatment of corporations and partnerships and of family transactions, and consideration of some aspects of tax planning. The class is an intensive one, designed primarily for students who contemplate some degree of specialization in corporate and tax matters. The class is conducted primarily by student presentation of solutions to selected problems.

EVALUATION: Class presentation of solutions to assigned problems (one-third) and a paper presenting solutions, as a follow-up to class presentation (two-thirds)

PREREQUISITE: Taxation I and Legal Accounting (or equivalent accounting background)

CO-REQUISITE: Business Associations and Taxation II

### **LAWS 2068.03: Ocean Law and Policy**

This seminar examines current issues in Ocean Law & Policy. The specific focus will vary each year depending on the instructor. (e.g. international fisheries; offshore oil and gas; integrated ocean management) It is recommended that students have a background in international law and/or law of the sea.

EVALUATION: Major paper and class participation

### **LAWS 2074.03: International Human Rights Law**

This class will examine international Human Rights law, policy and process using primary source documents, jurisprudence, and the experiential evidence gleaned and provided by nongovernmental organizations (NGOs), the "conscience" of the International community. The class is intended to introduce students to International Human Rights Law as a discrete and significant area of law that is intersecting with increasing impact on Domestic Law. Using the prism of "Race"/colour, national and ethnic origin, the class will examine the quality of international Human Rights protection by focusing on the plethora of instruments and mechanisms put in place for enforcement.

ENROLMENT: Limited to 16

INSTRUCTOR(S): E.M.A. Thornhill

EVALUATION: Major Research Paper: 80% (in English or French);

Assignment: 15%; Class Participation: 5%

### **LAWS 2075.04: Legislation**

As one of the primary sources of law, legislation is one of the basic working tools of the lawyer. Building on the First-Year Public Law class, the Legislation class attempts to give the student a more detailed view of the role of legislation in the legal process. The class has two major focal points. One is directed towards giving the student a better appreciation of how a statute is created, including the basic underlying policy decisions upon which it is based, the statutory scheme developed to carry out the legislative process, and the problems faced by the drafters in translating general ideas into specific unambiguous language. The second major emphasis is directed towards giving the student an appreciation of the court techniques involved in judicial interpretation of statutes. The rules of interpretation can be stated very easily. To appreciate how they are used by the courts is much more difficult. Understanding gained in this class should be related to other classes and areas of the law where legislation plays an important role, e.g., Constitutional, Administrative, Taxation Law. The class may help to increase appreciation for appropriate use of language in legal work of all types. The class is conducted by discussion of assigned readings and the presentation and discussion of proposed legislation drafted by the students. Each student will prepare a major paper consisting of a draft of proposed legislation and an explanation of the draft, including such matters as the need for the legislation, the problem(s) to which it is addressed, its constitutionality, the underlying policy supporting the legislative choices and the relation of the proposed draft to the legal context (i.e., the common law and other statutes).

EVALUATION: Major research paper

### **LAWS 2076.03: Poverty Law and Human Rights**

This class entails an in-depth analysis of poverty and the social welfare system in Canada, with particular emphasis on specific federal and provincial (primarily Nova Scotia) legislation. The constitutional implications of certain legislative provisions will be examined vis-a-vis the Charter, in particular ss. 7 and 15 and s. 36 of the Constitutional Act, 1982. Discussion will also be had of Canada's international obligations to alleviate poverty and how these commitments are used by poverty lawyers. Participants will discuss how to interpret poverty legislation. Issues such as the right to welfare and/or an adequate annual income will be debated. We will look critically at the lawyer's role in pursuing remedies to the problems of people of low income.

ENROLMENT: 16 students

EVALUATION: By examination plus a component for class participation.

### **LAWS 2079.02: Oil and Gas Law**

This course deals with the legal characterization of oil and gas, onshore and offshore, applicable constitutional and international law principles, basic rights transfer agreements, regulation, operator responsibilities, pipeline jurisdictional issues, aboriginal rights, rights of first refusal, environmental law, the Offshore Accords and their implementation and current regulatory issues.

EVALUATION: Written examination

### **LAWS 2081.02: Bankruptcy and Insolvency**

This class will deal with various federal and provincial legislative provisions governing bankruptcy and insolvency; fraudulent conveyances; assignments and preferences; the status of receivers, private and public, at common law and by statute; the status of agents appointed

pursuant to security instruments including chattel mortgage, conditional sale, assignment of book debts, and section 427 Bank Act, the status of engagements such as look-sees, and monitors; informal and formal proposals; the role of trustees, receivers and lawyers; creditors and debtors and the administration of insolvent estates; priorities within and without bankruptcy including other competing interests between classes of creditors; the distribution of the estate among creditors within and without bankruptcy; consequences of bankruptcy and the alternatives to bankruptcy; dealing with insolvent persons and corporations in the consumer and business community; ethical considerations in the delivery of legal advice and services in insolvency; new developments and proposals for reform of insolvency laws in Canada.  
EVALUATION: Final examination

### **LAWS 2086.02/2087.03: General Jurisprudence**

It is not easy to answer "What is jurisprudence?", the question of most students considering enrolment in this elective class. It is probably simpler to ask "What is jurisprudence about?", for there are few parameters on its field of inquiry. Questions as diverse as "What is the basic nature of law?", "What can law achieve?", "What is the relationship between law, morality and politics?", "What is the relationship between law and social change?", "Should we obey the law?", and "Whom does it serve?" are appropriate subjects for the jurisprudence student. In trying to answer these questions, an effort is made to ensure that the class maintains some balance between conceptualism, the students' perceptions and experience, and contemporary Canadian legal dilemmas.

Students will be exposed to a survey of the major schools of jurisprudence, ranging widely from legal positivism and liberalism to feminism, critical legal studies, law and economics, (dis)ability theory, and critical race theory. Each view of the law will be analyzed carefully and students will be expected to contribute their own critical insights on the questions and purported answers of the day. A high level of participation is therefore essential. In addition to regular contributions to discussions, students will be required to make presentations.

A major text will form the basis of the class materials. Handouts will also be distributed.

EVALUATION: This seminar may be taken as an examination class (2 credit hours), as a major paper class (3 credit hours), or possibly as a combination of the two methods, subject to Faculty regulations. Credit is given for class participation including a class presentation.

### **LAWS 2091.04: Criminal Procedure**

Criminal Procedure concerns the provision and regulation of methods for dealing with those who are alleged to have violated the criminal law. The class provides an overview and more intensive exposure to some technical areas against a background of general principles, while trying to confront difficult policy questions inherent in ensuring procedural justice in a democratic society. Topics include jurisdiction (eg. Time and territorial limits), pre-trial procedure and practice (search and seizure, wiretapping and bail), the trial process (the preliminary inquiry and plea bargaining) and post-trial remedies (appeals and extraordinary remedies). Consideration will be given to the impact of the Charter of Rights and Freedoms and to proposals for law reform.

### **LAWS 2092.09: Clinical Class in Criminal Law**

The clinical class in criminal law offers an opportunity to enhance advocacy skills, get out of the classroom and experience the reality of criminal trial practice. This class has both a clinical and an academic component. The clinical component operates for eleven weeks of the term. Each student is assigned to a crown counsel defence lawyer or possibly a judge, and observes and participates as far as possible in the criminal law work of that person. For this eleven-week period each student must spend a minimum of 16-20 hours a week with the principal. The academic component is dealt with in two weekly seminars, each of two hours, which run throughout the term. The seminars focus upon lawyering skills including interviewing, trial preparation and advocacy skills using simulation exercises as the vehicle for learning. The seminars also focus upon matters relating to criminal law, criminal procedure, evidence, criminology and legal ethics. All-day tours of facilities such as penitentiaries and crime labs may also be arranged. Written memoranda are required and students will choose from a vast array of criminal law topics arising out of the many actual criminal court trials and cases

students will be involved in. This is a 9-credit course and students should adjust their class schedule accordingly.

EVALUATION: Honours/Pass/Fail. Individual feedback is given to students throughout the class. An evaluation of each student's performance in each aspect of the class is provided at the end. A student's grade is not counted in determining his/her weighted average. However, in the event of failure because of a weighted average below 55, or as with the Legal Aid Clinic, where the student is otherwise no longer academically entitled to complete their LLB degree, a numerical grade will be assigned for inclusion in the weighted average

RESTRICTION: Students who have completed or wish to complete Clinical Law or Criminal Trial Practice are not eligible

### **LAWS 2094.03: Comparative Constitutional Law**

This class is designed for students intrigued by the philosophical and justice issues implicated by the study of differing constitutional regimes. The aim of the class is to introduce advanced constitutional theory and situate these debates within the context of historical and contemporary developments in constitutional law in parts of North America, Africa, and Europe. Themes include the relationship between democracy and legal theory, violence and moments of constitutional transition and the role of group rights in federalist arrangements.

EVALUATION: Major paper, paper presentation, reading package and class participation

PREREQUISITE: Constitutional Law

### **LAWS 2096.03: Entertainment Law.**

This class will explore all aspects of the law as it relates to the entertainment industry from the point of view of the practitioner. This will involve a cross-discipline study of various areas of law such as contracts, commercial, tax, securities, business associations, copyright, trademarks, and judicial remedies as they converge and apply in a unique and emerging area. Particular attention will be paid to the music industry including record contracts, publishing agreements, music licensing, and merchandising. There will also be some time devoted to the film and television industry and some of the particular problems created by modern technology delivery systems. There will be no formal prerequisites; however, a background in some of the areas mentioned above will be helpful. Students will be expected to analyze the conflicts inherent in the merging of art and business and in particular the legal anomalies created by this merger and the inequities created by oligopolistic ownership of the entertainment industry.

Paper topics will be restricted to class topics and suggestions can be provided.

ENROLMENT: Limited to 16 students

EVALUATION: Major paper (75%) and seminar participation (25%)

### **LAWS 2103.03: Jessup Moot**

The Jessup International Law Moot Court Competition gives law students the opportunity to argue a hypothetical case involving international law. The experience affords both training in advocacy and understanding of the international legal system. Competitions are held annually in approximately 80 countries, and winners of those competitions compete in international finals. The Canadian regional round of the competition is a national mooting competition for Canadian law students. Nearly all 21 law schools across the country usually participate. The moot problem always contains issues redolent of a topical international affair. The Jessup Moot is sponsored by the International Law Students Association, based in Washington, D.C. Philip C. Jessup, for whom the competition is named, was one of America's most respected jurists on the International Court of Justice.

Work on the competition begins in October and proceeds up to the Canadian regional round, which is held in February. Each team is judged on its memorials, or written arguments, and on its oral presentation. Each team must prepare a memorial for each side and must argue the case four (4) times, twice for each side. A panel of experienced judges, commonly including justices from across Canada, scores the oral presentations. Jessup Moot team members will be expected to complete the requirements of the Canadian national competition to earn academic credit.

EVALUATION: Performance on the Jessup team

SELECTION: By open competition along with other external moots, in Winter term of second year, for team participation in third year. Prior completion of an International Law course is recommended.

### **LAWS 2104.03: Environmental Law I**

Environmental laws in support of sustainable development are explored through six class themes. The ethical foundations and principles of environmental law are reviewed including the principles of precaution, integration, polluter pays and public participation. The role of common law in preventing and redressing environmental degradation is considered. Constitutional realities and restrictions to environmental management are examined. The traditional command-control approach to environmental regulation is critiqued and possible strengthenings discussed with emphasis on toxic chemical control and water quality protection. Environmental impact assessment law and practice is covered. The class concludes by highlighting alternative approaches including alternative dispute resolution, the public trust doctrine, crimes against the environment, economic instruments, and pollution prevention legislation. EVALUATION: Final examination

### **LAWS 2106.03: Taxation of Corporations**

(This class replaces Business Taxation.) The class is a survey of the taxation of corporations. The first part of the class will deal with the rules governing the taxation of corporations. Major policy issues in the design of a corporate tax system will be addressed. The second part of the class will look at applications of the basic rules. Topics will include when to incorporate, the tax-free incorporation of a business, corporate reorganizations, estate freezes, buying and selling a business, and shareholder remuneration.

RECOMMENDED: Taxation 1 is highly recommended but not required. Any student considering this class without Taxation 1 is advised to consult with the instructor unless they have had non-law school tax training. EVALUATION: Three-hour final examination (80%) and class participation (20%)

### **LAWS 2107.03: Gale Cup Moot Court Competition**

This class is a high level moot competition among all common law schools in Canada, and is held in late February at Osgoode Hall in Toronto. The class requires individual and collective work on a moot case in an area of domestic law, usually criminal law. Extensive research, the writing of a factum, the preparation of argument, performance in moot trials at Dalhousie and final presentation of the case in Toronto are all involved. The class will include exposure to appellate advocacy techniques and instruction therein together with simulations before practicing lawyers. Evaluation is by the faculty advisor, although the Gale Cup judges will also likely provide comment and grading at the actual competition. Students should be aware that preparation for the Moot or the Moot itself may interfere with travel plans during Reading Week.

This class is limited to 4 third year students. Eligibility for the class is determined by the Moot Court Committee based on performance in the second year qualifying moots.

EVALUATION: Numerical and a letter grade evaluation for moot performance. Participation in the class satisfies the major paper writing requirement.

### **LAWS 2108.03: Canadian-American Moot Court Competition (Trilateral Moot)**

This class is a high level moot competition among Dalhousie, University of Maine and University of New Brunswick. The competition is held in November and the location is rotated among the competing schools. The problem is traditionally based on a moot case in an area of domestic law raising important legal issues in Canada and the United States. The class requires research in Canadian and American Law, the writing of a factum and preparation of the moot case, performance in moot trials and argument of the case at the host school.

The class will include exposure to appellate advocacy techniques and instruction therein together with simulations and experience before practicing lawyers. Evaluation will be by the faculty advisor and the Canadian American Moot Court Competition judges.

This class is limited to third year students. Eligibility for the class is determined by the Moot Court Committee based on performance in the second year moot off.

EVALUATION: Numerical and letter grade evaluation for moot performance. Participation in the class satisfies the major paper writing requirement

### **LAWS 2110.04: Family Law I**

After addressing introductory topics like constitutional jurisdiction, courts and marriage, this survey course addresses the traditional topics of "private" family law in the sequence in which they are usually resolved: separation and separation agreements, divorce, custody and access, child support, property division (including pensions), and spousal support. The last part of the course explores third-party custody claims, adoption, child protection and the impact of the Charter of Rights upon family law. Throughout, the course considers both substantive and procedural aspects of family law, including alternative dispute resolution techniques. The continuing tensions between procedure and substance, rules and discretion, status and contract, rights and obligations, are identified and discussed in each topic area.

EVALUATION: Written examination

### **LAWS 2111.02: Financial Consequences of Marriage and Marriage Breakdown**

This is a limited enrolment seminar intended to allow students to explore in detail areas involving financial and asset matters outlined in Family Law I. Discussion and student research may cover such areas as separation agreements, marriage contracts, the philosophy and practice of spouse and common law spousal support obligations; child support problems and the Federal Guidelines; division of assets on separation or divorce under the Matrimonial Property Act or equivalent legislation including a detailed look at such problem areas as, for example, pensions, business assets and severance packages. Also division of assets in common law relationships will be examined. Tax and practice problems inherent in dealing with these areas will be part of on-going discussions.

Students will be encouraged to deal with these areas on a comparative basis whenever appropriate.

EVALUATION: By examination or major paper

PREREQUISITE: Family Law I

### **LAWS 2113.05: Alternative Dispute Resolution.**

This seminar class will provide students with an opportunity to learn about and develop conflict management skills. The class will provide students with an opportunity to consider the theory and practise of various dispute resolution techniques, such as negotiation, mediation and arbitration. The class will involve skills development exercises and discussion of topical readings on the subject of dispute resolution processes.

EVALUATION: Based on a combination of written assignments and class participation.

### **LAWS 2115.03: Health Care Ethics and the Law**

The purpose of this class is to develop an understanding of health law and health care ethics and of the relationship between law and ethics. Topics covered in past years include: Informed choice, death and dying, genetics, reproduction, H.I.V. and AIDS; resource allocation; and medical research. Each issue is examined in an effort to determine what the law is and what the law ought to be.

EVALUATION: Major research paper (70%), reaction papers (20%), and class participation (10%)

### **LAWS 2116.02/2117.01: Education Law**

The purposes of the class include assessing the relation between law and government policy; breaking down the barriers between different disciplines; evaluating the impact of the Charter in a discrete setting and considering the links between law and values in Canadian society. The class will be offered in seminar form with discussion as the norm. There may be some guest lecturers and student presentations. The class will be broad in scope and useful to students who do not intend to directly pursue a career related to education, as well as those who do. Without limiting the instructor, the kinds of topics which might be covered include the following: judicializing education, jurisdiction over schools, the impact of the Charter, discipline and enforcing rules, schools as microcosms of society; and the limits of rights discourse. The impact of the Charter equality provisions on the field of education will also be an important

theme. While there will be a high profile Charter component to the class, there will also be an examination of administrative law issues, collective bargaining concerns, negligence and denominational school structures. There will be specifically assigned readings for each class and general class materials.

**EVALUATION:** Twenty percent by class discussion or oral presentation and 80% either by paper or by a written or oral examination for those who are claiming two credit hours. These two-credit students can also reduce the examination component by doing a class presentation for 20%

### **LAWS 2119.02: First Nations and the Canadian State**

This class will examine the unique legal position of the First Nations peoples within Canada. The objective of the class is to sensitize students to the unique legal and policy issues which must be understood and addressed to effectively represent or otherwise work with First Nations. Thus, course materials will engage jurisprudence and legislation, within the broader nexus of Colonial history, aboriginal conditions and culture, and government programmes and policies. Particular topics may include sources of law on aboriginal peoples, unique constitutional provisions, the special position of Indian reserves, the nature of aboriginal title and rights, Indian treaties, fiduciary obligations, taxation, and self-government/self determination.

**EVALUATION:** Final exam (2 credit hours) or major paper (3 credit hours)

### **LAWS 2121.02: Law of Succession**

The first part of the class deals with legislation limitations on freedom of testation such as the Testators' Family Maintenance Act and the Matrimonial Property Act and certain significant common law rules. Alternatives to the disposition of property by will are also explored. The second part of this class focuses on the law of wills. Topics will include the formalities required to execute a will, the rules of construction, and problems relating to lapse (the beneficiary dies) and ademption (the property bequeathed disappears) and capacity to make a will. The special will drafting problems of certain clients, such as parents with a handicapped child or a couple where one of the spouses is confined to a nursing home, will be addressed.

There will be a brief section on estate administration.

**EVALUATION:** Examination

### **LAWS 2122.02/2123.03: Canadian Legal History**

This is a survey course in the history of Canadian law from the time of the First Nations to the present. The successive reception of aboriginal law, French civil law and English common law will be discussed, as well as the later influence of U.S. law. We will explore the general characteristics of the legal regimes of British North America before and after responsible government, the impact of Confederation, and the response of the Canadian legal order to industrialization, social reform, urbanization, the two World Wars, immigration and technological change. Emphasis will be put on the development of Canadian legal institutions, the legal profession, legal thought and selected areas of substantive law. Throughout we will consider the evolution of Canadian legal culture.

**EVALUATION:** Final examination 100% (2 credit hours); or a major paper (80%) and class participation (20%) (3 credit hours)

### **LAWS 2124.03: Marine Environmental Protection Law**

Protection of the marine environment was one of the earliest and most extensive areas of development in international and national environmental law. The transboundary nature of the issues and dramatic public impact of marine pollution incidents have contributed to a dramatic growth in the number and scope of legal instruments aimed at regulating uses and resources of the marine environment. This legal activity has been accompanied by a growing understanding of the critical importance of the oceans to the health of global systems in general, whether as a source of food, a sink for pollutants or a regulator of climate.

The objective of this class is to provide an understanding of the development and current state of law dealing with protection of the marine environment. The examination will proceed initially from the international level, but will focus on the implementation (or non-implementation) of these principles in Canadian law. The specific topics covered in the seminar will vary from year to year depending on current issues and student research interests, but the following list indicates the general subject areas which will be addressed: (1) The Legal Status of the

Marine Environment (International and Domestic); (2) Vessel Source Marine Pollution; (3) Land-Based Marine Pollution; (4) Dumping of Wastes at Sea; (5) Regulation of Activities on the Continental Shelf; and (6) Protection of Particular Interests (e.g. protected areas, biodiversity).

**EVALUATION:** Major paper and class presentation

**PREREQUISITE:** One of Environmental Law I, Maritime Law I, Law of the Sea, or Ocean Law and Policy

### **LAWS 2127.02/2128.03: Mental Disability Law**

This seminar concentrates on issues involving those who are described as having mental health problem or intellectual disability. The class surveys many central topics, including the history and conceptualization of mental disorder, substantive and constitutional aspects of involuntary civil commitment, the legal response to alleged incompetence, the right to treatment and to refuse treatment, misuses of power and remedies, advocacy services and the intersection of mental disability and the criminal justice system. Students are encouraged to develop their understanding of the rules and policies of the legal system and to heighten their awareness of this form of inequality and discrimination.

**EVALUATION:** Take home final examination (or a substituted short research paper) (2 credit hours) or major paper (3 credit hours); community-oriented class presentations and general class participation are also evaluated for both examination and research students.

### **LAWS 2129.05: Corporate Transactions.**

The purpose of this class is to provide exposure to the legal issues involved in several types of transactions in which corporations will typically engage. Students will be introduced to several types of corporate transactions and pertinent legal considerations associated with each, will consider specific fact situations relevant to the transactions, and will negotiate and draft agreements that address the specific factual and legal issues raised. The responsibilities of the lawyer involved in these transactions will also be examined, including conflict of interest considerations. Examples of corporate transactions that might be explored include financing agreements, purchase and sale of a business, amalgamations, and franchise agreements.

**PREREQUISITE:** Business Associations

**RESTRICTION:** This class is open to third year students only. Student cannot take both Information Technology Transactions and Corporate Transactions.

**EVALUATION:** Assignments and Quiz (80%), Class Participation (20%). This class does not meet the major paper requirement.

### **LAWS 2130.03: International Trade Transactions**

International trade is the aggregate of thousands of individual transactions. This seminar will offer students the opportunity to investigate the different types of transactions involved in international trade and the laws which regulate them. The initial classes will expose students to the elements of a traditional documentary transaction in international trade, namely the sale agreement for the export or import of goods, the carriage contract for delivery abroad, and the payment mechanism by letter of credit. Subsequent classes will be devoted to specialized aspects of these transactions including export and import controls, customs requirements and national dumping and subsidies rules, as well as other forms of international trade as students may select for their own research. Topics might include Canadian and American import controls, Canadian export credit guarantees, counter trade, technology transfers, trade in services, leasing, factoring, electronic commerce, distributorships, restrictive business practices, codes of conduct for multinational business, and aspects of international commercial arbitration to name some examples.

The discussion of Canadian laws and practices of foreign trade will be supplemented by the comparative treatment of American and other foreign legal regimes at appropriate points. International legal sources will also be studied to the extent they increasingly affect the law applied in Canada.

**EVALUATION:** Class assignments and a major research paper

### **LAWS 2132.03: Health Law**

This class is designed to expose students to a wide range of legal issues that arise in the field of health law. It introduces students to the health care system and relevant laws governing health care delivery. Topics covered

include: licensing and regulation of health care professionals; malpractice and negligence; consent; confidentiality and disclosure of health information.

ENROLMENT: Limited to 60 students

EVALUATION: Final examination (100%)

### **LAWS 2133.03: Environmental Law II - Environmental Law as Regulatory, Political and Social Process**

This course takes an in depth look at a select number of cross cutting issues in the field of environmental law and may vary from year to year. Past themes included climate change, environmental assessments, and the relationship between environmental law and economics. Course issues are considered at an international, regional, national and local level, and are addressed from a law and policy perspective.

EVALUATION: Major paper 70%, class participation 30%

### **LAWS 2135.03: Court of Appeal Placement**

Student assistant to Nova Scotia Court of Appeal. The Judges of the Court of Appeal have agreed to have two students in the fall term and two students in the winter term serve as student researchers. Students will take part in the work of the Court of Appeal, assisting Judges with research and reviewing appeal books and factums as requested. Students will be required to spend nine hours per week on this court work.

EVALUATION: Based on satisfactory completion of assigned tasks including an assessment of any written work e.g. memoranda provided to the Court. Evaluation shall be on the basis of consultation between the Faculty Supervisor and the Chief Justice of Nova Scotia and/or the Chair of the Clerks Committee

NOTE: this class does not fulfil the major paper requirement

### **LAWS 2137.03: Regulation of Financial Institutions**

There have been recent profound changes in the regulation of Canadian financial institutions and the seminar will focus on the reasons for them and whether the new framework is appropriate in order to maintain capital adequacy, financial reserves and competency of personnel, among other issues. Specific topics which will be covered include: philosophical approaches to regulation; evaluation of different types of financial institutions; the "four pillars" theory; constitutional division of powers and other jurisdictional issues such as provincial regulation of securities activities of banks and other federally regulated financial institutions; use of financial and non-financial holding companies including problems of cross ownership and conflicts of interest; protection of depositors and the role of investor protection plans such as deposit insurance provided by Canadian Deposit Insurance Corporation; and impact of globalization on financial institution regulation.

Each of these specific topics will be the subject of a separate chapter in the seminar materials. There will be some limited discussion of and comparison with the U.S. approach to financial institution regulation.

EVALUATION: Major paper 70%, class participation 15%, and class presentations 15%

PREREQUISITE: Business Associations

### **LAWS 2138.03: Securities Regulation**

This class will address the theoretical basis for and the role of securities regulation in regulating capital markets and protecting investors. It will provide students with a firm understanding of the basics of securities laws and policies and sufficient guidance to permit them to research certain complex aspects of the subject that cannot be covered in an introductory class. Specific topics which will be covered include: institutional and regulatory framework; theory of securities regulation; licensing of securities market professionals; regulation of primary market offerings; trading in the secondary markets, including an examination of the Toronto Stock Exchange rules and policies; continuous market disclosure, including such topics as financial, insider trading and proxy solicitation regulations; regulation of market conduct, including the specifics of take-over bid and issuer bid legislation; and enforcement matters.

EVALUATION: Based primarily on a problem-oriented written examination with the possibility of optional in-term work counting for a certain percentage of the total grade

PREREQUISITE: Business Associations

### **LAWS 2139.01: The Bertha Wilson Visitorship in Human Rights**

Every second year, beginning in 1992-93, the Osler Hoskin/Honorable Bertha Wilson Visiting Professor in Human Rights delivers an intensive 14-hour class in the area of human rights law, domestic or international. A more detailed class description will be provided each time the class is offered. Precise timetabling will be announced later, but it is understood that for the brief period involved this class will in all likelihood encroach on students' regularly scheduled classes.

### **LAWS 2144.02: Securities Law Moot**

The Canadian Corporate/Securities Law Moot Court Competition is an annual Moot Court competition, sponsored by the Toronto law firm of Davies, Ward & Beck, which focuses upon the fields of corporate and securities law in Canada. The competition is designed to provide students having an interest in these areas of legal practice with an opportunity to meet with judges, corporate and securities regulators, academic lawyers and legal practitioners to debate legal issues of current importance to the Canadian business community.

Teams of mooters from a number of Canadian law schools will meet in late February or early March in Toronto to moot a problem. The competition requires collaborative work on a hypothetical problem in the area of corporate and securities law. It will require extensive research culminating in the preparation of a factum. It will also include a preparatory oral advocacy session and the eventual pleading of the problem before a board consisting of judges, corporate/securities regulators, academic lawyers and legal practitioners.

This competition is open to both second and third year students.

Participants will be selected on the basis of written applications; selection will be based upon a student's stated interest in participation, prior experience, oral advocacy skills and academic record.

EVALUATION: Research, factum and oral advocacy. Participation in the competition satisfies the major paper writing requirement

PREREQUISITE: Business Associations, Securities Regulation

### **LAWS 2149.03: Family Law Problems**

This class provides the opportunity for students to pursue in depth some of the issues either introduced briefly or not covered in Family Law I. The rich theoretical concepts underlying legislative involvement in the family provide the basis for examination of such topics as conceptions of the family, the public/private split, family violence, the feminization of poverty, and the family and the welfare state. The changing family form, the financial implications of marriage and other forms of union and their breakdown, and alternate court structures and methods of dispute resolution will be examined. The focus of the class is expected to alter somewhat from year to year as law reform occurs rapidly in this area.

EVALUATION: Major research paper (80%), class presentation (10%), class participation (10%)

ENROLMENT: Limited to 16 students

PREREQUISITE: Family Law I

### **LAWS 2151.02/2152.03: Women and the Law - Introduction**

This class is open to all second and third year law students and all students eligible to take classes from the classes listed as Women's Studies core classes. This class begins with a focus on feminist legal theory, and the integration of feminism with issues of race, class, sexual orientation, and disability. The second major focus is on equality rights in Canada, from the early cases to current concepts of equality under the Charter. The class then considers the impact of feminist legal theories in particular areas of law. This is followed by student class presentations on their major paper topics.

EVALUATION: Final exam (2 credit hours) or major paper (3 credit hours)

### **LAWS 2153.03: Business and Environmental Law**

This class looks at the interrelationship between environmental issues and business issues and how those issues continue to evolve. This interrelationship is analyzed beginning with private disputes, including contaminated sites. It moves through to public and international issues, including disputes under NAFTA and WTO. Issues covered include due diligence, jurisdictional difficulties and stigma.

PREREQUISITE: Business Associations and Environmental Law I  
EVALUATION: Major research paper: 70%; class presentation 15%; class participation 15%

### **LAWS 2155.03: Human Rights Commission Placement**

The placement will provide a range of opportunities, which may include assisting Legal Counsel in legal research and analysis in relation to human rights and administrative law; observing human rights boards of inquiry; review of provincial legislation and practices for compliance with the Human Rights Act; working with the Race Relations and Affirmative Action and Public Education Divisions; and observing/assisting staff in the Investigation and Compliance Division. Evaluation will be on the basis of performance in the placement and written components including legal memorandums of varying length. This placement involves nine (9) hours per week. It is not a "major paper" class.

Two students (maximum) per term will be selected on the basis of good academic standing, in Public Law, Administrative Law and Employment Law in particular, and experience or demonstrated interest in the field of human rights. Preference will be given to third year students. Assets: Administrative Law, Employment Law. Interested students must apply directly in writing, providing a written statement confirming their experience/demonstrated knowledge and interest in human rights, and providing a copy of law school grades to date to, Legal Counsel, Nova Scotia Human Rights Commission, 6th Floor, Joe Howe Building, 1690 Hollis St., P.O. Box 2221, Halifax, Nova Scotia, B3J 2R8 or by fax (902) 424-0596. Applicants must also advise Candace Malcolm by copy of their application, that they are seeking the placement.

EVALUATION: Pass/Fail/Honours

CREDITS: 3

ENROLMENT: Limited to 2 per term

NOTE: Not offered in 2003-2004

### **LAWS 2157.14: Health Law Exchange**

This programme is intended to give students, under the umbrella of the NACLE exchanges, the opportunity to study law (with an emphasis in health law) at one of the leading Health Law programmes in the United States. Students who have completed two years of full-time study may spend one semester at the University of Houston and receive full credit towards their degree at Dalhousie. Health Law classes offered at the School of Law include the following: Biotechnology and the Law, Correctional Health Law, Disabilities and the Law, Food and Drug Law, Forensic Medicine, Genetics and the Law, Health Care Finance and Policy, Health Care Law and Aging, Health Care Rationing, Legal Aspects of Bioethics, Medical Malpractice litigation, Occupational Health Law, Public Health Law, Regulation of Health Care Professionals, Law and Psychiatry, Law and Psychology, Regulation of Biomedical Research, Reproductive Health Law, Toxic Tort Litigation

COORDINATOR: Health Law Institute faculty

ENROLMENT: Limited to 2 students per term

EVALUATION: Depends upon the classes taken at Houston

CREDIT: Up to 14

PREREQUISITE: Health Law, LAWS 2132.02

### **LAWS 2159.03: Health Systems: Law and Policy**

Traditionally, health law scholarship has focused on the physician-patient relationship; however, increasingly, lawyers are turning their attention to larger system issues and the complex web of relationships between governments, private insurers, doctors and other health professionals, public and private hospitals, pharmaceutical companies, and patients. This course will focus on the structure and dynamics of Canada's health care system. It will locate Canada's system amongst the variety of approaches taken internationally to the financing and allocation of health insurance and health services and to the regulation of the quality of health services. Issues to be explored include what different theories of distributive justice demand in terms of access to health care, the extent of market failure in health insurance and health service markets, how to determine what services are publicly funded and means of review of these decisions, how to ensure the accountability of decision-makers, why the present system fails Aboriginal peoples, regulation of privately financed health care (in vitro services, drugs, medical equipment, home care, etc.), the shift from institutional care to care in the home, the need for reform of the medical

malpractice system, managed care, and general issues of privatization, deregulation and reregulation.

EVALUATION: Major research paper (60%), policy formulation and reflection exercise (30%), general class participation (10%).

INSTRUCTOR(S): W. Lahey

FORMAT: 2 hours per week, 3 credits

### **LAWS 2160.06: Supreme Court of Nova Scotia Placement**

Student assistant to the Supreme Court of Nova Scotia, the Province's General Jurisdiction Trial court. The judges of the Supreme Court have agreed to have two student in each of the fall and winter terms to serve as student researchers. Students will take part in the work of the Court, assisting the judges with research and other tasks as requested, and will be required to spend 18 hours a week on this court work.

Only third year students with very good academic standing will be eligible. This exercise does not fulfil the major paper requirement. In carrying out any task for the Court, students are strongly reminded that confidentiality is essential.

EVALUATION: Based on satisfactory completion of assigned tasks including assessment of any written work provided to the Court.

Evaluation will be on the basis of consultation between the faculty supervisor and the supervising justices of the Supreme Court of Nova Scotia.

### **LAWS 2162.03: Family Law and Social Science**

Family law by its nature involves diverse aspects of social science. This major paper class will, through lectures and seminars, introduce students to the jurisprudential origins of social science in the law, critical evaluations of social science methods, uses of social science in family law and the ways in which social science comes to courts - including Brandeis brief, expert testimony and judicial notice. Supreme Court of Canada Justice Claire L'Heureux Dube's advocacy for the expanded use of judicial notice will be critically examined. Students will, through a paper, have an opportunity to examine specific aspects of family law and social science. Issues covered may include identifying and assessing allegations of child sexual abuse; child sexual abuse accommodation syndrome; battered wife syndrome; feminization of poverty; domestic violence and custody/access issues; joint custody; effects of separation/divorce on children; parent education programmes; and repressed memory.

EVALUATION: By major paper and assignment(s)

PREREQUISITE: Family Law I, LAWS 2110.04

### **LAWS 2163.03: Family Law Dispute Resolution**

Family law involves issues that are emotional, rooted in a family history, and, often, ongoing and reviewable (for e.g. custody, support). Parties to family law disputes often have a history and future of interaction. Family law is in these regards unique.

This class will examine the unique nature of family law and examine how the nature of family law impacts upon forms of dispute resolution, imposing at times limitations, at times impetus for change or innovation. Negotiation, mediation, arbitration and adjudication will be critically discussed. Specific issues such as the use of Referees in Nova Scotia; case management; the impact of domestic violence; child support guidelines; child welfare mediation; judicial settlement conferences; the impact of language; the role of children, counsel and judges; and parent education programmes may be discussed.

EVALUATION: By assignment and class participation in experiential dispute resolution

PREREQUISITE: Family Law I, LAWS 2110.04

### **LAWS 2164.03: and 2165.02: Maritime Law and Policy - Carriage of Goods by Sea**

This is an advanced seminar that deals in depth with different fields of maritime law and policy from year to year. When the seminar focuses on marine transportation, the class will explore the rights and responsibilities of the various parties to the export and import of goods by sea. Thus it will interest students of maritime law, shipping management, foreign trade and international business generally. The class will be conducted by discussion of a variety of shipping documents and legal materials, both Canadian and international, in the context of a number of transactional problems which students will be invited to argue. Student papers directed

to overseas trade or shipping policy issues as well as maritime law reform will be encouraged.

EVALUATION: Oral assignments plus a major research paper for 3 credits or oral assignments plus a written examination for 2 credits

### **LAWS 2166.03: Banking Law and Negotiable Instruments**

This class (which replaces the existing Negotiable Instruments class) introduces the student to basic problems in the use of commercial paper and to the law of banking. In dealing with commercial paper the class concentrates on disclosing an understanding of the mechanisms of negotiable instruments such as promissory notes and cheques and the practicalities of using them and suing on them. The law of banking as it pertains to bank/customer relations will be examined in the domestic and, briefly, the international sphere. Additionally, modern payment mechanisms such as credit cards, travelers cheques and electronic transfers will be analyzed.

EVALUATION: By mid-term examination and final examination

### **LAWS 2167.03: Health Law Placement**

This placement provides students with the opportunity to work with individuals in Health Law in Halifax (either at the Capital District Health Authority or the Nova Scotia Department of Health). Students will take part in the work of their placement supervisor assisting with research and other tasks as requested. Students will be required to spend nine hours a week on placement work.

Students will be evaluated on the basis of performance in the placement including assessment of memoranda written for the placement supervisor. Evaluation will be conducted by the faculty supervisor in consultation with the placement supervisor. This course does not fulfil the major paper requirement.

Students will be selected by the faculty supervisor on the basis of academic standing and demonstrated interest in the field of health law and policy. Only students who have taken Health Law will be eligible. Interested students must apply to the Director of the Health Law Institute directly, in writing, by July 1 of the academic year in which they wish to do the placement. Applications shall consist of a written statement confirming the student's experience and/or interest in health law, and a copy of law school grades to date.

NOTE: FACULTY SUPERVISOR: Health Law Institute Faculty  
PLACEMENT SUPERVISOR: Nancy Milford, Director, Risk Management and Legal Services, Capital District Health Authority, or Dennis

Holland, Senior Director, Legislative Policy and Research, Nova Scotia Department of Health

PREREQUISITE: Health Law, LAWS 2132.02

EVALUATION: Honours/Pass/Fail

### **LAWS 2168.03: Internet and Media Law**

This class deals with the law that governs the dissemination of information and the regulation of information providers. In this class, "media" is defined broadly to include broadcasters, newspapers and magazines and the internet. Topics that will be addressed include: defamation; liability of service providers; privacy issues; publication bans; media regulation; copyright issues; conducting business via the internet ("e-commerce") and media ownership. The impact of the internet on the legal regulation relating to each of these topics will be explored throughout the class.

EVALUATION: Final examination (100%)

### **LAWS 2169.03: Competition Law**

This class deals with Canadian competition law and policy, and in particular, the provisions of the Competition Act and the role of competition policy institutions such as the Competition Bureau and Competition Tribunal in enforcing and interpreting the Act as it applied to (i) mergers; (ii) cartels and other horizontal agreements; and (iii) distribution, pricing and marketing practices. The class also considers relevant comparative/international competition law (or antitrust law, as it is known in the U.S.) perspectives. As competition law is primarily economic law, some knowledge of economics is useful, but not required.

INSTRUCTOR(S): D. Campbell/Bhattacharjee

FORMAT: 2 hours per week, 3 credits

PREREQUISITE: Business Associations

EVALUATION: Major paper and class presentation/participation

### **LAWS 2170.03: Information Technology Transactions**

This class will focus on practical and substantive issues relating to the development, negotiation, and drafting of commercial agreements involving information technology matters. Topics will include licensing, distribution, and marketing agreements; electronic commerce and internet agreements; the financing and acquisition of intellectual property; and taxation issues. Students are partly evaluated through role assignments in which they prepare, negotiate, and finalize technology agreements.

RECOMMENDED: Commercial Law

ENROLMENT: Limited to 16 third year students

EVALUATION: Two 40% written assignments and a 20% closed book test.

This class does not meet the major paper requirement.

NOTE: Students cannot take both Information Technology Transactions and Corporate Transactions.

CO-REQUISITE: Business Associations

### **LAWS 2171.02: Sopinka Cup Trial Advocacy Competition**

This trial advocacy competition will generally be conducted on the following basis. A regional competition between teams from Dalhousie, Universite de Moncton and University of New Brunswick will be held in February (the Maritime Trial Advocacy Competition phase of the event). Four students will represent each school at this stage.

The winning team from the Maritime Trial Advocacy Competition will represent the region in the national competition, known as the Sopinka Cup Trial Advocacy Competition. Eight law schools from throughout Canada are chosen for this event. This will likely take place in early March. At this stage teams are limited to two students. A second school from the Maritimes will participate at the national level every fourth year. Second and third year students will be eligible to participate. (Prior participation in Evidence and Criminal Procedure is recommended.) Selection will be based on a trial advocacy exercise, conducted on relatively short notice in the Fall term. This exercise is similar to the process the Moot Court Committee now uses for the selection of three appellate court teams (the Gale, Trilateral and Laskin moots).

### **LAWS 2172.03: Advanced Legal Research**

Building on the research skills acquired in the mandatory first-year class, Advanced Legal Research delves further into the field, with intensive exploration of topics such as Canadian statutory and case-law (including the Quebec civil code), government documents, secondary literature and specialized reports. British, commonwealth, United States, European Community and international law are dealt with in depth as well as legal research in a variety of forms: print and electronic. Students will develop efficient search techniques for a variety of on-line resources such as QuickLaw, Westlaw, Lexis/Nexis and the World Wide Web. In addition, students will become skilled in critically evaluating sources for legal research. Emphasis will be placed on engaging in exhaustive legal research in a chosen area of law. Ethical aspects of legal research, history of legal indexing, access to information, multimedia citation and other special topics will also be explored.

EVALUATION: Writing and research assignments, and class participation.

### **LAWS 2175.03: Nova Scotia Supreme Court (Family Division) Placement**

Two students will assist Judges of the Supreme Court (Family Division) each term, providing research and undertaking other tasks as directed by the supervising Judge. Students will be expected to spend nine hours per week working at the Court and upon the tasks assigned by the Court.

Only third year students with very good academic standing and a demonstrated interest in family law will be accepted. This class cannot be used to fulfil the major paper requirement.

SUPERVISORS: Justice J. Williams, R. Thompson

CREDITS: 3

EVALUATION: Based on satisfactory completion of assigned tasks, including an assessment of written work such as memoranda provide to the Court

PREREQUISITE: Family Law

### **LAWS 2177.02: Labour Arbitration Moot**

The Labour Arbitration Moot Competition for 2 second year law students enrolled in the Administration of the Collective Agreement class. Work begins in November and up to the Competition, in Toronto late in January. CO-REQUISITE: Labour Law. Participants will be selected on the basis of grades and established mootings abilities. Enrolment in Administration of the Collective Agreement. Team members are excused from writing the brief of law for this course.

EVALUATION: Performance on the Mathews, Dinsdale and Clark Moot team

### **LAWS 2178.04: Intellectual Property Law**

This class provides students with an introduction to the legal regimes governing the protection of intellectual property. The class will cover the following specific areas of intellectual property law: patents, trademarks, and copyright law. In addition, students will be introduced to common law actions for passing off, appropriation of personality, and injurious falsehood.

EVALUATION: 100% examination

### **LAWS 2179.02: The Torys Visiting Professorship in Business Law**

Thanks to the generosity of the Torys law firm, each year, a special business law course will be offered by a distinguished visiting legal scholar from Canada, the United States, or elsewhere. This scholar, the Torys Visiting Professor in Business law, will generally offer an intensive 26 hour, 2 credit class in an area of business law, from a domestic, comparative, or international perspective. A more detailed class description will be provided each time the class is offered. It is understood that for the brief period involved this class may encroach on students' regularly scheduled classes.

NOTE: A shortened version of the course (LAWS 2196.01) is occasionally offered, and given one credit only at the Law School.

INSTRUCTOR(S): 2 hour lectures daily for 13 days over a period of approximately 3 weeks

### **LAWS 2180.02: Directed Research Project**

There is already considerable flexibility at the Law School concerning evaluation. Recognizing this, the Academic Committee supports non-paper projects as a matter of policy, subject to some basic guidelines:

1. Major projects requiring the production of media contributions (that is to radio, television, newspapers or magazines) may be accepted for academic credit at Dalhousie Law School. It is recognized that such endeavours deserve recognition both as legitimate academic exercises and as contributions to the public service mission of students and faculty.
2. These projects may satisfy a major paper or examination component, as arranged between the professor and student.
3. A high level of professional involvement is expected from the time the project is conceptualized until completion.
4. Students and faculty should employ the guidelines for Directed Research papers (DRPs) in planning and evaluating such projects, with appropriate changes.
5. Some limitations may be imposed upon the student's right to appeal a grade with which he or she is dissatisfied, given that this mode of evaluation does not fit within the usual Law School grading patterns. The above guidelines are intended to assist faculty and students in formulating and supervising any proposals for contributions to radio, television, newspapers, or magazines. In the final analysis, although the Faculty encourages such innovative undertakings, the professor and student will be responsible to ensure that the academic standards of the Law School are maintained, albeit in this distinct context.

### **LAWS 2183.02: Privacy Law**

This course is designed to expose students to a wide variety of legal issues that arise in the field of privacy. It will provide students with an opportunity to explore what privacy is, to examine how laws protect or invade privacy and to examine other legal interests which compete with privacy interests. Topics covered include: privacy and access to information legislation; the role of Federal and Provincial Privacy Commissioners, privacy rights in a variety of settings, e.g. home, office, school, hospital, courts, internet, business; avoidance of and accommodation of privacy breaches.

EVALUATION: Written examination

### **LAWS 2184.01: Corporate Finance I**

This one-credit, introductory course is designed specifically for law students with no prior background in finance, other than material covered in Business Associations. The purpose of the course is to help law students become comfortable with some of the fundamental ideas underlying modern corporate finance transactions. Topics may include, among other things, simple valuation methods, net present value, the efficient market hypothesis, portfolio theory, the capital asset pricing model and option pricing theory. It is presumed that students with no prior finance background who intend to enroll in Corporate Finance II will first complete Corporate Finance I.

EVALUATION: Final Examination (at least 65%). May also include one or more "problem sets" (up to 35% of final grade).

PREREQUISITE: Business Associations. (Note: LLB/MBA students, students with undergraduate degrees in business or commerce, or any other students who have taken prior courses in finance are NOT eligible to enroll in this course.)

### **LAWS 2185.02: Corporate Finance II**

This course is intended to review basic financial economic principles in a variety of legal contexts, including in relation to specific kinds of business transactions and financial instruments (e.g., debt and equity financings, securitizations, share repurchases, statutory arrangements, issuances of exchangeable and convertible debt, and financial derivatives) as well as in relation to general corporate governance concerns. Some discussion of financial accounting issues, financial institutions and markets may also be included.

EVALUATION: Final Examination (at least 65%). May also include one or more "problem sets" (up to 35% of final grade).

PREREQUISITE: Business Associations. (Note: Those law students with no prior exposure to finance are strongly encouraged to complete Corporate Finance I before enrolling in Corporate Finance II.)

### **LAWS 2188.03: Restorative Justice: Theory and Practice**

This seminar will introduce students to the theory and practice of restorative justice. Students will become familiar with the principles of restorative justice as compared with other theories of justice. Restorative Justice practices will be examined including an exploration of the role of victims, offenders, communities and facilitators. There will be particular emphasis on emerging restorative justice conferencing techniques. A number of "restorative" process models will be considered within the criminal realm. Restorative justice has played a role at various points in the criminal justice system, including its use for crime prevention, diversion by police, prosecutors and in sentencing and corrections. Consideration will also be given to application beyond the criminal context, for example, in the areas of tort law, family law, environmental law and in dealing with large scale historical, social and political practices. Students may have the opportunity to acquire clinical experience by observing a restorative justice conference and/or receiving training in facilitation of restorative justice processes.

EVALUATION: Major paper, Reflection Comments and Class participation

FORMAT: 2 hours per week, 3 credits

### **LAWS 2189.03: Crown Law**

There is no other entity involved in as many civil proceedings as the crown, federally and provincially. Through its statutes, regulations and policies, the crown's impact is evident in all aspects of Canadian society. It is imperative, therefore, that legal practitioners, regardless of their areas of practice, understand the crown as a legal entity. The crown enjoys unique rights and protections under the law. This course will explore these concepts through topics such as crown immunity, remedies available against the crown, civil procedure rules only applicable to the crown, the jurisdiction of courts over the crown (including that of the Federal Court of Canada), rules of evidence exclusive to the crown, judicial review, crown agencies and crown powers in the recovery of debt. The course will focus on the federal crown and the provincial crown in Nova Scotia.

EVALUATION: Final exam with the option of minor paper (30% of the final grade).

INSTRUCTOR(S): M. Kathleen McManus, Counsel to the Department of Justice  
FORMAT: 2 hours per week, 2 credits

### **LAWS 2192.03: Advanced Negligence: Medical Malpractice.**

This course will examine, from a theoretical perspective, issues of potential liability of hospitals, health care professionals, product suppliers, and governments for their respective roles in the provision of health services. Topics covered may include: the learned intermediary rule; non-delegable duties and vicarious liability; tort/contract overlap; the fault standard and comprehensive compensation for injury; potential government liability, especially re the blood supply and sexual sterilization; reproductive technologies and malpractice; and issues of consent, including capacity of minors and those with mental impairment to consent to treatment.  
EVALUATION: Major research paper (80%), class presentation (10%), and class participation (10%)  
FORMAT: 2 hours per week, 3 credits

### **LAWS 2193.02: Health Law and Policy: Current Issues.**

This course offers an opportunity for students to engage critically with a set of lectures in health law and policy offered through the Health Law Institute seminar series. These lectures are presented by distinguished guest speakers from a variety of scholarly disciplines and professional fields related to health law and policy. Students enrolled in this course for academic credit are required to do readings in advance and to attend each monthly seminar and accompanying tutorial. They will also write a series of reaction papers as well as a minor paper 15-20 pages in length. The content of this course changes from year to year, depending on the speakers and issues selected for presentation. Recent topics have included legal developments in the patenting of plants and animals; the implications of mass torts and class actions in the Canadian health care setting; the relationship between law, medicine and disability rights; and negligence in conception, abortion and birth. Students should review the series announcement available in mid-August for a list of dates, speakers, and topics to be covered in the upcoming year.  
ENROLMENT: 16  
EVALUATION: five reaction papers (3-4 pages each) 30%, one minor paper (15-20 pages) 55%; seminar and tutorial attendance and participation 15%.

### **LAWS 2194.03: Critical Race & Legal Theory I: A Survey of "Race" & Law in Canada.**

Using a Critical Race and Legal Theory approach to examine Canada's substantive law, this survey course introduces students to the obfuscated interconnected role of Race and Law in Canada. Students will acquire Race literacy skills as we analyze the bond between Race and Law, through direct examination of legal instruments dating from the Colonial to Contemporary Periods, (statutes, treaties, proclamations, decrees, directives, trial records, court decisions, petitions) and other primary source Authentic Documents that let original actors speak for themselves. Students will also be equipped to understand and critically assess the ongoing processes by which, throughout Canada's history, Law has both corrected and created deficits for racialized Communities that are notably, Aboriginal, African Descended and Asians.  
EVALUATION: Seminar Presentation 20%; Major Research Paper 80% (in English or French)

### **LAWS 2195.03: Human Rights Law & Protection in Canada.**

This Major Research Paper Advanced Seminar offers students an in-depth exposure to the jurisdictional network of Human Rights (HR) legislation, policies, and mechanisms set up under both the common law and civil law regimes to ensure the protection of HR in Canada. Students will critically examine relevant reports, doctrinal writings and jurisprudence generated by Collective Agreement Labour Arbitrations, by HR Tribunal and Board of Inquiry Hearings, and by Supreme Court of Canada decisions, so as to identify the evolutionary trends of Canadian legislation and Case Law. The Seminar will focus both on those substantive deficiencies and procedural limitations that inhere in the current systems, and on the public

response to Canadian domestic implementation and delivery of HR protection.  
EVALUATION: Term Assignment 20%; Major Research Paper 80% (in English or French)

### **LAWS 2196.01: The Torys Visiting Professorship in Business Law**

See description for LAWS 2179.  
Funding may also be available for students who are Mi'kmaq or Indigenous Black Nova Scotians and who are part of Dalhousie Law School's Indigenous Black and Mi'kmaq (IB and M) Programme. For further details, please see the description of the IB and M Programme on page 38 of this calendar.

## **E. Graduate Classes**

### **LAWS 3069.03: Graduate Directed Research Paper**

### **LAWS 3000.03: Graduate Seminar on Legal Education and Legal Scholarship**

This seminar is a required class for students in the LLM programme. It is also open to JSD students. Its purpose is to explore various issues in legal education and legal research from a comparative perspective. The first part of the class is devoted to an examination of the purposes of legal education and the various ways that legal education is structured and carried out in different jurisdictions. The remainder of the class is spent examining different methodological and ideological approaches to legal research, with special emphasis on how each of the seminar participants would see his or her development as a legal scholar.  
EVALUATION: is made in relation to a number of components including, but not limited to, a research assignment, a book review, class participation, a series of journals and a "methodological prospectus" for the student's thesis research. The class begins in September and is completed by the end of February.

# Faculty of Medicine

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## Faculty of Medicine

### Office of the Dean of Medicine

Location: Rm C-205, Clinical Research Centre  
5849 University Avenue  
Halifax, NS B3H 4H7  
Telephone (902) 494-6592  
Fax: (902) 494-7119

### Admissions and Student Affairs Office

Location: Room C-132, Lower Level, Clinical Research Centre  
Telephone: (902) 494-1874  
Fax: (902) 494-6369

## Academic and Administrative Staff

### Dean (Interim)

Cook, H.W., BSc, MSc, PhD (Dal)

### Associate Deans

Cook, H.W., BSc, MSc, PhD (Dal), Research  
Padmos, A., BA (Toronto), MD (McMaster), FRCP (C), Cancer Care Programs  
Rowe, R.C., MB, BS (Adelaide), MA (Ed) (MSVU), FRCP (C)  
Undergraduate Medical Education  
Sinclair, D.E. MD (Dal), FRCP, CCFP (EM), Continuing Medical Education  
Spence Wach, S., MHSA, Health Systems & Policy  
Wrixon, W., BSc (Mun), MD (Dal), FRCS(C), Postgraduate Medical Education

### Assistant Deans

Hughes, D.M., BSc (UNB), MD (Dal), FRCP (C), Admission & Student Affairs  
Iype, M.O., MBBS (Bangalore), FRCPC, Saint John Campus

### Academic Directors

Mann, K., BSc, MSc, PhD (Dal), Medical Education  
Sinha, G., Director, Student Advisor Programme  
Zitner, D., BA (Sir George Williams University), MA (Dal), MD (Dal), CCFPC, FCFPC, Medical Informatics

### Administrative Directors/Staff

Edwards, A.C., BSc (Dal), MBA (Dal), Finance  
Gaudet, C., BA, APR, Communications  
Graham, S.D., BComm (SMU), Admissions and Student Affairs  
Holmes, B., BSc (Acadia), MEd (Dal), Curriculum and Faculty Development  
MacFarlane, D., BA (MSVU), Alumni Affairs Co-ordinator  
Paterson, G.I., BSc (UBC), MSc (Dal), ISP, Medical Informatics Co-ordinator  
Power, L., BSc (Dal), BEd (MSVU), MEd (MSVU), Human Resources  
Robertson, W., Information Technology  
Ross, C., Research Coordinator  
Silver Smith, C., Postgraduate Medical Education Coordinator  
Stevens, C., Assistant Director of Finance  
Weeden, A., Cert. BA (UNBSJ), BA (Dal), Planning

### Dalhousie Medical Research Foundation

Sloan, J., BA(French), BPR (MSVU) Administrator/Executive Director  
Teixeira, D., Administrative Assistant

## Faculty Council

Couban, S.  
Giacomantonio, M.  
Guernsey, D.  
Hirsch, D.  
Malatjalian, D.  
Marshall, J.  
McLeod, R.  
Rafuse, V.  
Sinal, C.  
Torkkelli, P.  
Whyte, Dr. R.  
Ex officio: President, Dean, Associate and Assistant Deans, Faculty Secretary, President of Medical Students' Society, President of PARI-MP.

## I. General Information

Dalhousie Medical School was organized in 1868, but medical teaching was carried out by the independent Halifax Medical College from 1875 to 1911, when the Faculty of Medicine was re-established by the University.

The Faculty provides a complete medical training leading to the degree of Doctor of Medicine (MD). Nationally accredited postgraduate training in family medicine and specialty training is provided in University-affiliated hospitals in Nova Scotia, Prince Edward Island and New Brunswick. Continuing Medical Education is provided to the practitioners of the three Maritime Provinces.

The Faculty is fully accredited by the Liaison Committee on Medical Education and the Committee on Accreditation of Canadian Medical Schools.

The Medical School has strong research programmes in basic biomedical sciences, clinical sciences, population health and medical education.

### A. Mission Statement

The Faculty of Medicine, Dalhousie University, strives to benefit society through equal commitment to exemplary patient care, education and the discovery and advancement of knowledge. We aim to create and maintain a learning and research environment of national and international stature to enable our graduates and us to serve the health needs of the Maritime Provinces and the rest of Canada.

### B. Faculty

The Faculty of Medicine has approximately 1,450 faculty members, based in Nova Scotia, New Brunswick and Prince Edward Island. Faculty meetings are held regularly throughout the year to determine policy on academic matters.

### C. Faculty Council

Faculty Council meets frequently throughout the year, advising Faculty and Deans on academic matters. Faculty Council is responsible for hearing student appeals and for administering the departmental survey process and the selection of candidates for important Faculty administrative positions.

### D. Standing Committees of Faculty

There are 13 standing committees of Faculty (Faculty Council, Curriculum Committee, Faculty of Medicine Library Committee, Medical Research Committee, Ethics Review Committee, Scholarships and Awards Committee, Admissions Committee, Student Financial Aid Committee, Preclinical Tenure and Promotions Committee, Clinical Tenure/CAPR and Promotions Committee, Nominating Committee, T.J. Murray Visiting Scholar in Humanities Committee and Dr. Gerald & Gale Archibald Award for Medical Humanities). These committees report annually to Faculty.

### E. Degree

The Degree conferred by the University is Doctor of Medicine (MD). The class extends over four years.

## F. Academic Year

The academic year for the first two years of the medical class begins late August and extends to the end of May. The final two years of Medicine begin with a month long unit "Introduction to Clerkship." Students will then complete their clerkship as a two phase clerkship continuum. In Phase 1, students will rotate through clerkship experiences in the major clinical disciplines. Phase 2 provides opportunities for students to complete elective time plus a 12 week unit in Continuing and Preventive Care.

## G. Graduate Studies

In association with the Faculty of Graduate Studies, classes are given that lead to degrees of MSc or PhD. Qualified students may register concurrently for the MD and graduate degrees (MSc or PhD) in the Faculty of Medicine. Currently available programmes include: Anatomy, Biochemistry, Microbiology, Pharmacology, and Physiology and Biophysics (for further information please refer to the Faculty of Graduate Studies Calendar).

## H. Research Opportunities

Research in the Faculty of Medicine is supported mainly by research grants and awards to individual faculty members from national granting agencies including the Canadian Institute of Health Research, National Cancer Institute of Canada, Nova Scotia and New Brunswick Heart Foundations, Canadian Heart Foundation. Substantial additional assistance is made available through endowments to the University from the estates of the Hon. J.C. Tory and Gladys Marie Osman and the Dalhousie Medical Research Foundation.

Undergraduates registered in the MD Programme are encouraged to participate in ongoing research projects within the Faculty of Medicine. Three major programmes are available to medical students with an interest in biomedical and health research.

## I. BSc (Medicine)

This programme is designed to provide a select group of highly qualified and motivated medical students with an opportunity to gain experience in basic and/or clinical research during the two twelve-week summer periods and elective time over two years. The programme consists of the regular undergraduate medical curriculum in first and second years, a research project, formal weekly seminar and discussion sessions over the summer, a written thesis and oral defense. The emphasis of the programme is on the successful completion of a piece of research from the design stage through implementation, to oral presentation and defence of the written paper.

A limited number of students will be admitted into the two-year programme from each first-year medical class. Successful applicants will receive an annual stipend of approximately \$5000. Interested students are advised to consult with the Research Office in the Faculty of Medicine and the elective programme advisor for first year. Elective lists made available to the first year class in early September provide a starting point for students to select topics of interest for this programme.

It is the student's responsibility to file a formal application for the BSc (Medicine) programme before the deadline in January of each year.

## J. MD/PhD Programme

Programme currently under review. Applications are not accepted.

## K. Summer Research Programme

Each year applications are received from students interested in pursuing research over one summer in the Faculty of Medicine. Scholarships valued at approximately \$4000 are available to support medical student research projects during the twelve-week period from June until August of each summer.

Individuals interested in participating in any of the above three research programmes in the Faculty of Medicine should contact the Research Office, Faculty of Medicine, Room C-203, CRC Building, 494-1395.

## L. Dalhousie Medical Research Foundation - Studentship Programme

The Dalhousie Medical Research Foundation was formed in 1979 and has as its objective the support of research and related activities in the Faculty of Medicine and its affiliated teaching hospitals. A number of prestigious studentship awards are available to highly qualified medical students with a demonstrated interest in and potential for success in biomedical research. The award is open to any first-year medical student. The Foundation supports supervised research experience from the end of the first to the end of the third year of medical school with the objective to encourage highly qualified and motivated medical students to consider careers in biomedical or behavioural research. The Foundation supports the BSc Med. Programme but participation in this programme is not mandatory. Students interested in applying for either a BSc Med. or General Studentship should contact the office of the Dalhousie Medical Research Foundation, Sir Charles Tupper Medical Building ~ (902) 494-3502 ~ [www.dmrff.org](http://www.dmrff.org)

## M. Faculty Regulations

1. Medical students are required to adhere to the general University Regulations. Clinical clerks and residents are subject to the rules and regulations of the hospital department to which they are assigned concerning hours of duty, holidays, etc. Patient care responsibilities override University and statutory holidays.
2. Medical students must observe the regulations of the hospitals relative to undergraduate and post-graduate students, and any violation of such regulations will be dealt with as if a University regulation were violated.
3. All University regulations respecting fees apply to the Faculty of Medicine. In addition, students who have not paid their annual university tuition fees in full by the end of January will be suspended from the Faculty. If the fees are not paid by February 15, the registration of the student for the session will be canceled. (In this connection it should be noted that the Awards Office and the Office of the Dean of Medicine always give consideration to the provision of bursaries and loans for those in genuine financial need but application for such aid must be anticipated by the student.)

## N. Dalhousie Medical Alumni Association - Studentship Programme

The Dalhousie Medical Alumni Association offers a number of studentships to qualified medical students. The Dr. F. Murray Fraser Studentship Fund and the Beth Rafuse Medical Research Award provide summer studentships to medical students along with the Creighton Family Summer Rural Studentship, the Weir Family Rural Studentship, and the Dr. George Loh Summer Studentship in Pathology. The Weld Kernohan Lecture Fund supports a lecture once every three years in a Lecture Series offered by Continuing Medical Education and the Dalhousie Medical Students' Society.

## O. Dalhousie Medical Alumni Association

Serving the medical school for half a century is a network of more than 6,500 medical alumni - both MD's and Post Graduate Medical specialists - with a long-standing tradition of putting students first. The DMAA Board of Directors, comprised of twenty alumni, faculty and student representatives meets regularly to address issues affecting the quality of education offered and research opportunities available at the medical school.

The financial support allotted each year from the proceeds of the Annual Fund in support of student activities demonstrates the mandate of the DMAA, which is to enhance the excellence and prestige of the medical school's teaching and research activities. A full schedule of on-campus programming is offered throughout the year to encourage positive interaction among students, faculty and alumni.

The DMAA reports to its membership and the university community through the pages of *Vox MeDAL*, published twice a year and features regular contributions from and about students. The Medical Alumni Office is located near the entrance to the Kellogg Library and is staffed by Executive Director, Dilly MacFarlane. For further information, please call

(902) 494-8800. Please visit our web site at [www.medicine.dal.ca/alumni](http://www.medicine.dal.ca/alumni) or E-mail [Dilly.MacFarlane@dal.ca](mailto:Dilly.MacFarlane@dal.ca).

## P. Sir Charles Tupper Medical Building

The Sir Charles Tupper Medical Building was completed in the summer of 1967. This 15-storey structure, the chief Centennial Project of the Government of Nova Scotia, is named after Sir Charles Tupper (1821-1915), one of the founders of the Faculty of Medicine, a Father of Confederation, and the only physician to have been Prime Minister of Canada.

The Tupper Building houses the W.K. Kellogg Health Sciences Library which occupies part of the first and all of the second floors of the Tupper Building. The library has a collection of approximately 158,000 volumes and yearly receives 2,400 current serials. The collection also includes over 2,900 audio visual programmes.

The Kellogg Library was made possible by the generous gift, in 1965, of \$420,000 from the W.K. Kellogg Foundation of Battle Creek, Michigan. Other benefactors include the Medical Society of Nova Scotia, which makes an annual contribution to maintain the Cogswell Collection, and the Provincial Medical Board of Nova Scotia which provides an annual grant in honour of the late Dr. John George MacDougall who was, for many years, President of the Board and a member of the staff of the Faculty of Medicine.

The Tupper Building also houses the following: teaching, research and administrative facilities of the Departments of Anatomy and Neurobiology, Biochemistry and Molecular Biology, Physiology and Biophysics, Pharmacology, Microbiology and Immunology, and Pathology; space for the undergraduate and graduate teaching of science students; study, recreational and dining areas for medical students; the Animal Care Centre; the Business Development Office; the Dalhousie Medical Alumni Association Office; the Dalhousie Medical Research Foundation; and, Medical Computing and Media Services.

## Q. Clinical Research Centre

The Centre (formerly Dalhousie Public Health Clinic), which was constructed in 1923 following a gift from the Rockefeller Foundation, was originally built to house the outpatient services of the clinical departments. The Centre is now physically connected to the Tupper Building and, together with a block of space connecting the two buildings (the Link), houses the Atlantic Research Centre (ARC), the offices of the Department of Community Health and Epidemiology and the administrative units of the Dean's Office.

## R. Family Medicine Centres

These centres are modern ambulatory clinical facilities housing the administrative, research, clinical and educational resources of the Department of Family Medicine. The first of these opened in 1975 and is situated on the 8th floor of the Abbie Lane Building, QE II Health Science Centre. The Cowie Family Medical Centre is in Spryfield. The third centre established in 1995 is the New Brunswick Region 3 Family Medicine Teaching Unit (Fredericton, NB). In 1998, a fourth centre was established at the Cape Breton Healthcare Complex and a fifth in 1999 at the Regional South East Health Care Corporation.

## S. Affiliated Hospitals

The majority of clinical departments are located in one of the affiliated teaching hospitals. The major teaching hospitals include the QEII Health Sciences Centre, the Nova Scotia Hospital, the IWK Health Centre, and the Atlantic Health Sciences Corporation. Other affiliated and associated institutions, which for the most part are involved in the Dalhousie University Resident Training Programmes include the Centracare Hospital, Sydney Community Health Centre, St. Martha's Hospital, The Moncton Hospital, Dr. Everett Chalmers Hospital, Queen Elizabeth Hospital and Prince County Hospital. Other facilities include the Nova Scotia Environmental Health Centre (opened in 1997) located in Fall River and a clinical skills learning centre (opened in 1998) located at 5599 Fenwick Street, Halifax.

## T. Dalhousie Medical Students' Society

All medical students are members of this Society, which exists to promote the welfare and general interests of the medical undergraduates, including social and sports activities, relations with the Faculty and with the Students' Union of the University. The Society presents honours and awards to outstanding medical students.

The president and vice-president of the Medical Students' Society, the presidents of the four undergraduate classes and the president of the Residents Association of Nova Scotia are members of Faculty. The Presidents of the Medical Students' Society and Residents Association of Nova Scotia are ex-officio members of Faculty Council. Medical students are members of the following Faculty committees: Medical Education, Student Financial Aid, Admissions and Library. Regular monthly meetings are held by the Dean and associates with the class presidents and educational representatives as well as the president of the Medical Students' Society.

## U. Medical Undergraduate Student Advisor Programme

Director: Dr. G. Sinha  
Department of Anatomy and Neurobiology  
Room D-2, 14th Floor  
Sir Charles Tupper Medical Building  
Telephone: 494-7059

This is a confidential support programme which was devised by the students. It is separate from the Dean's Office and it enables students to get help for individual, personal and academic problems from a person who has no influence on their academic career. All communications are strictly confidential. Referrals are made when necessary.

There are also a number of lunch hour and evening events associated with the programme; and evening discussion on "Medical Marriages", a banker who gives advice on "Managing your Money". There is also a series of Brown Bag lunches on items of general interest.

Students looking for advice should contact one of the Directors. Early contact is recommended before problems become critical.

## II. Admissions ([www.medicine.dal.ca](http://www.medicine.dal.ca))

### A. Admission to First Year

#### 1. Application and Selection

Entrance to the Faculty of Medicine is limited to 90 students annually. Successful candidates are selected by the Admissions Committee of the Faculty of Medicine, whose decision is final.

The application for admission is to be made only on the regular application form of the Faculty of Medicine which may be obtained from the Web site ([www.medicine.dal.ca](http://www.medicine.dal.ca)) after September 1st. The completed form must be returned to the Registrar's Office, Dalhousie University, Halifax, N.S. B3H 4H6 post marked not later than October 31 in order to be considered for entry to the class beginning the following August. All applications must be accompanied by a \$70.00 processing fee, which is not refundable and is not applicable to tuition fees.

A completed application consists of:

1. The application form filled out by the applicant as required,
2. The \$70.00 fee as noted above,
3. Three completed confidential assessments (which are to be sent directly to Admissions and Student Affairs Office, Room C-132, Lower Level, Clinical Research Centre, 5849 University Avenue, Nova Scotia, B3H 4H7),
4. Release of official score reports from the Medical College Admission Test office (MCAT),
5. Official transcripts from all universities and colleges attended by the applicant (if the applicant is still engaged in university studies, an interim transcript is to be sent when the application is made and a final official transcript forwarded by the institution concerned on the completion of those studies), and
6. Supplementary information form.

The Admissions Committee will not consider incomplete applications.

## 2. Place of Residence/Applicant Pools.

There are two applicant pools determined by place of residence or undergraduate/graduate university: Maritimes (81 seats) and non-Maritime (9 seats). Admission preference is given to Canadian citizens (or landed immigrants) whose place of residence is in Nova Scotia, New Brunswick or Prince Edward Island (the Maritime Provinces of Canada), the Maritime pool. The place of residence for university students is normally presumed to be the country or province in which the home of the applicant's parents is located. Attendance at a university in the Maritime Provinces does not, by itself, necessarily constitute having residence in the Maritime Provinces.

Applicants who have been, or will be, in the work force for more than three years at the time of commencement of studies in the Faculty of Medicine will normally be presumed to be resident of the place where such employment occurred. Canadian undergraduate students who have been enrolled full-time at a Maritime university for at least three consecutive academic years will be considered to be Maritime residents for the purposes of admission. The applicant must then relinquish residency status in his/her home province. Canadian students in graduate programmes in good standing who have resided in Nova Scotia for two (2) years will be considered a maritime resident. Other relevant factors will be taken into account by the Admissions Committee in their determination of the residency status of each applicant. Each applicant is encouraged to give detailed and complete information on their resident status at the time of application. Non-Maritime Canadian residents, applicants who are residents of Canada but not Canadian citizens or landed immigrants and international applicants, must apply in the non-Maritime pool.

All applicants are expected to claim the same place of residency on all applications to medical schools. Failure to do so may lead to rejection of the application. The decision of the Admissions Committee regarding the residency status of each applicant will be final and is not subject to appeal.

## 3. Selection Objectives

The Faculty is seeking applicants who have a good record of achievement in both academic and non-academic activities. Applicants with a broad academic background have an enhanced chance of admission as humanities and social sciences cultivate desirable personal qualities for students and physicians. This includes sound basic training in the sciences in order that they can understand the complexities of modern scientific medicine. The greatest possible proficiency in communication and self-expression, both orally and written, is a necessity to the future medical practitioner. In addition, in order to have acquired the required degree of intellectual maturity, the prospective medical student should have more than basic training in at least one field of learning, whether it be in the humanities, social sciences, life sciences or physical sciences.

## 4. Selection Factors

Sources of information and factors considered by the Admissions Committee include (a) academic requirements, (b) ability as judged on university records and on the Medical College Admission Test, (c) confidential assessments received from referees of the applicant's choice and from any others the Committee may wish to consult, (d) interviews, and (e) place of residence. More detailed comments and explanations on each of these follow in paragraphs 4-10 below.

## 5. Academic Requirements

The Admissions Committee recognizes that appropriate preparation for the study of medicine can be acquired through many varied educational backgrounds. The major objective is that premedical education encompass broad study in the physical, life and social sciences and the humanities. The minimum requirement for entry, however, is a baccalaureate degree in any discipline. Classes in the social sciences and humanities will be helpful in understanding human behaviour in health and illness. Ability to communicate effectively, both orally and in writing, is essential. The committee believes that attracting students with a rich variety of educational backgrounds is in the interest of all students. Such preparation supports the training of outstanding physicians.

All applicants must meet the following minimum academic requirements:

- **Maritime Applicants:** A minimum academic average of B+ (77% or higher) or a GPA of 3.30 based on a full class load of 5 full classes each year in the last two undergraduate years, or three out of four years plus MCAT scores of 8 and above (but may contain a score of 7 in ONE of the numerical sections) with a minimum score of 24. While we would ordinarily expect a candidate to have 2 consecutive years in which 5 full classes were carried while achieving a GPA of 3.3, the Admissions Committee would accept applications from candidates who have demonstrated compelling reasons for not having met the requirements or who have unusual qualifications. These decisions would be made at the discretion of the Committee.
- **Non-Maritime Applicants:** A minimum academic average of A- (80% or higher) or a GPA of 3.70 based on a full class load of 5 full classes each year in the last two undergraduate years, or three out of four years plus MCAT scores of 10 and above (but may contain a score of 9 in ONE of the numerical sections) with a minimum score of 30.

Due to differing requirements for degrees at various universities in the Maritime provinces, the Faculty has adopted a policy to ensure fair and equal opportunity for all students. The Admissions Committee has the discretion to receive an application from any student at a Maritime university that does not have a three year general science baccalaureate degree if that student will have completed all of the requirements that would have made him/her eligible for that degree at Dalhousie by June 30 preceding registration in the Faculty of Medicine. However, the Committee strongly favours candidates who have a four-year undergraduate degree and only in unusual circumstances accepted those from three year degrees (or equivalent programs).

The medical undergraduate has to deal with a great more information per unit of time than is usually the case in university undergraduate programmes in arts or science. Therefore, the Admissions Committee will consider not only the academic grades of applicants but the type and degree of difficulty of university classes completed.

## 6. Academic Ability

Although there are no absolute prerequisite classes, candidates are encouraged to have taken two or three science classes at a challenging level. This will not only prepare the applicant to successfully write the Medical College Admission Test, but will provide a good foundation for studies in the medical program. Accordingly, a demonstrated capacity to carry a full programme of demanding advanced level classes is a necessary asset for a medical student. The ability to obtain consistently better than average grades in such a programme is the best indication of that capacity. An academic record which shows failed or repeated classes, classes passed with low grades or supplementary examinations, particularly in the two years prior to anticipated entry into medical school, makes the prospect of admission unlikely. With a limited enrolment and many more applicants than the class requires, those with the best academic record will have the greatest chance of admission. Nonetheless, the Admissions Committee can, and does, make significant use of non-academic factors (see para. 7) in deciding which applicants will be admitted.

## 7. Medical College Admission Test

The Medical College Admission Test (MCAT) is an absolute requirement for admission to the Faculty of Medicine. It is a useful predictor of academic performance in the preclinical years of medical school. Applications from candidates who have not met the minimum requirements are not considered. It is the responsibility of the applicant to arrange to take the Test.

All applicants are required to write the Medical College Admission Test prior to the deadline date for submission of application. This test cannot be any more than five years old. We do not accept the April writing of the MCAT for entry in September of the same year. The MCAT is less science-based and more balanced. It has been designed "to encourage students interested in medicine to pursue broad undergraduate study in the natural and social sciences and in the humanities. The MCAT will assess mastery of basic biology, chemistry, and physics concepts; facility with scientific problem solving and critical thinking; and writing skills." Students should note that the scientific information to answer questions on the MCAT should be obtainable in first or second year undergraduate classes.

Performance in the verbal reasoning test and writing sample test will be enhanced by a broad undergraduate education including the humanities. These tests will now make up half the total MCAT examination.

Information about the MCAT, including an application form, can be obtained by writing to MCAT Registration, The American College Testing Programme, P. O. Box 4056, Iowa City, Iowa, 52243 or by visiting their Web site at [www.aamc.org/mcat](http://www.aamc.org/mcat). The latest date for submitting an application is about four weeks before the testing date.

## 8. Non-Academic Factors

These play a very important part in the evaluations of the Admissions Committee. The attributes of emotional stability, intellectual curiosity, social values, initiative, leadership, reliability, personal maturity, motivation and communicative skills, as determined by referee's confidential assessments, interviews, etc., are considered for each candidate. Any outstanding achievement or breadth in terms of life experience is given consideration. Such achievement would be drawn to the attention of the Committee by the referees or in the Supplementary Information Form provided.

## 9. Interviews

Applicants with a reasonable chance of admission are invited for an interview. A fee of \$50 will be charged to all applicants receiving an interview. Occasionally a second interview (at no charge to the student) is arranged if additional information is needed to reach a decision.

## 10. Immunization Requirements

The Faculty of Medicine's immunization policy requires that all students show documented appropriate immunization for tetanus, diphtheria, polio, measles, mumps, rubella and chicken pox. Proof of immunization must be written documentation obtained from a physician and/or public health facility, including the date of the immunization. All students must be immunized against Hepatitis B, which will be made available in a three injection series in the autumn of the Med I year, at a cost of approximately \$90.00 (responsibility of the student). It is strongly recommended that all students be immunized against influenza. On registration day, all Med I students are skin tested to establish their tuberculin status.

## 11. Notification

Candidates will be informed of the status of their application (e.g. accept, reject or wait list) between February and late June. Those candidates who are wait listed can expect to hear anytime between the end of June to Registration day.

## 12. Deferrals

Although applicants who are offered a place in the incoming class may request a deferral of admission for one year, the Admissions Committee only rarely grants these requests.

Students who are enrolled in a graduate studies programme will be required to complete the programme before entering medicine. It is anticipated that such students will apply during their last year since deferrals are rarely granted.

## 13. Acceptance Fee

On notice of acceptance into the Faculty of Medicine, applicants must be prepared to sign a formal agreement of acceptance and to deposit with the Registrar the sum of \$200 before a specified date. This sum is credited toward tuition fees if the student registers but is not refunded if the student withdraws.

## 14. Eligibility

An application is not considered if the applicant has been required to withdraw from another medical school at the request of the Faculty of that school.

## 15. Re-application

A new application form must be completed in each year in which application is made.

## 16. Amendment of Admission Regulations

These regulations may be amended or added to without notice by the Faculty of Medicine. In ordinary circumstances adequate notice of change is given.

## B. Admission with Advanced Standing

Admission with advanced standing (transfer into 2nd, 3rd, or 4th years) from another medical school is rarely granted.

## C. Students with Learning Disabilities

Dalhousie University is committed to providing equal educational opportunity and full participation for students with learning disabilities. Please see the Policy on Accessibility for Students with Learning Disabilities (pg.)

## III. Curriculum Leading to MD Degree

The curriculum of the Faculty of Medicine is under continuous review, to respond to changes in patterns of health and disease treatment, the health care system, and in methods of effective teaching and learning. In 1995 the Committee on Accreditation of Canadian Medical Schools and the Liaison Committee on Medical Education reviewed the curriculum and granted the maximum seven year accreditation. For the most current information, visit our Web site: <http://www.medicine.dal.ca>.

## A. Objectives of the Undergraduate Programme

### 1. Basic Assumptions

1. All physicians require a common foundation of knowledge, skills, and attitudes, the basis for which should be developed in the class of undergraduate medical education.
2. The function of the undergraduate medical education programme is to prepare the physician to undertake a post MD educational programme leading to independent practice in one of the fields of medicine (e.g. family medicine, specialty practice). The graduating student cannot be expected to possess all the knowledge, skills and competencies that are essential for the practicing physician. Rather, the emphasis is on concepts, skills, and attitudes, and the integration of basic and clinical sciences.
3. Essential components of an undergraduate medical education programme include the presence of formal mechanisms to evaluate its performance, adequate administrative support and participation in medical education research.

### 2. Educational Goals for the Medical Student

At the end of the undergraduate programme, the aspiring physician should:

1. Be an active, independent learner, able to seek out information; to analyze it critically, and to apply it by scientific reasoning to the solution of clinical problems; and to use the changing technology of information processing.
2. Possess the strong foundation of knowledge, skills, values and attitudes required for the pursuit of a postgraduate medical education programme and for life-long learning. This will include the ability:
  - a) To identify, evaluate, and help resolve health problems in individual patients; to help patients adjust to their condition and to make efficient use of available resources for these purposes. In so doing the student will utilize appropriate aspects of the basic, clinical, behavioural and social sciences.
  - b) To demonstrate skills in information seeking, information analysis, scientific reasoning and the application of results.
  - c) To educate patients and others in the promotion of health and the prevention of disease. Demonstrate a strong commitment to the promotion of health.
  - d) To take into consideration the personal needs of each patient, as well as the family and social environment, when managing clinical problems. Demonstrate a caring, compassionate and dedicated attitude towards patients.
  - e) To work effectively as a member of a team that includes physicians, other health professionals and community agencies.

- f) To participate in peer review activities and respond positively to constructive criticism.
- g) To contribute to the development and success of health care programmes and institutions. Demonstrate an understanding of the organizational aspects of the Canadian and Maritime health care systems, with their various programmes and institutions; knowledge of the impact of demographic, socioeconomic, political and technological factors on health care delivery and of strategies and measures for cost containment.
- h) To appreciate the fundamental contribution of research to the evolution of medicine.

## B. Policy Statement on Interprofessional Learning

Students in the Faculties of Dentistry, Health Professions and Medicine participate in interprofessional modules to discuss contemporary health and health care issues. The interprofessional modules are part of the curricula of individual programmes. Participation is mandatory and the IPL Module supercedes all other regularly scheduled classes. The objectives of these modules are to:

- Learn and develop skills and strategies for working effectively to address complex problems and issues with other professionals, colleagues and clients/consumers/patients.
- Develop an awareness of, and respect for, the expertise, roles and values of other professionals, colleagues and clients/consumers/patients.

Topics & Dates for Interprofessional Learning Modules 2004-2005	
Palliative Care Module (Senior level)	September 16, 2004 (Wednesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #1 Introduction (Entry level)	September 23, 2004 (Thursday, 1:00 - 5:00 p.m.)
Disability Module (Intermediate level)	November 2, 2004 (Tuesday, 1:00 - 5:00 p.m.)
Working in Interprofessional Teams #2 Professional roles (Entry level)	January 19, 2005 (Wednesday, 1:00 - 5:00 p.m.)
From Family Violence to Health (Intermediate level)	February 10, 2005 (Thursday, 1:00 - 5:00 p.m.)
Please note: PM sessions generally are planned to run between 1:00-5:00 pm in 2 or 3 separate (2hr) sessions depending on student numbers. Group/room/ building/time assignments are posted on the Web site. An information desk will be available on site. Check Web site for location <a href="http://www.dal.ca/ipl">www.dal.ca/ipl</a> .	

## C. The Four Year Programme

### 1. First Year

Begins in late August with a duration of 40 weeks.

The first-year programme is designed around clinical cases or problems. Students work in groups of 7-8 with a faculty tutor, meeting for approximately six hours weekly. Laboratory experience and a small number of lectures (3-5 weekly) are included. An important component of learning is participation in the small group tutorials. Students are expected to participate, and evaluation will reflect this expectation. Self-directed study is an integral part of the curriculum. Introduction to patients and clinical medicine occurs early in the year. Attendance at all clinical experiences is required. The units run consecutively as follows:

Orientation: 1 week

Unit 1: Human Body - 8 weeks

Unit 2: Metabolism & Function - 10 weeks

Unit 3: Pathology, Immunology & Microbiology - 8 weeks

Unit 4: Pharmacology - 5 weeks

Unit 5: Genetics, Embryology, and Reproduction - 5 weeks

Unit 6: Clinical Epidemiology & Critical Thinking

Unit 7: Patient-Doctor

Unit 8: Electives

Units 1-5 run consecutively throughout the year

Units 6-8 run longitudinally

### 2. Second Year

Begins in late August with duration of 40 weeks.

In their second year of study, students continue to learn in small groups of 7 - 8 students with a faculty tutor. Six hours weekly are devoted to tutorial experience. Attendance at tutorials is required. Students continue to have lectures (3-5 weekly) and laboratory experiences. Self-directed study is an integral component of the curriculum, and time is scheduled for this activity. Clinical experience continues, and attendance is required.

The curriculum units are as follows:

Unit 1: Brain and Behaviour - 10 weeks

Unit 2: Skin, Glands and Blood - 9 weeks

Unit 3: Cardiovascular and Respiratory - 8 weeks

Unit 4: Genitourinary, Gastrointestinal and Musculoskeletal - 10 weeks

Unit 5: Population Health, Community Service & Critical Thinking

Unit 6: Patient - Doctor

Unit 7: Elective

Units 1 - 4 run consecutively throughout the year.

Units 5 - 7 run longitudinally

### 3. Clinical Years (Years III and IV)

The clinical years are a continuum of 87 weeks' clinical experience. Phase 1 begins in September and runs for 54 weeks. Phase 2 is 33 weeks long and will complete the clerkship experience. Rotations in the clerkship years are as follows:

#### Phase 1

- Introduction to the Clerkship - 4 weeks
- Family Medicine & Psychiatry - 12 weeks
- Internal Medicine - 12 weeks
- Surgical - 12 weeks
- Women, Children & Youth Health - 12 weeks
- Emergency Medicines - longitudinally, involving two shifts per month. Clerkships may also require that students complete the rotation at designated sites away from the Halifax teaching hospital base.

#### Phase 2

- Electives - 12 weeks
- Continuing & Preventive Care - 12 weeks

## D. Classes Offered

The units in the 2004-2005 curriculum, as well as the clerkship unit chairperson, or unit head, are listed alphabetically. Each class is described briefly. Unit heads are subject to change.

### Introduction to the Clerkship

Unit Chair, Dr. M.L. Watson, 473-8457

The Introduction to the Clerkship is a preparatory unit for the clerkship which includes hands-on skills and procedures modules. This must be successfully completed to enter the clerkship rotations.

### Brain and Behaviour

Unit Head - Dr. M. Sadler, 473-7451

This interdisciplinary unit incorporates objectives of Neurosciences, Neuroanatomy, Neurophysiology and Psychiatry. This unit extends for 10 weeks in Year II.

### Cardiovascular and Respiratory

Unit Head - Dr. D. Morrison, 473-6222

This 8-week unit in Year II introduces the concepts, knowledge and skills which are necessary to understand disorders of these two systems.

### Clinical Epidemiology and Critical Thinking

Unit Head - Dr. R. Whyte, 470-6466

This 1st year unit has been designed to reflect the current state of clinical epidemiology and clinical practice for the new millennium. The goal will be for students to develop a mastery of critical appraisal of primary source literature.

## Continuing and Preventive Care Unit

Unit Head - Dr. S. Shea, 470-8483

The 4th year clerks will again be completing their year with a 12 week CPCU. Each student will do 3 weeks in The Care of the Elderly. The remaining 9 weeks may be subdivided into three, 3-week rotations or one 6 week rotation and one 3 week rotation. Three of those 9 weeks must be in an ambulatory setting. The global goals of this are more defined than those of the Elective Unit.

## Electives I-IV

Unit Head Year I-IV - Dr. D. Hughes, 494-1874

In Years I and II, students spend a half-day weekly in elective study. Twelve weeks of elective study are available in Phase II of the clerkship period.

## Emergency Medicine

Unit Chair - Dr. K. Magee, 473-8564

All students will be required to complete an experience in Emergency Medicine in Phase 1 of the clerkship. This experience is unique in that it is integrated with the four core units in Phase 1. It is scheduled so that each clerk will participate in 2 shifts per month for a maximum of 20 shifts. The shifts will occur on evenings and weekends only and will include the QEII Health Sciences Centre, the Dartmouth General Hospital, the Saint John Regional Hospital, the Valley Regional and the IWK Health Centre. The rotation will expose the clerk to a large volume of patients and a wide variety of medical experiences.

## Family Medicine & Psychiatry

Unit Chairs - Dr. C. MacLean, 473-1546; Dr. B. French, 470-8375.

This 12 week unit is organized as three, 4 week blocks. One month will be completed in Family Medicine, one month will be completed in Psychiatry and the third month will be organized as a student's choice rotation consisting of either Family Medicine or Psychiatry.

## Genetics, Embryology and Reproduction

Unit Head, Dr. M. Hansell, 494-2006

In this Year I unit, students are introduced to molecular and human genetics and to early human development and reproduction.

## Genitourinary, Gastrointestinal and Musculoskeletal

Unit Head - Dr. M. Kareemi, 458-3694

This Year II unit of 10 weeks in length emphasizes the basic mechanisms underlying musculoskeletal, gastroenterological and renal disorders.

## Human Body

Unit Head - Dr. I. Mobbs, 494-2497

This Year I unit consists of an introduction to the structure of the normal human body. The problem-based class includes significant laboratory experience to enhance tutorial learning.

## Internal Medicine Unit

Unit Chair - Dr. N. Morrison, 473-4024

This 12 week unit will incorporate objectives of internal medicine and the medical sub-specialties. Clerks will complete a 4 week rotation on a clinical teaching unit, and 8 weeks on selective medical rotations. Of these 8 weeks, students will be given choice from a selected menu for one month and can choose to complete one 4 week rotation at an out of town location provided that the pre-set criteria have been met.

## Metabolism and Function

Unit Head - Dr. N. Morgunov, 494-3407

This unit introduces students to concepts and principles in biochemistry, physiology and molecular biology.

## Pathology, Immunology and Microbiology

Unit Head - Dr. L. Geldenhuis, 473-7334

This Year I unit includes the study of problems which introduce relevant concepts and principles of immunology, microbiology and pathology.

## Patient Doctor

Unit Head- Dr. C. Dipchand, 473-4612

The Patient-Doctor Unit is a multidisciplinary one and spans two years of the undergraduate medical curriculum. Students will be introduced to the "art of medicine" and to the attitudes, values and communication skills necessary for a good patient-doctor relationship. Over the first two years, students will learn a great deal from real and simulated patients, family physicians and other health professionals. A variety of settings, both in the medical school and the community will be used, as well as Faculty from the Departments of Medicine, Surgery, Pediatrics, Obstetrics and Gynaecology, Bioethics, Psychiatry, and Family Medicine. Much of the learning will occur in small groups, on a weekly basis.

## Pharmacology

Unit Head - Dr. J. Blay, 494-3529

This 5-week unit in Year I emphasizes basic pharmacological principles, such as factors affecting absorption, metabolism and excretion of drugs.

## Population Health, Community Service and Critical Thinking

Unit Head - Dr. J. Cox, 473-7811

This unit will provide an introduction to understanding health in a community context and the principles of epidemiology. The main themes of the unit will include: infectious diseases outbreak and the public health system; health of minorities; the problems of aging; substance abuse and its impact; occupational and environmental health; family violence; nutrition and coronary heart disease; mental health; screening in population health. Topics will be addressed in lectures and "mini-case" tutorials, which are usually two to three 2-hour sessions. Evaluation will include tutorial participation, a mid-unit and end-of-unit written examination and a Community Health Intervention Strategy Research Paper.

## Skin, Glands and Blood

Unit Head - Dr. S. Robinson, 473-2394

This 9-week, Year II unit has been developed to facilitate students' understanding of disorders affecting the skin, endocrine glands and blood.

## Surgical Unit

Unit Chair - Dr. C. Coady, 473-2575

This 12 week surgical unit will integrate objectives traditionally introduced in the surgical disciplines. The clinical rotations are organized into four segments of 3 weeks duration. All students will do a 3-week General Surgery rotation, a 3-week rotation consisting of 1 week in Anaesthesia, 1 week in Ophthalmology and 1 week in Otolaryngology. There are two 3-week selective rotations that can be chosen from specialties including: Cardiac, Neurosurgery, Pediatric General Surgery, Plastics, Orthopedics, Thoracic, Vascular and Urology.

## Women, Children & Youths' Health Unit

Unit Chairs - Dr. T. Scott, 470-6747; Dr. K. Blake, 470-8115

This 12 week unit will be organized as two 6 week blocks and incorporate the objectives from Pediatrics and Obstetrics and Gynecology. The 6 week rotation in Obstetrics and Gynecology will include the post-partum mother-baby unit (1 week) and will cover Neonatology. The Obstetrics and Gynecology rotation will have students located at the IWK Health Centre as well as other centres within the Maritimes. All locations will be structured to allow maximum exposure to ambulatory care and care of women, babies and families during labor, birth and the immediate post-partum period. The 6 weeks of Pediatrics will be 3 weeks ward-based and 3 weeks ambulatory. The Ambulatory Unit will have a focus on additional Pediatrics, ER experience and adolescent medicine. Students completing this rotation will be located at the IWK Health Centre and other off-site locations as required.

## E. The Flexible Scheduling Option

A student may take 3 years to complete Years I/II or Years III/IV. This means that the workload of students in this programme may vary depending on the year, but, on average, it will be reduced by one-third. Evaluations are held in concert with students in the regular programme. Students must understand that the sequence of the curriculum might not be ideal. Students must apply to the Associate Dean for Undergraduate Medical Education and Student Affairs by the last day of the first unit

(Year I) and before the clinical years begin (Year III). Students must pay full tuition for each of the three years.

## IV. Undergraduate Medical Education (UME)

The purpose of the UME Office is to assist students and faculty functioning in the Faculty of Medicine by:

1. Coordinating all undergraduate medical classes and educational experiences;
2. Assisting students who require information regarding curriculum, evaluation, elective experiences, or other matters which arise; and
3. Organizing and administering all external and internal examinations and evaluations of undergraduate medical students.

### A. Unit and Year Outlines

Students will be provided with an overall outline of the academic year at the beginning of the year. Class outlines will be placed on file in the Undergraduate Medical Education Office.

### B. Evaluation

Evaluation is conducted in the Faculty of Medicine for two purposes:

1. To enable both student and Faculty to evaluate progress, which determines where satisfactory progress has been achieved, and also to discover where difficulties lie so that remedial action can be taken;
2. To certify to the public and its licensing authorities that a graduate of this Faculty of Medicine is a dependable and competent physician.

To meet the above objectives, several types of evaluations are held throughout the four undergraduate years. Learning examinations are held occasionally throughout the year to enable each student to evaluate areas already learned in order to use time more efficiently in preparation for final exams. Grading examinations ordinarily take place at regular intervals, usually at the end of a unit. Evaluation of clinical skills is also conducted at regular intervals.

At the beginning of each year, Promotion and Evaluation Regulations are distributed to all medical students. These regulations are approved by Faculty Council on an annual basis. The regulations address all aspects of professional education and deal with fitness to study medicine.

### Academic Accommodation for Students with Learning Disabilities

Please refer to the section on Procedures Regarding Students with Learning Disabilities under University Regulations.

### C. Grading

All student performance will be recorded as "Pass" or "Fail" on the official transcript. Numerical or letter grades do not appear on the transcript.

### D. Ongoing Evaluation

In addition to knowledge and clinical skills, students will be evaluated on both attitudinal attributes and skills. This evaluation is ongoing, and contributes to performance assessment in all classes, particularly in the clinical experiences.

### E. Graduation

A student must have completed and passed all components of the curriculum before convocation. For students in their final year who have been unable to do so due to outstanding remedial work or the need to complete work missed due to illness, graduation at the Fall convocation will be possible.

### F. Application Procedure for the Qualifying Examination

Apply directly to the Medical Council of Canada. The Registrar's office of MCC will process the applicant's credentials and issue an admission letter and an ID card. Application kits will be available at the offices of Faculties of Medicine, Provincial College of Physicians and Surgeons and the Medical Council of Canada.

## G. Licensing

Students are reminded that they must conform to the regulations prescribed by the Medical Board or College of Physicians and Surgeons of the province in which they wish to practice. Contact the licensing authority in each Province for specific regulations. The names and addresses of the Registrars of the Medical Licensing Authorities of the Atlantic provinces and the Medical Council of Canada are as follows:

Nova Scotia: Dr. C.D. Little, Registrar, College of Physicians and Surgeons of Nova Scotia, Suite 200, 1559 Brunswick St., Halifax, NS B3J 2G1.

New Brunswick: Dr. E. Schollenberg, Registrar, College of Physicians and Surgeons of New Brunswick, 1 Hampton Road, PO Box 628, Rothesay, N.B. E0G 2W0.

Prince Edward Island: Dr. C. Morse, Registrar, College of Physicians and Surgeons of Prince Edward Island, Polyclinic Professional Centre, 199 Grafton Street, Charlottetown, P.E.I. C1A 1L2.

Newfoundland: Dr. R.W. Young, Registrar, Newfoundland Medical Board, Churchill Park Chambers, 15 Rowan Street, St. John's, Nfld. A1B 2X2.

Medical Council of Canada: The Registrar, 2283 St. Laurent Blvd., P.O. Box 8234, Ottawa, ON K1G 3H7

## V. Postgraduate Medical Education

A separate calendar is produced for Postgraduate Medical Education. One is available by phoning that office at 494-2362 or writing to Room C-126, Lower Level, Clinical Research Centre, 5849 University Avenue, Halifax, N.S., B3H 4H7.

## VI. Division of Medical Education

### Director

Mann, K.V.

### Professors

Frank, B.W.

Kenny, N.

Laidlaw, T.

Mann, K.V.

Murray, T.J.

Pelzer, D.

Rowe, R.

Vaughn, P.

### Professor Emerita

Gray, J.

### Associate Professors

Allen, M.

Blake, K.

Croskerry, P.G.

Daniels, C.

Morgunov, N.

Murphy, J.

Sinclair, D.

Wrixon, W.

### Assistant Professors

Bergin, F.

Fleming, M.

Gold, E.

Kovacs, G.

MacLean, C.A.

Ross, J.A.

Sargeant, J.

Twohig, P.

Zitner, D.

### Lecturers

Clarke, L.

Farina, D.

Ferguson-Losier, N.

Ginn, J.

Holmes, D.B.  
Paterson, G.

In July 1994, the Faculty of Medicine established the Division of Medical Education. This restructuring followed the Long Range Planning Committee Report (1992) which recommended that the medical school develop a plan for a continuum of medical education curricula from undergraduate through continuing medical education.

The Division of Medical Education conducts and fosters educational development and research at the Medical School. Education initiatives that are relevant to the entire continuum of medical education are part of the Division's mandate. It also serves as a means of communication and a resource for individuals who are involved in educational research and development throughout the Faculty.

The Division combines academic functions of undergraduate, postgraduate and continuing medical education. The operational aspects of these three programmes remain separate, each under the direction of an associate dean, and the Division facilitates sharing of resources and expertise to maximize their effectiveness.

Several educational programmes which cross the continuum are located in the Division. These are communication skills, faculty and programme development, simulated patient and procedural skills. In addition, the specialty areas of medical informatics, bioethics education and research and medical humanities are connected to and play an active role in the Division.

For further information, please visit the Division's homepage on the Internet at [www.medicine.dal.ca/dme](http://www.medicine.dal.ca/dme).

## VII. Continuing Medical Education

### Associate Dean

Sinclair, D.

Location: Clinical Research Centre, C-106  
5849 University Avenue  
Halifax, NS B3H 4H7  
Telephone: (902) 494-2061  
Fax: (902) 494-1479  
Web Page: [www.medicine.dal.ca/CME](http://www.medicine.dal.ca/CME)

Continuing Medical Education programs have been presented by the Faculty since 1922 with the introduction of the annual Dalhousie Refresher Course. This Refresher is still offered, along with another annual three-day Refresher, held in February since 1974. A variety of other types of programs are now offered by the Office of Continuing Medical Education, with contributions from many Faculty members. Subject matter is predominantly clinically oriented, and ranges from research to applied therapeutics. In addition to the Refreshers and other Halifax-based short courses, a regular series of visiting teacher programs is offered in community hospitals throughout Nova Scotia. Community physicians are also served by two distance education initiatives: the provision of programs via interactive videoconference and the development of on-line interactive learning modules for the Internet. An academic detailing program provides one-on-one educational sessions in physicians' offices. The Management Program for Clinical Leaders is designed for physician managers in health care organizations who wish to increase their effectiveness as partners in the management of health care resources. A variety of other programs are provided, with an increasing emphasis on small-group, problem-based learning activities. A quarterly lecture series, "Distinguished Leaders in Medicine" is organized by Continuing Medical Education on behalf of the Faculty of Medicine to provide joint faculty and student learning opportunities.

Consultative services in Continuing Medical Education are available to medical organizations. Research on effective teaching and learning methods, program planning and evaluation is actively pursued. Particular emphasis is placed on developing methods that encourage physicians to take an active part in designing, conducting and evaluating their own continuing education.

## Anaesthesia

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Location: QEII - Health Sciences Centre  
Victoria General Site, Tenth Floor  
Halifax, Nova Scotia  
Telephone: (902) 473-2331

### Professor and Chair of Department

Coonan, T.J.

### Professor Emeritus

Moffitt, E.A.

### Professors

Clark, A.J.M.  
Devitt, H.  
Finley, G.A.  
Hall, R.I.  
Hung, O.R.  
Imrie, D.  
Shukla, R.C.  
Stewart, R.D.

### Associate Professors

Arellano, R.  
Clark, A.G.  
Davies, C.  
Gallacher, W.  
Knox, J.W.D.  
Launcelott, G.O.  
Law, J.A.  
Morris, I.R.  
Muir, J.G.  
Persaud, S.S.  
Smith, J.B.  
Soder, C.M.

### Assistant Professors

Allen, C.T.B.  
Aylmer, A.P.  
Barker, R.  
Beauprie, I.  
Beed, S.D.  
Chisholm, K.C.  
Davies, E.C.  
Drysdale, S.  
DiQuinzio, C.  
Dobson, G.  
Glenn, J.J.  
Godkin, T.A.  
Gray, A..  
Hackmann, T.  
Henderson, J.  
Hirsch, K.  
Hughes, D.R.  
Joules, C.P.  
Keeping, B.  
Keith, I.C.  
Kent, B.  
Litz, S.  
Livingston, P.  
Macaulay, B.  
MacManus, B.J.  
MacQuarrie, K.J.  
Mariotti, C.

McIntyre, A.J.  
McKeen, D.  
McLaren, R.G.  
Midgley, J.  
Milne, D.  
Morrison, D.L.  
Ngan, J.E.S.  
Nunn, R.  
Roper, F.  
Sadowski, Z.  
Schelew, B.L.  
Scovil, J.E.  
Shields, C.  
Stevens, S.  
Vakharia, N.  
Wawrzyszyn, B.  
Whately, G.  
Yazer, H.

### Lecturers

Berger, C.  
Chedore, T.  
Chisholm, J.  
Dobson, G.R.  
Friesen, M.  
Lee, S.  
Nair, V.  
Redmond, M.  
Seidmann, T.

The Department of Anesthesia provides general, regional and local anesthesia for all types of general surgery, neurosurgery, cardiovascular surgery, urology, gynecology, plastic and orthopedic surgery, and obstetric and pediatric anesthesia in the operating and case rooms of the hospitals affiliated with Dalhousie University. It has intensive care responsibilities and consultative services in most hospitals. The department at the Queen Elizabeth II Health Sciences Centre is jointly responsible with the Departments of Surgery and Medicine for intensive care activities. The Department at the IWK Health Centre is responsible for ICU activities at the Children's site. Additionally, the department operates pain clinics at the QEII Health Sciences Centre, IWK Health Centre and the Saint John Regional Hospital.

Its faculty is well equipped to teach all aspects of medicine related to anesthesia and acute care medicine and illustrate the application of the basic sciences of physiology, pharmacology and anatomy to anesthesia. The Department participates in the COPS program and in the communications skills and interviewing skills components of the undergraduate doctor-patient unit. The Department provides instruction in airway management to undergraduates.

### Third Year Medicine

A one-week core rotation clerkship in anesthesia is given to all third year medical students. The students are taught about anesthesia and perioperative medicine including fluid and electrolyte therapy, opportunities are provided to acquire practical skills in venous access and airway management. Experience in acute pain management, chronic pain management, intensive care medicine, same day surgery consultation, crisis resource management training and cardiac transesophageal echocardiography can also be obtained.

### Electives

#### First year

Departmental faculty act as preceptors and guide students in a literature survey.

#### Second year

One afternoon per week may be taken as an elective in anesthesia acquiring specific skills or investigating a particular topic, furthering their knowledge of perioperative medicine and gaining skills in airway management, ventilation and I.V. cannula.

### Fourth year

Clinical clerks may choose one month anesthesia as an elective to further practice the basic skills associated with airway control and ventilation.

### Internship

Four weeks may be taken in anesthesia to further upgrade skills and knowledge related to acute care medicine.

### Residency Training

An integrated university residency training program is available in the department. This consists of a five-year program meeting requirements of the Royal College of Physicians and Surgeons of Canada. Participating hospitals are QEII HSC, IWK Health Centre, and Saint John Regional Hospital. The program in anesthesia is designed to provide a well-rounded experience covering all core areas but also providing time for specialization in areas of individual interest. The first year is a general medical activity including rotations in anesthesia general medicine, general surgery, obstetrics, pediatrics, and emergency. Two electives of one month each are included.

The second year of training is a year of introduction to general anesthesia including rotations in anesthesia for general surgery and urology, orthopedic and plastic surgery, otolaryngology and airway management, oromaxillofacial surgery and gynecology. Introductory rotations in ICU, cardiothoracic anesthesia, pediatric anesthesia and obstetric anesthesia complete the year.

Years three to five are a continuum including the Royal College's requirements of six months internal medicine, six months ICU and the required rotations in pediatric anesthesia, obstetric anesthesia, and chronic pain. Three months are undertaken in community based anesthesia in Saint John Regional Hospital. In addition, subspecialty rotations are provided in thoracic anesthesia, neuro anesthesia, cardiac and vascular anesthesia, and acute pain. There is a six-month period of elective time which may be spent pursuing clinical specialties or engaged in a research project. Many of the faculty members are actively involved in research and resident participation is mandatory.

All anesthesia residents must take the annual intraining examination of the American Board of Anesthesiology. This examination the cost of which is met by the department provides valuable feedback concerning strength or weakness in clinical knowledge.

ATLS and ACLS courses are provided to all residents by the Department.

### Continuing Professional Development

Members of the Department of Anesthesia promote continuing professional development. Offering preceptorships for periods of 2-4 weeks on specialized training programs tailored to the individual physician's needs.

### Fellowships

These are offered in specialized anesthesia areas including chronic pain and pediatric anesthesia.

A formal academic program of Grand Rounds, Journal Club, Research Club, Problem Rounds, and resident educational seminars function throughout the academic year.

# Anatomy and Neurobiology

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Location: 13th Floor, Tupper Building  
Telephone:(902) 494-6850  
Fax: (902) 494-1212

## Dr. D.G.J. Campbell Professor and Head of Department

Leslie, R.A.

### Professors

Currie, R.W.  
Hopkins, D.A.  
Neumann, P.E.  
Rutherford, J.G.  
Semba, K.  
Wassersug, R.J.

### Associate Professors

Allen, G.V.  
Balldridge, W.H.  
Bance, M. (major appointment, Division of Otolaryngology)  
Brownstone, R.M. (major appointment, Division of Neurosurgery)  
Egan, D. (major appointment, School of Physiotherapy)  
Hansell, M.M. (post-retirement)  
Mendez, I. (major appointment, Division of Neurosurgery)  
Mobbs, I.G.  
Morris, S. (major appointment, Division of Neurosurgery)  
Smith, F.

### Assistant Professors

Clarke, D. (major appointment, Division of Neurosurgery)  
Darvesh, S. (major appointment, Medicine)  
Kablar, B.  
Marsh, D.R.  
Mathieson, W.B.  
Rafuse, V.  
Sinha, G.

### Adjunct Professor

Egan, D. (major appointment, School of Physiotherapy)

### Instructor

Baghdadi, M.

### Demonstrator

Ferris, D.

## A. Course of Study

### First Year Medicine

The Anatomy Department is involved in 2 units in the first year of Medicine. Students are introduced to Gross Anatomy and Histology in the Human Body Unit and Embryology in the Genetics, Embryology and Reproduction Unit. Students learn basic concepts and patterns through a case-oriented problem-simulated (COPS) approach. Students attend small group tutorial sessions where a case is discussed and learning issues from a particular anatomical region or organ system are raised. These issues are resolved in the tutorials, laboratory sessions, textbooks, the internet, and with the aid of a limited number of lectures.

### Second-Year Medicine

Neuroanatomy is taught as an integral part of the Brain and Behaviour Unit, which is presented at the beginning of the second year. Neuroanatomical principles of organization and integration in the central

nervous system are employed to analyze and explain the pathological processes described in the cases around which the unit is built. The basic neuroanatomy from which these principles are derived is presented in a series of lectures and laboratory sessions that are arranged to complement the cases. Neuroanatomical topics are included in the written examination at the end of the unit; as well, there is a practical examination on the material presented in the laboratory sessions.

In order to obtain an integrated understanding of the operation of the central nervous system, neurophysiological, neuropharmacological and psychiatric topics are also taught in conjunction with the neuroanatomy considered in this Unit.

## B. Electives for Medical Students

The department participates in the elective programme. First Year Students: The Department offers a variety of essay topics covering areas of recent research interest, which enable students to become familiar with topical research in medicine and with the facilities of the Kellogg Health Sciences Library.

The Department also offers short research projects under the direction of staff members for medical students wishing to undertake basic or pre-clinical research or integrate basic anatomy with clinical projects.

Second and Third Year Students: The Department offers research projects under the direction of staff members. The Department also offers electives in Head & Neck Anatomy and Neuroanatomy. An elective in Musculoskeletal Anatomy can be offered in conjunction with the staff of the Division of Orthopedic Surgery.

## C. Residency Training

Programmes can be arranged for residents to help fulfil basic science requirements in specialty training. Scheduled anatomy review sessions are an integral component of several residency training programmes.

## D. Graduate Studies

Students wishing to take classes leading to a MSc or PhD degree in Anatomy should consult the calendar of the Faculty of Graduate Studies. Interdisciplinary Anatomy/Neuroscience degrees are also offered through the Neuroscience Graduate Programme. Medical graduates wishing to take advanced training in neuroanatomy, gross anatomy, developmental anatomy or histology should consult the Head of the Department. (Details of the graduate courses offered by the Department are listed in the Faculty of Graduate Studies Calendar.) It is also possible to take a combined MD/PhD programme.

## E. Classes

### Dentistry Students

Gross Anatomy/Neuroanatomy: This class is offered to first-year students. It presents an integrated description of the anatomical organization of the central and peripheral nervous systems, and the gross anatomy of the head and neck, thorax and abdomen. Lectures, laboratories and dissections are used with special attention given to oral and dental structures.

Histology: This class is offered to first-year Dental students. The class covers the structure of tissues and organs of the body with emphasis on oral structures.

The Anatomy & Neurobiology Department is also involved in the first year Growth and Development class, teaching the embryology component.

### Health Professions Students

General basic lecture classes in gross anatomy, microanatomy and neuroanatomy are offered to meet the needs of students in nursing and special health education (1010.03), and recreation, physical and health education, kinesiology and dental hygiene (1020.03). A problem-based learning class in Human Anatomy is offered to Pharmacy students (1040.03). A lecture and laboratory class in head and neck anatomy (1030.03) is also offered to Dental Hygiene students. In addition, special

lecture and laboratory classes in gross anatomy (2170X/Y.06), microanatomy (2160.03) and neuroanatomy (2100.03) are offered to Physiotherapy and Occupational Therapy students.

The following classes are open with a limited enrolment to Arts and Science students:

- Neuroanatomy/Biology 3440.03/Neuroscience 3440.03
- Human Histology/Biology 3430.03
- Comparative Vertebrate Histology/Biology 3421.03
- Human Gross Anatomy/Biology 3435.06
- Basic Human Anatomy 1010.03/1020.03
- Anatomy for Occupational Therapy 3100.01

## Biochemistry & Molecular Biology

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Location: 9th Floor, Tupper Building  
Telephone: (902) 494-6436

### The Carnegie and Rockefeller Professor and Acting Head of Department

Palmer, F.B.

#### Professors

Breckenridge, W.C.  
Doolittle, W.F.  
Gray, M.W.  
Lazier, C.B.  
Palmer, F.B. (post-retirement)  
Ro, H.-S.  
Singer, R.A.  
Wallace, C.J.A.

#### Associate Professors

Bearne, S.  
Byers, D.M. (major appointment in Pediatrics)  
Cook, H.W. (major appointment in Pediatrics)  
Dobson, M.  
Liu, P.X.-Q.  
McMaster, C. (major appointment in Pediatrics)  
Ridgway, N.  
Too, C.

#### Assistant Professors

Archibald, J.M.  
Lesser, B.H.  
Marignani, P.  
McLeod, R.  
Riddell, D.C. (major appointment in Pathology)  
Roger, A.  
Rosen, K.V.

#### Adjunct Professors

Ewart, K.V., NRC, Institute for Marine Biosciences

### A. Course of Study

#### First-Year Medicine

The practice of medicine requires an understanding of the chemistry underlying the maintenance and reproduction of human beings and their disease-causing parasites. Biochemistry provides the foundation on which physiology, pharmacology and much of pathology rest. The study of Biochemistry introduces students to the basic principles important to a practicing doctor and shows where we are in the continuing effort to understand in detail the chemical basis of life. The principles of Biochemistry will be introduced through the study of selected cases, in small group tutorials and independent learning.

#### B. Electives

The Department offers two types of elective programmes to limited numbers of medical students. (1) small research projects under the direction of staff members and (2) investigations in some depth of student's choice, utilizing the resources of the Kellogg Health Sciences Library. Students wishing to take an elective in Biochemistry should consult the Department so that a suitable programme may be selected.

## C. Classes

### Classes for Dentistry Students

Biochemistry for first-year Dental students DENT 1112.01.

Nutrition and Biochemistry DEHY 2809.03: (taught in collaboration with the School of Nursing for Dental Hygiene students).

### Classes for Science Students

Details of the following classes will be found in the Calendar of the College of Arts and Science.

- BIOC 2020.03: Cell Biology
- BIOC 2030.03 or B: Genetics and Molecular Biology
- BIOC 2200.03: Introductory Biochemistry
- BIOC 3200.03: Biological Chemistry
- BIOC 3300.03: Intermediary Metabolism
- BIOC 3400.03: Nucleic Acid Biochemistry and Molecular Biology
- BIOC 4001.03: Special Topics in Biochemistry
- BIOC 4010.03: Bioinformatics
- BIOC 4301.03: Biochemical Communication
- BIOC 4302.03: Biochemistry of Lipids
- BIOC 4403.03: Genes and Genomes
- BIOC 4404.03: Gene Expression
- BIOC 4501.03: Medical Biotechnology I
- BIOC 4603.03: Advanced Laboratory in Biochemical Techniques
- BIOC 4604.03: Research Project I
- BIOC 4605.03: Research Project II
- BIOC 4610.06: Scientific Writing and Advanced Laboratory in Biochemical Techniques
- BIOC 4700.03: Proteins
- BIOC 4701.03: Enzymes
- BIOC 4804.03: Introduction to Pharmacology I
- BIOC 4805.03: Introduction to Pharmacology II
- BIOC 4811.03: Biochemistry of Clinical Disorders I
- BIOC 4812.03: Biochemistry of Clinical Disorders II
- BIOC 4835.03: Human Genetics

### Classes for Health Professions Students

- BIOC 1040.06: Biological Chemistry and Metabolism for students of Pharmacy.
- BIOC 1420.03: Introduction to Biochemistry for Bachelor of Nursing Students.

## D. Graduate Studies

The Department offers suitably qualified students an opportunity to study for the degree of Master of Science and Doctor of Philosophy. A complete description of these programmes, as well as of graduate classes, is in the Graduate Studies Calendar.

# Bioethics

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Location: Dalhousie University  
5849 University Avenue  
Clinical Research Centre, Room C105  
Halifax, NS B3H 4H7  
Telephone: (902) 494-3801

## Department Head

Kenny, N.P.

## Professor

Baylis, F., BA (McGill), MA, PhD (Western). (Cross appointment with the Faculty of Arts and Social Sciences). Interests: novel genetically-based technologies, research ethics, women's health and feminist ethics.

Kenny, N.P., OC, BA (Mount Saint Vincent University), MD (Dalhousie University), FRCPC, LL.D. (Hon) (Mount Saint Vincent University), LL.Div. (Hon) (Atlantic School of Theology), S.Litt.D. (Hon) (Regis College, Toronto School of Theology), LL.D. (Hon) (Saint Francis Xavier University). Interests: physician ethics, ethics education, pediatric ethics, values and public policy and resource allocation.

## Associate Professors

Graham, J., MA (University of Waterloo), MA (University of Victoria), PhD (Universite de Montreal) (Cross appointed with Sociology & Social Anthropology). Canada Research Chair in Bioethics. Interest: medical anthropology and science studies, regulation of pharmaceuticals, biologics and genetic therapies, integrative approaches to anthropology and Epidemiology, methodologies to assess diagnostic and therapeutics practices, dementia diagnostics and normal aging.

Weijer, C., BMdSc, MD (University of Alberta), BA, MSc, PhD (McGill). Interests: ethics of randomized clinical trials and genetic research.

## Assistant Professors

Kirby, J, M.D. (Dalhousie), M.A. (Dalhousie). Interests: clinical ethics, ethical analysis of health care policy, advancement of social justice in health care, ethical issues in mental health care

Pauls, M., MD. (Manitoba) Interests: Undergraduate and post-graduate ethics education, advance-care planning and the acute care setting, resuscitation decision-making, emergency medicine and pre-hospital research ethics, refusal of care.

Simpson, C., BA, MA (McMaster), PhD (Dalhousie). Interest: The role of hope in health care, role modeling and reflective practice in bioethics, organizational ethics

## I. Mission

The Department of Bioethics in the Faculty of Medicine at Dalhousie University is committed to critical analysis of moral issues in health. In pursuit of this goal, the department seeks to develop and maintain a national and international reputation for scholarly work in bioethics.

## II. Mandate

The mandate of the Department of Bioethics is:

- to successfully compete for peer-reviewed research funding to support the academic work of faculty;
- to meaningfully contribute to the scholarly literature in bioethics and thereby shape the discourse in the field;
- to provide high-quality ethics education for the Faculty of Medicine, local health care institutions, government agencies, and the community at large;
- to influence local, national, and international policy development through policy consultation and committee work;

- to serve professional organizations for the continued growth of bioethics; and
- to advocate for professional integrity in bioethics.

This mandate is realized through research and scholarly activity in:

- physician ethics education
- role-modeling
- value, attitude and character formation
- influencing the COPS curriculum
- CME ethics
- value-based decision-making
- ethics and biotechnology
- enhancement technologies and human identity
- genetics and communities
- genetics and justice
- research ethics
- the regulation of research
- conceptual problems especially in clinical trials
- educational material for REB's
- research involving children, women, persons with mental disabilities and other disadvantaged groups
- community research
- dying
- duties and obligations of bioethicists
- organizational ethics and health policy
- resource allocation

### A. Med I and II

Initial orientation to the ethics of clinical practice is provided in the Med I orientation. Particular attention to ethical issues encountered as a medical student is the focus of core sessions early in Med I. The identification of ethical issues embedded in the COPS cases is a key goal in Med I and Med II.

### B. Clerkship

Ethics is an integral component of the core Introduction to Clerkship. The focus of these sessions is obligations and duties in the physician-patient relationships.

### C. Postgraduate Education

Regular specialty-specific sessions in ethics are provided in the core lecture series in most specialties. Integration of ethical analysis is facilitated by participation of faculty in formal academic programs such as Grand Rounds, Journal Club and inter-disciplinary seminars.

### D. Electives

A wide range of medical students and resident elective projects are supervised by departmental faculty.

## III. Graduate Courses

### BIOT 5000.03: Advanced Topics in Bioethics

This seminar involves critical examination of the bioethics literature. The application of various methodologies utilized in contemporary bioethical analysis will be highlighted. It will be of interest to graduate students in medicine, health professions, health law, and philosophy whose thesis topic involves a substantial bioethical component. Specific topics will be identified each year.

Permission of instructor required.

### BIOT 5001.03: Research Ethics

This seminar involves critical examination of the research ethics literature, with particular attention to a range of topics including: informed consent; research involving specific groups/communities; risks/limits to allowable risks; emergency room research; and placebo controls. It will be of interest to graduate students in medicine, health professions, health law, and philosophy. Permission of instructor required.

### BIOT 5101.03/5102.03: Directed Readings In Bioethics

This is an advanced level directed reading course designed for graduate students.

Instructors and topics can vary yearly.

### BIOT 5801.03: Topics in Health Care Ethics

(Topics In Health Care Ethics: Theories And Methods In Health Care Ethics)

In this class, we will explore some of the current debates among different theoretical perspectives about the proper theoretical groundwork for bioethics and the methodologies associated with these diverse theories. We shall pay particular attention to canonical work in the field, such as the principles approach of Beauchamp and Childress, while examining feminist and other alternatives. We shall consider the ways different theories identify, frame, and reason about ethical questions that arise in the realm of health and health care.

# Biomedical Engineering

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Location: Room 5194  
Dentistry Building  
5981 University Avenue  
Halifax, NS B3H 3J5  
Telephone: 902-494-3427  
Fax: 902-494-6621  
E-mail: BME@Dal.ca  
Web site: <http://www.dal.ca/bme>

## Director

Lee, J.M.

## Graduate Coordinator

Gratzer, P.F.

## Professors

- Clements, J.C., PhD (Toronto). Optimal control theory applied to electrocardiography, electrophysiological imaging, reaction-diffusion modeling in synaptic transmission at neuromuscular junctions. Primary appointment in Mathematics & Statistics.
- French, A., PhD (Essex). Information encoding and processing by sensory neurons, mechanotransduction, nonlinear systems analysis and ion channel biophysics. Primary appointment in Physiology and Biophysics.
- Gregson, P., PEng, PhD (TUNS). Image processing; computer vision; computer-assisted pathology detection, localization and quantification in diagnostic imaging. Primary appointment in Electrical and Computer Engineering.
- Horacek, M., PhD (Dal). Quantitative cardiac electrophysiology; body surface potential mapping; the inverse problem in electrocardiology and magnetocardiography. Primary appointment in Physiology and Biophysics.
- Kirby, L., MD (Dal). The design, safety and performance of assistive technology for people with physical disabilities. In particular, wheelchairs, walking aids and artificial limbs. Primary appointment in Division of Physical Medicine and Rehabilitation, Faculty of Medicine.
- Lee, J. M., PhD (Western). Bioprosthetic heart valves and vascular grafts, intravascular stents, biopolymers, tissue mechanics, developmental changes in cardiovascular system. Primary appointment in Applied Oral Sciences.
- Stroink, G., PEng., PhD (McGill). Clinical applications of magneto-cardiographic and body surface potential mapping and analysis; biomagnetic imaging, analysis of electro-encephalographic maps. Primary appointment in Physics.
- Weaver, D.F., MD (Queen's), PhD (Queen's). Computer-aided design and development of new chemical entities as potential drugs for people with neurologic diseases. In particular, epilepsy, Alzheimer's and general anaesthesia. Primary appointment as Tier 1 Canada Research Chair in Dept of Medicine (Division of Neurology), cross-appointment to Dept of Chemistry.
- Wright, J.R., Jr., MD (Ohio State), PhD (Ohio State Graduate School). Pancreatic islet transplantation, and cell encapsulation. Primary appointment in Pathology.

## Associate Professors

- Anderson, G., PhD (Toronto), BVSc (Melbourne), Dipomate ACVS (American College of Veterinary Surgeons). Investigation of mechanotransduction mechanisms in bone from normal and osteoporotic animals as well as the role of biomaterial particles in causing the loosening of total joint replacements. Primary appointment in Surgery.
- Bance, M., MB, ChB (Manchester, England), MSc (Toronto), FRCS (C) (Canada). Middle ear mechanics, measuring minute vibrations of

middle ear structures, hearing reconstruction mechanics, design of prosthesis for hearing reconstruction, transfer function of normal and diseased middle ears, finite element modelling of middle ear (in conjunction with Dr. Robert Funnell at McGill University). Primary appointment in Division of Otolaryngology, Faculty of Medicine.

Kozey, C., PhD (Dalhousie). Classification of neuromuscular control patterns associated with normal movement and movement in the presence of pathology and/pain. These studies involve the use of electromyography, and other sensors to measure muscle function and motion parameters. Primary appointment in the School of Physiotherapy.

## Assistant Professors

- Deluzio, K., PhD (Queen's). Gait assessment in osteoarthritis and prosthetic joint replacement, joint kinematics and wear simulation, signal analysis. Primary appointment in School of Biomedical Engineering.
- Filiaggi, M., PhD (Toronto). Biomaterials for orthopaedic and dental applications; synthesis of bioceramic scaffolds and coatings; bone regeneration and replacement. Primary appointment in Applied Oral Sciences.
- Ghanem, A., PhD (Cornell). Cell biomaterial interactions, biodegradable biopolymers for tissue engineering and drug delivery, cell culture models for in vitro toxicology. Primary appointment in Chemical Engineering.
- Gratzer, P., PhD (Toronto). Tissue engineering. Developing scaffolds for tissue regeneration (e.g. blood vessels, ligaments) using naturally derived materials (collagen and elastin). Primary appointment in School of Biomedical Engineering.
- Gu, J., PhD (Alberta). Medical robotic devices and applications; artificial eye implant control; rehabilitation assistive device design and applications; sensor fusion in mobile robot. Primary appointment in Electrical & Computer Engineering.
- Horne, G., MD (London), PhD (Calgary). Septal mechanics in heart failure. Non-invasive functional myocardial imaging (echocardiography, MRI, scintigraphy), somatic cell gene therapy for myocardial repair. Primary appointment in Medicine.
- Kember, G., PhD (Western). Signal processing, including pattern recognition and data compression. Modelling of neural control, particularly stochastic resonance. Primary appointment in Engineering Mathematics.
- Kozey, J., PhD (TUNS). Occupational biomechanics and workstation design with emphasis on accessibility, reach and anthropometry. The projects require the use of a variety of human motion analysis techniques. Primary appointment in Health and Human Performance.
- Maksym, G., PhD (McGill). Magnetic bead micromanipulation for stimulation and measurement of the cytoskeletal mechanics of the cell; structure-function of airway smooth muscle cells in asthma. Primary appointment in School of Biomedical Engineering.
- Ruan, S., PhD (Alberta). Differential equations and dynamical systems, population dynamics, neural network models, epidemiological models. Primary appointment in Mathematics & Statistics.
- Wells, S.M. PhD (Toronto). Structural-mechanical relations in biopolymers such as elastin and collagen are examined in order to determine the underlying mechanism(s) of elasticity of these materials and thereby to understand the functioning of the arteries, ligaments, skin etc. which they make up. As well, research examines the structural remodeling of these structures during development and maturation: from fetal to adult life. Primary appointment in Physics and Atmospheric Science, Faculty of Science.

## Adjunct Professors

The following researchers are also eligible to supervise graduate students in the School of Biomedical Engineering:

- DeMont, E., PhD (UBC). Structure and function of natural biomaterials, muscle function in locomotion. Primary appointment in Biology, St. Francis Xavier University.
- McDuffee, L., D.V.M. (Colorado State University), Ph.D. (University of California, Davis) Diplomate, ACVS (American College of Veterinary Surgeons). Orthopaedic research including: (i) investigation of fracture biomechanics, fracture stabilization techniques, and bone

healing; (ii) development of new orthopaedic implants; (iii) bone healing investigations involving osteoblasts from osteogenic tissue. Emphasis on the equine species. Primary appointment in the Atlantic Veterinary College, University of Prince Edward Island.

Lovely, D., PhD (Strathclyde). Myoelectric control systems, electrophysiological instrumentation, digital signal processing for signal enhancement (cardiac), computer interface aids for handicapped. Primary appointment in Institute of Biomedical Engineering at the University of New Brunswick.

McLean, L., PhD (UNB). Classification of muscle activation patterns in myofascial pain syndrome and fibromyalgia, electromyography, signal analysis, neuromuscular fatigue. Primary appointment in the Department of Physiotherapy at Queen's University.

Roscoe, S., PhD (McGill). Prostheses and medical implant devices. Electrochemical techniques to examine the adsorption and interfacial behaviour of proteins. Primary appointment in Chemistry, Acadia University.

## I. Introduction

The School of Biomedical Engineering is a collaborative effort of the Faculty of Medicine and the Faculty of Engineering.

The interdisciplinary research within the School of Biomedical Engineering at Dalhousie University is concentrated in three thrust areas: (i) Biomaterials and Tissue Engineering, (ii) Biosignals and Physiological Modelling, and (iii) Human Dynamics and Rehabilitation Engineering. Other significant research efforts in biomedical engineering at Dalhousie include work in kinesiology and gait, instrumentation, cardiac, orthopaedic and cellular mechanics, auditory and vestibular function, robotics, and rational drug design.

The programme offers a Master of Applied Science (MAsc) degree in Biomedical Engineering.

## II. Admission

Candidates must satisfy the general requirements for admission to the Faculty of Graduate Studies.

Students will be accepted into the MAsc programme from:

1. BEng or BAsc from an accredited undergraduate engineering programme
2. 4-year BSc in the physical sciences (e.g. Mathematics, Physics, Chemistry, etc.) with research experience\*\*
3. 4-year BSc in the biological sciences (e.g. Physiology, Biophysics, Biochemistry, Microbiology, Immunology, etc.) with research experience\*\*
4. MD, DVM, DDS, or equivalent

In cases (3) and (4) above, additional undergraduate coursework may be required prior to entry into the programme. This will depend on the nature of the research thesis to be undertaken and the requirements will be developed in consultation with the school; however, a minimum of 2nd year undergraduate calculus (equivalent to Dalhousie University's MATH 2001.03 and MATH 2002.03) plus linear algebra and/or statistics, and one year of physics and chemistry will normally be required. \*\*Qualifications for research experience include: a research thesis, senior research project, or equivalent work experience determined in consultation with the School of Biomedical Engineering.

A minimum mid-B average during the student's undergraduate coursework (with a minimum average of A- over the last two years) will be required, plus demonstrated ability to communicate and write in English (consistent with the entry requirements of the Faculty of Graduate Studies, e.g. TOEFL >> 600).

GRE Aptitude and Advanced scores in one of the sciences are recommended for all applicants whose undergraduate work has been completed outside Canada.

## Financial Support

A minimum stipend of \$17,000 is available for graduates. Normally, students who are accepted are supported financially either by external

sources or Dalhousie scholarships. Additional financing is available for students with external scholarships. Applications should be made early, preferably by April 1 at the latest.

## III. Degree Requirements

1. At least a total of six half-credit classes (three full credits) to be chosen in consultation with a school advisor. It is expected that a minimum of four of these classes will be taken from the suite of 5000-level classes offered by the School of Biomedical Engineering. In addition, students whose preparation in a particular area is deficient may be required to complete appropriate classes.
2. Attendance and participation in the BME seminar programme.
3. A research thesis representing original work by the student will be carried out under the supervision (or co-supervision) of a faculty member of the School of Biomedical Engineering who is also a member of the Faculty of Graduate Studies. This thesis will normally be 75-100 pages in length exclusive of figures, tables, references, etc. Where the student's principal research supervisor is not appointed into the School of BME, a co-supervisor from within the school will be named on the advice by the school's Graduate Studies Coordinator in order to ensure that the thesis contains sufficient Biomedical Engineering content. The student must also undertake a satisfactory oral defense of the research thesis.

Each student will have a supervisory committee consisting of at least the Graduate Coordinator and one other faculty member of the school (in addition to the supervisor). The supervising committee will meet at least twice a year (including September following admission) or when called by any member of this committee or the student.

## IV. Class Descriptions

### BMNG 5010.03: Introductory Physiology for Biomedical Engineering.

The function of organs and body systems is presented through lectures and seminars. Special emphasis is on integration of function in the whole organism. This class covers the physiology of human organ systems including neurophysiology, cardiovascular, respiratory, renal, gastrointestinal and endocrine physiology. In addition to lectures there will be in-depth discussions and analyses of current topics as they apply to the organ systems.

### BMNG 5020.03: Cell Biology for Biomedical Engineering.

This class offers an introduction to the eukaryotic cell structure and function for engineering and physical science students who do not have a strong biological background. The class will emphasize elements of cellular function which have particular relevance to Biomedical Engineering research: e.g. biomechanics, electrophysiology, biocompatibility of materials, and tissue engineering. Topics will include: cellular structure, organelles and cytoskeleton at the ultrastructural and molecular level, models of cytoskeletal function, protein production and processing, construction of extracellular matrix components, cell connections with extracellular matrix and cell-cell connections and signaling, mechanotransduction, introduction to cell division, tissue growth and development. The concept of the cell as a structural and functional unit within its extracellular matrix will be emphasized. Concepts relevant to tissue engineering will be introduced.

### BMNG 5030.03: Pathobiology for Biomedical Engineering.

This class deals with basic pathological processes and general mechanisms of disease that are relevant to Biomedical Engineering. These topics include: (1) cell injury and adaptation, (2) inflammation, repair and wound healing, (3) fluid and hemodynamic alterations, (4) diseases of immunity, (5) neoplasia, (6) nutritional and environmental pathology, and (7) arteriosclerosis. Each of these topics will be covered through guided readings followed by discussion in small group sessions. Although focusing primarily on disease processes, the course will also include sessions on the structure of bone, skin and blood vessels, as a basic

understanding of these tissues is fundamental to many areas of BME research. The final session will deal with the appropriate use of animal models to study human disease processes.

### **BMNG 5040.03: Introduction to Biomedical Engineering.**

Biomedical Engineering includes both: (i) design of devices, instrumentation, or processes for clinical use, and (ii) the application of engineering science and technology to the solution of problems in biological systems. This class will explore both these avenues with an emphasis on the distinctions between scientific and engineering approaches to research and development. Topics include: the history of biomedical engineering, problem solving in the real world, defining design objectives, problem formulation and specification, experimental design and instrumentation, approaches to equipment design, statistical principles for measurement and quality control, optimization principles, economic considerations and impact of technology on medicine, safety and regulatory concerns, ethical concerns in animal and human experimentation, and grant application writing. Wherever possible, actual case studies will be used as examples wherein the above principles have (or have not) been successfully applied.

### **BMNG 5110.03: Biocompatibility and Biomaterials Design.**

This class deals with the scientific basis of biocompatibility (host and materials responses in biomaterials) and its application to intelligent design of biomaterials for implantable systems. The class will be divided into thirds: (i) cellular, tissue-level, and systemic responses to implanted devices, including thrombosis, wound-healing, cytotoxicity, and immunological responses; (ii) materials degradation including corrosion, dissolution, swelling/leaching, surface chemistry, etc.; (iii) case studies of materials and device design including: heart valves, total hip prostheses, dental restorative materials, total artificial heart, burn dressings and hemodialysis systems. The class will be evaluated by three literature criticism sessions, a research paper and coupled class presentation, one mid-term test and a final exam.

### **BMNG 5120.03: Biomechanics in Physiology and Surgical Implant Design.**

This class deals with: (i) solid and fluid mechanical analysis of biological tissues and organs, and (ii) use of mechanical engineering techniques in the design of implantable medical devices, e.g. heart valves, vascular grafts, ligament replacements, total artificial heart, and total hip or knee replacements. Topics to be covered include cell structure and mechano-electrical function, blood flow, arterial mechanics, bone structure and mechanics, mechanics and tribology of artificial joints, muscle mechanics, pulmonary functions, fundamentals of gait and mobility aids. Guest lecturers from clinical sciences will help to develop the practical context of biomechanical engineering problems.  
EXCLUSION: MECH 4650.03

### **BMNG 5130.03: Biomechanics of Human Gait.**

An overview of the research in biomechanics of human motion with particular focus on gait analysis. Topics include measuring and analysis techniques, biomechanical modelling, and data analysis techniques. Applications include the study of normal, able-bodied gait, and the evaluation of gait pattern changes associated with osteoarthritis, and total knee replacement.  
INSTRUCTOR(S): K. Deluzio

### **BMNG 5150.03: Introduction to Tissue Engineering.**

Tissue engineering is a recent and fast-growing field which encompasses and unites biology, chemistry, medical sciences and engineering to design and fabricate systems to replace tissues and organs. Topics will include tissue engineering scaffolds, cell incorporation (selection and culture), in vivo versus in vitro constructs, and applications of tissue engineering.  
INSTRUCTOR(S): P. Gratzner

### **BMNG 5160.03: Bioengineering in Orthopaedics and Dentistry.**

Orthopaedics and dentistry dominate the medical device market, providing some conspicuous examples of successful biomaterials engineering. This course will explore a number of biological and engineering considerations that arise in the design and development of implants for skeletal tissue replacement or regeneration, with an emphasis on bone/implant interactions.  
INSTRUCTOR(S): M. Filiaggi

### **BMNG 5210.03: Biomedical Instrumentation, Data Acquisition and Analysis.**

This hands-on course is an introduction to computer-based acquisition and analysis of physiological signals as relevant to Biomedical Engineering. In an integrated series of lectures and laboratory projects, students will use A/D, D/A, and serial techniques to acquire real and simulated data from a variety of sensors (e.g. Electrocardiograms, muscle activity, flow, temperature, and sound). Issues such as sampling, aliasing, filtration, convolution, and image analysis will be examined.  
INSTRUCTOR(S): G. Maksym

### **BMNG 5220.03: Mathematical Analysis of Dynamic Biological Systems.**

This class is concerned with the construction, analysis and interpretation of mathematical models of dynamical biological systems. Topics covered will include neural networks, electro-biology, epidemiology and the transmission of HIV, the morphology of complex biological and chemical systems, and pattern formation in morphogenesis.  
CROSS-LISTING: MATH 5290.03

### **BMNG 5250.03: Bioelectricity: A Quantitative Approach.**

An introductory electrophysiology class, following a quantitative approach based on the general principles established in physics and engineering. The core material covers nonlinear membrane properties of excitable cells that produce action potentials, propagation of action potentials in one-, two-, and three-dimensional excitable media, the response of excitable media to artificial stimuli, and the electromagnetic field that the active bioelectric sources produce in the surrounding extracellular space. Applications to the study of neural and cardiac electrophysiology will be discussed in detail.

### **BMNG 5260.03: Diagnostic Imaging and Radiation Biology.**

This class will discuss the basics of current medical imaging modalities including the mathematical foundations of image processing, and image reconstruction from projections; imaging with ionizing radiation covering aspects of radiation physics and detectors, X-ray CT, SPECT and PET; magnetic resonance imaging methods and techniques; and ultrasound imaging including propagation, scattering and image formation. Students will be working with real images from real, currently-used equipment provided by the Computer Vision and Image Processing Lab, Department of Electrical & Computer Engineering, Dalhousie, and through the internet.

### **BMNG 5410.20: /30.03: Directed Readings in Biomedical Engineering.**

This class is designed for students wishing to gain knowledge in a specific area in which no graduate level classes are offered. Class format is variable and may include seminars, lectures, and the study of papers and/or book chapters as part of a directed research or design project. Students are required to present the work (not less than 90 hours per semester), in a written report which will be evaluated. Normally, a student can take only one directed reading class as part of their degree programme.

### **BMNG 9000.00: MASc Thesis.**

# Community Health and Epidemiology

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Location: Centre for Clinical Research  
5790 University Avenue  
Halifax, Nova Scotia B3H 1V7  
Telephone: (902) 494-3860  
Fax: (902) 494-1597  
E-mail: che@dal.ca  
Web site: www.medicine.dal.ca/che/

## Department Head

Currently vacant

## Professor Emeritus

Irwin, A.C.

## The Eddy Professor and Head of Department

Vacant

## Professors

Brown, M.G. (post-retirement)  
Cohen, M. (major appointment in Oral & Maxillofacial Pathology, Faculty of Dentistry)  
Kisely, S. (major appointment in Department of Psychiatry)  
Kutcher, S. (major appointment in Department of Psychiatry)  
MacLean, L. (major appointment in School of Business Administration)  
Murray, T.J. (major appointment in Medical Humanities)  
Padmos, A. (Head, Cancer Care Programme, QEII)  
Poulin, C.  
Stewart, R. (major appointment in Division of Emergency Medicine)  
VanZanten, S. (major appointment in Division of Gastroenterology)  
Wolf, H.K. (post-retirement)

## Associate Professors

Flowerdew, G.  
Guernsey, J.R. (cross appointment in School for Resource and Environmental Studies)  
Joffres, M.  
Joseph, K.S., (major appointment in Obstetrics and Gynecology)  
Kephart, G.  
Kirkland, S. (cross appointment in Division of Geriatric Medicine)  
Langille, D.B.  
McIntyre, L. (major appointment in Faculty of Health Professions)  
Sketris, I. (major appointment in College of Pharmacy)  
Townsend, E. (major appointment in School of Occupational Therapy)  
Veugelers, P.

## Assistant Professors

Asbridge, M.  
Burge, F. (major appointment in Department of Family Medicine)  
Cox, J. (major appointment in Department of Medicine)  
Curtis, L.  
Dodds, L. (major appointment in Obstetrics and Gynecology)  
Dunbar, M. (major appointment in Department of Surgery)  
Gagnon, G. (major appointment in Department of Civil Engineering)  
Gahagan, J. (major appointment in School of Health and Human Performance)  
Gross, M. (major appointment in Department of Surgery)  
Joffres, C.  
Johnston, G. (major appointment in School of Health Services Administration)  
Kozousek, V. (major appointment in Ophthalmology)  
Langley, J. (major appointment in Pediatrics)

LeBlanc, J. (major appointment in Pediatrics)  
MacKinnon, N. (major appointment in College of Pharmacy)  
MacPherson, K.  
Mitnitski, A. (major appointment in Department of Medicine)  
Mykhalovskiy, E.  
Porter, G. (major appointment in Department of Surgery)  
Tomblin-Murphy, G. (major appointment in School of Nursing)  
Weerasinghe, S.

## Lecturers

Anderson, D. (major appointment in Department of Medicine)  
Pennock, M. (major appointment Research Director, Population Health Research Unit)  
Stewart, S. (major appointment in Psychiatry)  
Ungurain, M. (visiting fellow, Unit for Population Health & Chronic Disease Prevention)

## Adjunct Faculty

Badenhorst, C. (Assistant Professor) Medical Officer of Health, Cape Breton area  
Baikie, M. (Assistant Professor) Associate Provincial Medical Officer of Health, Nova Scotia Department of Health  
Braunstein, J. (Lecturer) Senior Director, Population Health, NS Dept. of Health  
Crossman, D. (Assistant Professor) Mental Health Services Division, Nova Scotia  
Davidson, K. (Assistant Professor) Behavioural Cardiovascular Health & Hypertension Program, Columbia University College of Physicians & Surgeons  
Elliott, D. (Assistant Professor) Medical Consultant, Health System Development Branch, Nova Scotia Department of Health  
Farquharson, J. (Assistant Professor) Heart & Stroke Foundation of Nova Scotia  
Gould, R. (Assistant Professor) Medical Officer of Health, District Health Authorities 1-3, Nova Scotia Department of Health  
Haigh, D. (Assistant Professor) Workers Compensation Board of Nova Scotia, Consultant  
Hicks, V. (Assistant Professor) Health Economics Consulting Services  
King, D. (Assistant Professor) Chief Medical Advisor, Workers' Compensation Board of North West Territories and Nunavut  
MacLean, D. (Professor) Professor & Director, Institute for Health Research & Education, Simon Fraser University  
MacLean, S. (Assistant Professor) Department of Political Science, Simon Fraser University  
Mitchell, T. (Assistant Professor) Toronto Sunnybrook Health Sciences Centre  
O'Brien, R. (Assistant Professor) Assistant Deputy Minister, Health & Social Services, Nunavut  
Scott, J. (Assistant Professor) Provincial Medical Health Officer, Department of Health  
Seviour, R. (Assistant Professor) Medical Officer of Health, DHA 4, 5, 6, Nova Scotia Department of Health  
Strang, R. (Assistant Professor) Medical Officer of Health for Capital District Health Authority  
Sweet, L. (Assistant Professor) Chief Health Officer, PEI Department of Health and Social Services  
Tan, M. (Associate Professor) Medical Director, Global Diabetes Care, India  
Thomas, B. (Associate Professor) Consulting Toxicologist in Environmental Health  
Vaughan, P. (Assistant Professor) Director, Health Services for Worker's Compensation Board of NS  
White, F. (Professor) Chair, The Aga Khan University, Karachi, Pakistan

## A. Educational Objectives

The teaching programme of this department is designed to meet the following objectives:

1. To help the student develop a knowledge and understanding of the methods required for the primary, secondary, and tertiary prevention of disease.
2. To help the student learn about health resources in the community and how these may be most effectively utilized by physicians.

3. To assist the student in acquiring a basic understanding and knowledge of health data acquisition and its analysis and interpretation.
4. To assist the students in acquiring a basic knowledge of epidemiological approaches to problems of maintaining health and preventing disease, to assist students to recognize that health or disease results from the interaction of a number of broad determinants of health.

## B. First and Second Year Medicine

The Department participates in the undergraduate education programme by active involvement of Faculty members, tutorial leaders, by providing student electives and by individual consultations with students.

## C. MSc Programme in Community Health and Epidemiology

This MSc programme emphasizes knowledge, analytical skills and formal evaluative methods with application to disease prevention, health promotion and assessment of community health service and system needs. The typical MSc CH&E student has had undergraduate training in a health profession or related scientific discipline and has worked in the health sector. Admission standards are those of Dalhousie University's Faculty of Graduate Studies.

An honours baccalaureate degree from a recognized university is ordinarily required. Enrolment is limited. Some part-time students are accepted. Applicants must meet English Language Competency and Quantitative Skills requirements. Details of this programme are found in "Dalhousie University, Graduate Studies Calendar".

# Emergency Medicine

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Location: 351 Bethune, VG Site  
 QEII Health Sciences Centre  
 1278 Tower Road  
 Halifax NS B3H 2Y9  
 Telephone: (902) 494-6596 or 494-6193  
 Fax: (902) 494-1625  
 E-mail: [emergency.medicine@dal.ca](mailto:emergency.medicine@dal.ca)  
 Web page: <http://www.medicine.dal.ca/emergency/>

## Head

Kovacs, G. (Acting)

## Director, Division of EMS

Petrie, D.A., MD, FRCP(C), ABEM

## Professor

Ducharme, J.

Sinclair, D. (cross appointment in Pediatrics) (Clinical Chief IWK)

Stewart, R. (cross appointment in CHE, Anaesthesia, Physiotherapy)

## Associate Professors

Bullock, G., Residency Director, RCPS (Acting)

Croskerry, P. (cross appointment in Medical Education)

Kovacs, G. (cross appointment in Medical Education)

LeBlanc, C., Residency Director, CCFP (EM)

Maxwell, D. (primary appointment in Family Medicine)

Murphy, M. (cross appointment in Anaesthesia)

Tallon, J. (cross appointment in Surgery)

Taylor, B. (cross appointment in Pediatrics)

Thompson, J.

## Assistant Professors

Cain, E.

Campbell, S.

Carr, B. (cross appointment in Family Medicine)

Currie, T.

Field, S.

Fraboni, T. (cross appointment in Pediatrics)

Green, R.

Magée, K. (undergraduate coordinator)

McLeod, B.

Pauls, M. (cross appointment in Bioethics)

Petrie, D.

Postuma, P.

Ross, J. (cross appointment in Medical Education)

Travers, A.

Vaillancourt, C.

Watson, M. (acting Clinical Chief, QEII)

Wren, P. (cross appointment in Pediatrics)

## Lecturers

Ackroyd, S.

Allen, D.

Black, K. (cross appointment in Pediatrics)

Blackie, B. (cross appointment in Pediatrics) (post-graduate coordinator  
 Pediatric Emergency Medicine)

Blanford, A.

Bolton, S.

Bood, T.

Brake, H.

Cajee, I.

Clark, G.

Clory, M. (cross appointment in Family Medicine)

Coakley, A.  
 Cote, R.  
 Crawford, B.  
 Curry, S.  
 Davidson, R. B.  
 Dickson, A.  
 Dingle, M.  
 Drake, W.  
 English, K.  
 Evans, M.  
 Ferguson, L. (cross appointment in Family Medicine)  
 Ferguson, M. (cross appointment in Family Medicine)  
 Findlater, J.  
 Fletcher, M.  
 Grant, J. (cross appointment in Pediatrics)  
 Hebb, L.  
 Howlett, M.  
 Huntsman, J.  
 Inkpen, T.  
 Johnson, R.  
 Keith, K.  
 Keyes, P. (education site coordinator, Saint John, NB)  
 Kienitz, N.  
 Levesque, C.  
 Levy, D.  
 Lohar, A.  
 Losier, C.  
 MacKillop, J. (cross appointment in Family Medicine)  
 MacVicar, N.  
 McCrea, J.  
 McCulloch, D. (cross appointment in Pediatrics)  
 McKenna, P.  
 McMullen, M.  
 McTimoney, M.  
 Meagher, J.M.  
 Morley, C. (cross appointment in Pediatrics)  
 Murphy, K.  
 Murphy, N.  
 Murray, J.  
 O'Hanley, P.  
 Phillips, B.  
 Ryan, M. (cross appointment in Family Medicine)  
 Schwartz, S. (cross appointment in Pediatrics) (Undergraduate coordinator Pediatric Emergency Medicine)Seviour, C.  
 Sigsworth, W.  
 Smith, L.  
 Smith, W.  
 Smyth, P.  
 Stokes, R.  
 Thompson, J.  
 Walsh, P.  
 Weatherhead, D.  
 Wickett, R.  
 Wu, K. (cross appointment in Pediatrics)  
 Wurster, C.  
 Young, G.  
 Young, N.

## A. Emergency Medicine

The primary objective of Emergency Medicine is to ensure medical students are introduced to the many facets of Emergency Medicine and its role in the delivery of health care. The field of Emergency Medicine is an exciting one. Physicians practicing in this area are continually exposed to a wide variety of clinical disease and injury. Severity of presentation is also tremendously variable, requiring prioritization and the ability to rapidly judge how ill or injured patients are: a physician may be seeing a small child with a fever one minute, then be intubating a patient with acute respiratory distress the next.

## B. First- and Second-Year Medicine

During second year, faculty teach suturing, casting and splinting and basic airway management as part of the skills and procedures programme. Faculty members participate each year in the COPS programme. Number of second year elective positions at the QEII HSC is approximately 17.

## C. Clinical Clerkship (Med III and IV)

Introduction to Clerkship is a multidisciplinary activity, with Emergency Medicine faculty taking a leadership role in the administration and running of this section. It is the first one-month unit of Phase I of clinical clerkship and consists of: lectures, small group sessions, simulated patient encounters, skills and procedures, and advanced life support sessions. The objectives of the month are to familiarize students with hospital and clinic processes, refresh students' basic clinical and communication skills, and set a framework for clinical problem solving.

All medical students complete a longitudinal Emergency Medicine experience during Phase I of the clerkship. Students complete 20 shifts at various sites including tertiary care adult hospitals, a pediatric hospital and community hospital.

## D. Electives

Electives can be arranged in Emergency Medicine. Special requests are considered for all levels of medical training.

## E. Residency Training

The **Royal College of Physicians and Surgeons** residency in Emergency Medicine is a five year program offering extensive exposure to the clinical aspects of Emergency Medicine and related specialties. In addition, the resident receives specific training in relevant aspects of medical education, pre-hospital care and administration. Active participation in original research is a core component of this program. Residents in good standing have the option to pursue subspecialty training (Pre-hospital Care, Toxicology, ICU etc.) during either the fourth or fifth year.

### Year One

Eight weeks each of Internal Medicine and General Surgery. Eight weeks adult and four weeks pediatric Emergency Medicine. Four weeks each of pediatric and adult Anaesthesiology. Four weeks each of Psychiatry, Orthopedics and Plastic Surgery. Residents have the option, with approval from the Program Director, of completing two courses from the Masters Degree in Community Health and Epidemiology.

### Year Two

Sixteen weeks of adult and four weeks pediatric Emergency Medicine. Twelve weeks of ICU. Eight weeks of Neurosciences. Four weeks each of Obs/Gyn, CCU and Elective.

### Year Three

Sixteen weeks of Emergency Medicine. Eight weeks of Pediatric ICU. Four weeks each of Prehospital Care, Medical Education, Administration and Research. Four weeks each of Plastic Surgery, Elective and Internal Medicine Consult Service.

### Year Four (if not pursuing subspecialty training)

Sixteen weeks of adult and four weeks of pediatric Emergency Medicine. Eight weeks of Trauma Service. Twelve weeks of Elective. Four weeks each of Toxicology, Adult Anaesthesiology and Research.

### Year Five (if not pursuing subspecialty training)

Sixteen weeks of adult and four weeks of pediatric Emergency Medicine. Twenty weeks of Elective. Twelve weeks of Research.

### Suggested Textbooks

*Emergency Medicine: A Comprehensive Study Guide*, JE Tintinalli, E Ruiz, RL Krome

*Emergency Medicine: Concepts and Clinical Practice*, Rosen, Barkin et al.

## F. Continuing Medical Education

A number of the Faculty participate in the planning of CME for Dalhousie CME short courses as well as presenting lectures/classes internationally and nationally which are offered by the Canadian Association of Emergency Physicians.

# Family Medicine

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Location: Abbie J. Lane Building, Eighth Floor  
QE II HSC  
Telephone:(902) 473-4747  
Fax: (902) 473-4760

## Head of Department

MacLachlan, R.

## Professors

Gass, D.A.  
Cameron, I.A.  
Hayes, V.  
MacLachlan, R.

## Associate Professors

Abbott, C. (major appointment in Medicine)  
Archibald, G.  
Brosky, G.  
Burge, F.  
Cameron, S.  
Cervin, C.  
MacLean, C.  
Maxwell, D.M.  
Murray, T.J. (major appointment in Medicine)  
Nixon, M.D.  
Phillips, W.G.C. (retired)  
Putnam, W.

## Assistant Professors

Natarajan, N.  
Sinclair, D. (major appointment in Emergency Medicine)  
Tatemichi, S.  
Whelan, A.M. (major appointment in Pharmacy)  
Wrixon, W. (major appointment in Obstetrics/Gynecology)

## Lecturers

Abdulhusein, M.  
Ackerman, M.  
Allaby, L.  
Altenkirk, G.  
Archibald, F.  
Arseneau, J.-P.  
Ashton, B.  
Atkinson, S.  
Baines, Lita  
Baker, Janet  
Balsler, E.  
Barkwell, R.  
Barry, T.  
Bell, D.  
Berghuis, H.  
Bonang, Lisa  
Boulay, R.  
Bradley, W.  
Brewer, M.  
Brewer, J.  
Brien, D.V.  
Brooks, J.  
Bruce, C.  
Buchholz, K.  
Buffett, B.  
Buhariwalla, F.  
Burditt, A.M.

Canty, A.  
Carr, B. (major appointment in Emergency Medicine)  
Carruthers, G.  
Cauchon, N.  
Chandra, M.  
Chesser, G.  
Chiasson, M.  
Chow, C.  
Clarke, B.  
Cloutier, L.  
Coady, K.  
Collings, J.  
Collins, A.  
Colpitts, A.  
Comeau, L.  
Conter, H.  
Cote, C.  
Craig, P.  
Crawford, T.  
Crouse, S.  
Curry, J. (major appointment in Surgery)  
Cussen, M.  
D'Arcy, D.  
Davey, C.  
Davidson, B.  
Davies, C.  
Davis, P.  
Dias, B.  
Dow, M.  
Doyle, M.  
Dufour, K.  
Duncan, M.  
Edgar, D.  
Ellerker, M.  
Ellerker, S.  
Ellis, S.  
Ernest, G.  
Eros, E.  
Fay, D.  
Felderhof, C.  
Fewer, K.  
Ferguson, M.  
Ferguson, L.  
Fisher, R.  
Fraser, J.  
Fraser, P.K.  
Frent, G.  
Gallagher, K.  
Gallant, S.  
Gardner, A.  
Genge, R.  
Glazebrook, K.  
Gold, E.  
Goodfellow, M.  
Goodine, R.A.  
Goodwin, J.  
Gorman, M.  
Graham, J.  
Grant, G.  
Gunn, R.  
Harper, W.  
Hart, S.  
Harvey, W.  
Houstoun, A.  
Howard, J.  
Howe, D.  
Hudson, C.  
Irrinki, A.  
Johnson, M.  
Johnson, W.L.  
Johnston, C.  
Johnston, M.

Jost, E.  
Keddy, J.  
Kenney, S.  
Kerr, P.  
Keyes, E.  
Kirkpatrick, J.  
Lacey, K.  
Langley, C.  
Langley, S.  
Lappier, S.  
LeCours, M.  
Lee, P.  
Lee, S.  
Lewis, V.  
Li, J.  
Lister, N.  
Lowney, M.  
MacDonald, C.  
MacDonald, I.  
MacDonald, J.W.  
MacKean, P.  
MacKillop, J.  
MacKinnon, R.  
MacLennan, M.  
MacNeil, D.  
MacNeil, L.  
MacNeill, J.  
Mader, J.  
Makkar, N.  
Marco, C.  
Martin, B.  
McAuley, P.  
McCrea, J.  
McCrossin, M.  
McKenna, C.  
McIntyre, P.  
McLaughlin, W.  
McNab, J.  
Merritt, R.  
Miller, H.  
Mishra, H.  
Morgan, L.L.  
Moore, P.  
Morais, A.  
Moriarty, F.  
Moyse, C.  
Muise, R.  
Mullan, T.  
Murphy, P.  
Murray, K.  
Murray, P.  
Naugler, C.  
Nicholson, J.  
Nunn, D.  
O'Connor, J.  
O'Keefe, S.  
O'Leary, D.  
Oliver, R.  
Olmstead, D.  
Patterson, B.  
Perley, M.  
Plummer, A.G.  
Plaxton, K.  
Popma, H.  
Pottle, K.  
Prendergast, J.  
Reid, D.  
Ross, D.  
Rushton, C.  
Ryan, M.  
Sainz, B.

Sheehan, N.  
Simon, M.  
Slysz, G.  
Smith, J.A.  
Smith, M.  
Smith, P.  
Smith, V.  
Snell, T.  
Sommers, J.G.  
Spencer, P.  
Srinivasan, K.  
Steeves, A.  
Strang, R.  
Stuart, C.  
Taylor, R.  
Thomas, G.R.  
Thomas, S.  
Thompson, C.  
Tran, P.  
Veer, A.  
Verma, B.  
Watson, M.L.  
Weibe, A.  
Weider, J.  
White, M.  
Wilson, R.  
Wisniowski, L.  
Yee, K.  
Zed, J.  
Zigante, N.  
Zitner, D.  
Zwicker, H.

### **Clinical Instructors**

Aucoin, M.  
Barry, C.  
Carlos, M.  
Conrod, M.  
Cooper-Rosen, E.  
Critchley, C.  
Cudmore, D.  
Donald, G.  
Douglas, S.  
Duffy, C.  
Foley, A.  
Fraser, Z.  
Gracie, G.  
Hall-Losier, S.  
Hansen, P.  
Jayabarathan, A.  
Kazimirski, J.C.  
Kazimirski, M.  
Laughlin, T.  
Leahey, S. (Sabbatical)  
Lowe, W. (Sabbatical)  
MacDougall, S.  
Mackin, M.  
Marshall, C.  
Massarelli, E. (Sabbatical)  
Matheson, G.  
Morse, E.  
Mullan, R.  
Murray, K.  
Murray, M.  
Northrop, S.  
Telfer, C.  
Veinot-Nash, J.  
Vlahos-Harvey, S.  
Woodford, T.

## A. Family Medicine

As a multi-disciplinary educational team, we strive for excellence in teaching, using creative and innovative programmes that support an educational foundation for students who go on to pursue Family Medicine Residency Programme, as well as those interested in specialty training. We celebrate the collaborative aspects of practice and model this and life-long learning to our students, emphasizing the importance of continuity of care and the doctor/patient relationship.

## B. MED I and MED II

The Department participates in the COPS programme and in the Interviewing Skills, Clinical Methods and Life Cycle components of the Patient-Doctor unit. Many students participate in Med I and II Family Medicine Electives.

## C. Clerkship (MED III)

All students complete a 12 week Family Medicine and Psychiatry Clinical Clerkship. During this time Clerks will have the opportunity to augment the knowledge they gained during the COPS curriculum.

The clerkship block is divided into three units: two 4-week Core Rotations in Family Medicine and Psychiatry, and one 4-week Choice Rotation. The choice rotation allows clerks the option of a variety of Family Medicine and Psychiatry rotations.

The unit begins with a day and a half of seminars and ends with a day of evaluation, including a project presentation, an OSCE and a Multiple Choice Exam.

## D. Electives/CPCU

Additional Family Medicine rotations are offered to clerks in both the Elective Block and Continuing and Preventative Care Unit (CPCU). During this time the students have a wide range of Family Medicine electives that they may choose from, including, Administrative Medicine, Patient Education, Obstetrics, Office Based, etc.

## E. Continuing Medical Education

The faculty contribute toward several Continuing Medical Education short courses either in planning or presentation, as well as traveling to community hospitals in the Maritime Provinces and presenting specific topics relating to Family Medicine.

## F. Residency Training

The Department of Family Medicine offers a two-year integrated programme. The aim is to graduate family physicians who are prepared to meet the changing health needs of the community in both ambulatory and hospital settings. The programme is accredited by the College of Family Physicians of Canada and candidates who complete this programme are eligible to sit the certification examinations of the College of Family Physicians of Canada. The residency programs in Emergency Medicine, Health Care of the Elderly and Palliative Care are also available as extensions of the two-year Family Medicine programme and are also accredited programs of the College of Family Physicians of Canada.

The Dalhousie Family Medicine Residency programme has 80 residents (40 in each year) being taught across the Maritimes. There are five principal teaching sites (Halifax, Saint John, Fredericton, Sydney, and Moncton) and many small communities where residents do rotations. Each of the five sites is a home base for a group of residents.

Our aim is to encourage our residents to become effective, compassionate family physicians who can care for their patients in hospital, ambulatory and community settings. The programme has an emphasis on rural practice.

Moving around the Maritimes had been one of the characteristics of the programme. This is still possible if residents would like to travel but we also have many opportunities for residents who need to be primarily based in one community.

Suggested Textbooks:

- *Patient Centered Medicine: Mosby's Transforming the Clinical Method.*, Stewart et al.

- *Family Practice Sourcebook: Evidence-based Emphasis, 3rd Edition.*, Ken Marshall
- *A Textbook of Family Medicine, 2nd Edition*, Ian R. McWhinney

Suggested Journals:

- *Canadian Family Physician*
- *The Journal of Family Practice*

# Medicine

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Telephone:(902) 473-2379

## The Carnegie and Rockefeller Professor and Head of Department

Cowden, E.A.

### Professors

Anderson, D.R.  
Benstead, T.  
Connolly, J.  
Fernandez, L.A.V.  
Forward, K.  
Fox, R.A.  
Gardner, M.J.  
Haase, D.A.  
Handa, S.P. (Saint John)  
Hanly, J.G.  
Hirsch, D.  
Issekutz, T.B. (major appointment in Pediatrics)  
Johnston, B.L.  
Johnstone, D.E.  
Kells, C.M.  
Kiberd, B.A.  
Kirby, R.L.  
Khanna, V.N. (Saint John)  
Langley, G.R.  
Lee, T. (major appointment in Microbiology & Immunology)  
MacDonald, N. (Dean, Faculty of Medicine)  
Mann, O.E.  
Maxner, C.E.  
Miller, R.A.  
Murray, T.J.  
Nassar, B. (major appointment in Pathology)  
O'Neill, B.J.  
Padmos, A.  
Peterson, T.  
Phillips, S.  
Pollak, P.T.  
Powell, C.  
Purdy, R.A.  
Robertson, H.A. (major appointment in Pharmacology)  
Robinson, K.S.  
Rocker, G.  
Rockwood, K.  
Sadler, R.M.  
Schlech, W.  
Turnbull, G.K.  
VanZanten, S.J.  
Weaver, D.  
West, M.L.  
Wilkinson, M.

### Associate Professors

Abbott, E.C.  
Ahmad, S.  
Bata, I.  
Berwick, D. (Saint John)  
Bowie, D.M.  
Cockeram, A. (Saint John)

Corbett, B.N.  
Couban, S.  
Cox, J.L.  
Dean, C.R.T.  
Fernandez, C.  
Fort, S.  
Ginther, D.G.  
Gregor, R.D.  
Harrison, E.R.  
Hayne, O.A.  
Hernandez, P.  
Hoffman, P.S. (major appointment in Microbiology)  
Horacek, B.M. (major appointment in Physiology and Biophysics)  
Howlett, J.  
Jarrett, P. (Saint John)  
Josephson, B.  
Kaiser, S.  
Koipollai, C.J.  
Klotz, J.  
Leddin, D.J.  
Lo, C.  
Lodge, R.  
Love, J.  
MacCormick, R.  
Mallery, L.  
Marr, D. (Saint John)  
McGlone, J.M.  
McIvor, R.A.  
McParland, C.P.  
Miller, R.A.W.  
Morrison, D.  
Morrison, N.  
Mosher, D.  
Murray, A.H.  
Patil, J.  
Patrick, W.D.  
Peltekian, K.  
Peterson, T.  
Rowden, G. (major appointment in Pathology)  
Rowe, R.C.  
Sapp, J.L.  
Shlossberg, A.H.  
Simpson, D.  
Singer, R.A. (major appointment in Biochemistry)  
Soroka, S.  
Sutton, E.  
Szuler, I.  
Tanton, R.T.  
Title, L.M.  
Ur, E.  
West, K.A.

### Assistant Professors

Apostolides, C.  
Bailey, P. (Saint John)  
Bakowsky, V.  
Banarjee, S.  
Basta, M.  
Beaudin, D.J. (Saint John)  
Beveridge, R.C. (Saint John)  
Beydoun, H.  
Bhan, V.  
Carver, D.  
Colwell, B.D.O.  
Cookey, B.J.  
Costain, G.  
Crofts, P.A.  
Crowell, R.  
Cummings, E.A. (major appointment in Pediatrics)  
Darvesh, S.  
Davidson, R. (Major appt. Microbiology & Immunology)  
Davis, M.

Dipchand, C.  
Doreen, M.S.  
Dornan, J.M. (Saint John)  
Dupere, D.  
Emenau, P.L. (Saint John)  
Eskes, G.  
Farina, D.  
Fine, A. (Major in Physiology/Biophysics)  
Finlayson, L.A.  
Fisk, J.  
Fraser, J.  
Gallant, G.J.  
Garduno, R. (major appointment in Microbiology & Immunology)  
Gees, S.  
Geldenhuys, L.  
Giacomantonio, N.  
Goodyear, M.  
Gordon, J.  
Grant, E. (Saint John)  
Grant, I.  
Gubitz, G.  
Guy, F.C.  
Haldane, D.  
Hatchette, T.  
Hobbs, C.  
Horne, G.  
Horton, R.  
Huber, A.  
Imran, S.A.  
Jackson, S.  
Joshi, P.C. (Saint John)  
Joyce, B.M.  
Khaliqikareemi, M.  
Keough-Ryan, T.  
Keeling, D.R. (Saint John)  
Kidwai, B.  
King, D.  
Kirby, S.  
Lacuesta, G.  
Langley, R.G.B.  
Love, M.  
MacDonald, E. (Saint John)  
MacDonald, N.  
MacIntosh, D.G.  
MacKnight, C.  
MacNeil, D.  
Malatjalian, D.A. (major appointment in Pathology)  
McCarron, B.  
McIntyre, P.  
McLean, D.  
McNeil, S.A.  
Michael, R.T.  
Mitnitski, A.  
Morgunov, N. (major appointment in Physiology and Biophysics)  
Morzycki, W.  
Murray, S.J.  
Nachtigal, M.  
Pahil, R.S.  
Patel, S.  
Perk, M.  
Pyesmany, A. (major appointment in Paediatrics)  
Quraishi, A.  
Rayson, D.  
Rajaraman, R.  
Raju, M. (Saint John)  
Reardon, M.  
Rebello, R.  
Sangalang, V.  
Sapp, J. (Jr.)  
Saric, A.  
Shatshat, S.  
Sheridan, W.

Short, C.  
Siddiqui, A.  
Slyter, K. (Adjunct)  
Sohi, P. (Saint John)  
Stewart, J.W.  
Teskey, R.J. (Saint John)  
Tugwell, B.  
White, D.  
Wood, L.A.  
Workman, S.  
Yeung, P.K. (major appointment in Pharmacy)  
Yhap, M.

### Lecturers

Acott, P. (major appointment in Pediatrics)  
Acres, S.  
Adams, L.  
Aikman, P.  
Baer, C.  
Baillie, R.  
Barnard, D.R. (major appointment in Paediatrics)  
Baxter, K. (Saint John)  
Bedard, R.  
Bessoudo, R. (Saint John)  
Bishop, G.W. (Saint John)  
Brake, D.  
Burnell, M.J. (Saint John)  
Constantine, C.  
Doherty, P.  
Dolan, S.  
Douglas, J. (Saint John)  
Dow, G.  
Ecker, G.  
Fallows, G.  
Finkle, S.N.  
Forgeron, M.P.  
Foyle, A. (major appointment in Pathology)  
Gogan, N. (Saint John)  
Gorman, M.  
Haldane, D.J.  
Hanson, D.  
Harrigan, L.  
Harvey, R.  
Henderson, J.  
Hewlett, J.  
Igoe, M.  
Johnson, J.K.  
Joy, G.  
Kapoor, H.  
Lang, B.A. (major appointment in Paediatrics)  
Leckey, J.R.  
Lutchmedia, S.  
MacDonald, P.  
MacDougall, A.D. (Saint John)  
MacLean, G.L. (Saint John)  
MacPherson, K.M.  
Majaess, G.G.  
Manning, D.J.  
Markanday, A.  
Marsters, D.  
Milczarek, J.  
Mukherji, A.  
O'Brien, J.  
O'Connell, C.  
O'Reilly, M.  
Paddock, V.  
Panek, R.  
Parkash, R.  
Pippy, C. (Saint John)  
Poole, B.  
Raida, R.  
Raju, M.K. (Saint John)

Ramsey, S.E.  
Reid, P.H. (Saint John)  
Sadowska, E. (Saint John)  
Sheehan, W. (Saint John)  
Skedgel, C.  
Storsley, L.  
Taillon, M.  
Thompson, K.  
Thompson, W.  
Wightman, H.  
Tremaine, R.D.L.  
Walsh, N.G.  
West, P.H.F. (Saint John)  
Wightman, H.  
Zaman, K.

## Instructor

Smith, J.

## A. Academic Programmes

The Department of Medicine is located at the Queen Elizabeth II Health Sciences Centre, Halifax, N.S. and the Saint John Regional Hospital, Saint John, N.B.

Clinical rotations including ambulatory care in the Queen Elizabeth II Health Sciences Centre are undertaken at all sites including the Victoria General, Nova Scotia Cancer Centre, Nova Scotia Rehabilitation Centre, Halifax Infirmary and Abbie J. Lane Memorial.

## B. Academic Classes

### First-Year Medicine

1. The Department of Medicine provides six half day sessions at weekly intervals for one quarter of the class at a time as a clinical introduction to Cardiology, Respiriology, Musculoskeletal and Gastrointestinal Medicine. Three of these blocks are completed in first year and the final fourth block at the beginning of the second year. The sessions are conducted in small groups at the bedside.
2. System class teaching: Through its divisions of Cardiology, Dermatology, Endocrinology, Gastroenterology, General Medicine, Geriatrics, Hematology, Infectious Diseases, Medical Oncology, Nephrology, Neurology, Physical Medicine, and Rehabilitation, Respiriology, and Rheumatology the Department participates in the corresponding interdisciplinary class teaching programme and basic science-clinical correlative teaching sessions.
3. Electives: The Department offers student electives in areas within its various divisions.
4. Members of the Department are involved in the Case Practice sessions at the Fenwick Learning Resource Centre, where students have clinical encounters with simulated patients which illustrate the relevance of the material they are learning in the corresponding COPS (Case Oriented Problem Stimulated) curriculum component.

### Second-Year Medicine

1. The Department of Medicine provides 15 bedside half-day teaching sessions at weekly intervals. These sessions are conducted in small groups and are designed for students to practice integrating their learning and to become proficient at conducting complete histories and physical examinations on patients with a variety of presenting complaints. The Department also provides seven half-day sessions to one-third of the class at a time at weekly intervals as a clinical introduction to Neurological Medicine. Recommended Texts: Cecil's Essentials of Medicine; Davidson's Principles and Practice of Medicine; Bates, A Guide to Physical Examination.
2. Electives: The Department offers students electives in areas within its various divisions.
3. Members of the Department are involved in the Case Practice sessions at the Fenwick Learning Resource Centre, where students have clinical encounters with simulated patients which illustrate the relevance of the material they are learning in the corresponding COPS (Case Oriented Problem Stimulated) curriculum component.

## Third and Fourth-Year Medicine

### i. Core Medicine Clerkship:

The core Internal Medicine Clerkship will consist of 12 sequential weeks of full time internal medicine clinical care experience during the third year. This will be broken down into three four-week rotations. Each Clinical Clerk will do one rotation on a medical teaching unit at the Halifax Infirmary Site of the QEII Health Sciences Centre. A second general medical type experience will be selected from a short menu of general medical teaching services at the Victoria General and Halifax Infirmary Sites of the QEII Health Sciences Centre (a second MTU rotation, Intensive care, Cardiology, Geriatrics or Nephrology) or General Medicine Services at the Saint John Regional Hospital. A third four-week rotation will be a medical sub-specialty selective, which the students can take at the QEII Health Sciences Centre, Saint John Regional Hospital or other academic centres in Canada.

During these rotations the Clinical Clerk will function as a junior member of house staff with responsibilities for inpatients and particularly during the sub-specialty selective rotation, outpatient care. Students will improve their history and physical examination skills under supervision of more senior members of the clinical care team. They will also learn to investigate and manage common medical problems. This involves a mature commitment to continuous patient care including on-call responsibilities staying within the health care facility for a 24-hour continuous time block.

Students will participate in teaching rounds on each of the rotations to which they are assigned. There is also a series of noon hour seminars presented at the Halifax Infirmary site of the QEII Health Sciences Centre as well as at the Saint John Regional Hospital. In addition, a series of two-hour Wednesday seminars will provide an educational programme to the Clinical Clerks on topics that are less commonly seen on clinical rotations. The Clinical Clerks are provided with a list of common medical topics around which they should base their reading for internal medicine.

At the end of each rotation each student will be evaluated using a standardized in-training evaluation report (ITER). This will be filled out by the student's preceptor with input from more senior house staff as well as other health care professionals. At the end of the 12-week block a written multiple choice examination will take place. At the end of every 2 blocks (24 weeks) an examination (OSCE) will be done that focuses on clinical skills.

### ii. Clerkship Electives in Internal Medicine:

During the fourth year of medical school the students are provided with a block of time for elective experiences. During this time, a Clinical Clerk may choose to do an elective within the Department of Medicine. These electives may be a similar experience as one of the medical sub-specialties provided during the core Internal Medicine Programme or a more individualized programme may be arranged with a preceptor within the Department of Medicine. The elective rotation may involve an on-call experience. Evaluations consist of completion of an in-training evaluation report by the preceptor.

### iii. Continuing and Preventive Care Unit (CPCU):

CPCU takes place during the second half of fourth year for 12 weeks. All students do a three week Geriatrics rotation organized by the Division of Geriatrics, Department of Medicine. Many of the other rotations in this unit are done in various aspects of Internal Medicine with the emphasis on outpatient care of non-acute illness.

## C. Residency Training

The Department provides a fully approved Internal Medicine training programme and fully approved specialty training in Cardiology, Dermatology, Endocrinology, Gastroenterology, Hematology, Infectious Diseases, Medical Oncology, Microbiology, Nephrology, Neurology, Physical Medicine and Rehabilitation, and Rheumatology. These programmes are based at the various sites of the QEII Health Sciences Centre.

1. Internal Medicine: The core programme in internal medicine is a three-year programme in which the resident gains experience in general internal medicine, critical care and most of the sub-specialties of internal medicine. The general internal medicine experience includes

two large Medical Teaching Units with pyramidal tiers of housestaff. There are significant ambulatory care rotations from the second year onwards. Community experience is offered in the second year. The third year of training includes more consultation experiences. Successful completion of the core programme in internal medicine is a prerequisite to sub-specialty programmes.

2. Cardiology: This programme is based at the New Halifax Infirmary with rotations to the Izaak Walton Killam - Grace Health Centre.
3. Dermatology: This programme is based at the Victoria General Site with rotations at the Halifax Infirmary Site and the Izaak Walton Killam - Grace Health Centre.
4. Endocrinology: This programme is based at the Victoria General Site.
5. Gastroenterology: This programme is based at the Victoria General Site and the Halifax Infirmary Site with elective rotations in Pathology and Radiology or to the Izaak Walton Killam - Grace Health Sciences Centre.
6. General Internal Medicine: This includes a fourth year of training which is specifically tailored to career needs.
7. Geriatric Medicine: This programme is based in the Veteran's Memorial Building.
8. Hematology: This programme is based at the Victoria General Site with rotations to the Izaak Walton Killam - Grace Health Sciences Centre and the Hematology Laboratories.
9. Infectious Diseases: This programme is based at the Victoria General Site.
10. Medical Oncology: This programme is based at the VG site and Nova Scotia Cancer Centre.
11. Microbiology: This programme is based at the Victoria General site.
12. Infectious Diseases/Microbiology: This is a combined programme based at the Victoria General Site.
13. Neurology: This programme is based at the Victoria General Site.
14. Physical Medicine and Rehabilitation: This programme is based at the Nova Scotia Rehabilitation Centre, with rotations available in appropriate medical and surgical disciplines.
15. Rheumatology: This programme is based in the Victoria General Site.

## Microbiology and Immunology

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Location: Sir Charles Tupper Medical Building  
Telephone: (902) 494-3587  
Fax: (902) 494-5125

### Professor and Head of Department

Johnston, G.C.

### Professors

Anderson, R.  
Duncan, R.  
Forward, K.R. (major appointment in Pathology)  
Hoffman, P.S. (joint appointment in Medicine)  
Hoskin, D.W. (major appointment in Pathology)  
Issekutz, T. (major appointment in Pediatrics)  
Johnston, G.C.  
Lee, P.W.K. (joint appointment in Pathology)  
Lee, T. (joint appointment in Surgery)  
Mahony, D.E.  
Marshall, J.S. (joint appointment in Pathology)  
Stoltz, D.B.  
Stuttard, C.

### Associate Professors

Barnes, C.  
Bortolussi, R.A. (major appointment in Pediatrics)  
Haldane, D.J.M. (major appointment in Pathology)  
Halperin, S.A. (major appointment in Pediatrics)  
Issekutz, A.C. (major appointment in Pediatrics)  
Lee, S.F. (joint appointment with Oral Biology)  
Stadnyk, A.W. (major appointment in Pediatrics)

### Assistant Professors

Davidson, R.  
Faulkner, G.T.  
Garduno, R. (Joint appointment in Medicine)  
Lin, T.-J. (joint appointment in Pediatrics)  
West, K. (major appointment in Medicine)

### Sr. Instructor

Murray, L.E.

## A. Course of Study

### First-Year Medicine

The Department of Pathology and the Department of Microbiology and Immunology participate in an eight-week unit (PIM Unit) in the COPS curriculum. The Unit is comprised of a series of lectures, case studies and laboratory sessions which address basic science issues underlying clinical situations encountered in these disciplines.

### Residency Training

An integrated University residency training programme is given by the Department. It comprises four years in Medical Microbiology and meets the requirements of the Royal College of Physicians and Surgeons of Canada. Participating hospitals are the QEII Health Sciences Centre and the Izaak Walton Killam Health Centre for Children, Women and Families.

## B. Graduate Studies

The MSc programme generally requires a minimum of two years to complete and comprises classes in microbiology and immunology and allied disciplines, and research work resulting in a written thesis.

The PhD programme is approximately three to five years duration and involves class work as for the MSc plus research of a high calibre culminating in a thesis.

Graduate programme streams in Immunology, Virology, Molecular Genetics and Microbial Pathogenesis are available to allow well-qualified students to concentrate their studies while acquiring general knowledge and understanding of major concepts in Microbiology and Immunology. Please consult the Graduate Studies calendar for list of classes offered.

An MD/PhD programme is also available.

Students should consult the Graduate Studies Calendar or the Graduate Studies Coordinator for a full description of these programmes.

### **C. Research Facilities**

Members of the Department are housed in the Sir Charles Tupper Medical Building, the QEII Health Sciences Centre, the IWK Health Centre, the MacKenzie Building, and the Dentistry Building. Research in both basic and clinical microbiology, immunology and related disciplines is carried out in laboratories at these locations.

### **D. Classes**

#### **Classes for Dental Students**

First Year Microbiology: This class covers the general principles of medical bacteriology, virology, mycology, parasitology and immunology. Specific topics related to oral infectious diseases complete the class.

#### **Classes for Science Students**

The Department of Microbiology and Immunology offers a BSc. Honours programme, a Combined Honours programme with the departments of Biochemistry & Molecular Biology and Biology, and provides a wide range of classes, listed below, dealing with various aspects of microbiology and immunology. Students should consult the Faculty of Science Undergraduate Calendar for a list of courses offered.

#### **Classes for Health Professions Students**

The Department of Microbiology and Immunology offers separate microbiology courses to students in the School of Pharmacy, School of Nursing, Dental Hygiene, Dentistry and School of Physiotherapy. Please consult the appropriate Calendar for detailed course descriptions.

## **Obstetrics and Gynecology**

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Location: IWK Health Centre  
5980 University Avenue  
Halifax, Nova Scotia B3H 4N1  
Telephone: (902) 494-2455

### **Professor Emeritus**

Tupper, W.R.C.

### **Professor and Head of Department**

Young, D.C.

### **Professors**

Allen, A.C. (major appointment in Pediatrics)  
Armson, A.  
Baskett, T.F.  
Dunphy, B.  
Farrell, S.A.  
Graves, G.R.  
Isa, N.N.  
Wilkinson, M.  
Wrixon, W.

### **Associate Professors**

Grimshaw, R.  
Parish, B.  
Shukla, R. (major appointment in Anaesthesia)  
Smith, S.  
Stinson, D.L. (major appointment in Pediatrics)  
Webster, R.D.  
Wenning, J.  
Whyte, R. (major appointment in Pediatrics)  
Van den hof, M.

### **Assistant Professors**

Allen, V.  
Bentley, J.  
Bouzayen, R.  
Corkum, T.P.  
Craig, C.  
Delisle, I.  
Dempster, J.  
Gilmour, D.  
Howett, A. (major appointment in Pediatrics)  
Jangaard, K. (major appointment in Pediatrics)  
Landymore, K.  
Loebenberg, R.  
Lord, H.L.  
Murphy, P. (major appointment in Physiology/Biophysics)  
Pearce, P. (major appointment in Psychiatry)  
Reardon, E.  
Robinson, S. (major appointment in Medicine)  
Sanderson, F.  
Scott, H.  
Scott, T.  
Vincer, M. (major appointment in Pediatrics)  
Zilbert, A.

### **Lecturers**

Colford, D.  
Kogon, D.  
Mawdsley, S.  
Sheppard, K.

## Clinical Instructors

Adam, C.  
Brodie, G.  
Butt, K.  
Caddick, R.  
Christie, G.B.  
Connors, S.  
Crowley, J.  
Crumley, J.  
Cudmore, D.W.  
Gardner, A.  
Gillespie, K.  
Good, H.G.  
Henry, J.S.  
King, L.  
Kingston, M.B.  
Knickle, D.A.  
Landau, P.  
MacKay, J.  
Moore, T.  
Morgan, D.S.  
Saxon, R.

The objectives of the Department are to make available a basic core of knowledge in Obstetrics and Gynecology, and, at the same time, provide sufficient opportunity for self-education. The objectives are those laid out in the "core curriculum" developed by the Association of Professors of Obstetrics and Gynecology.

The objectives indicate the minimum of knowledge, skills and behaviour patterns the student must attain prior to entering an internship/practice. These objectives are not meant to be all embracing. It is the responsibility of the students to identify their own priorities and to be sure they acquire the knowledge and skills defined in the objectives. The Department provides lectures, audio-visual aids, discussion groups and suggested reading material. In addition, students have an opportunity to be actively involved in patient assessment and care.

### A. COPS Clerkship

The Women, Children, and Youth Unit of the clerkship consists of six weeks of Pediatrics and six weeks of obstetrics and gynaecology which includes one week of newborn experience. Half of the students will complete their rotation at the IWK Health Centre and half will go to other sites in the Maritime Provinces. Students at the IWK will attend regularly scheduled seminar sessions during which the major problems encountered in obstetrics and gynaecology will be discussed. Students at other centres in the Maritime Provinces will have access to these lectures by videotape and teleconferencing. In addition, all students are required to complete a log of practical clinical skills in obstetrics and gynaecology as well as pediatrics. Students are part of the clinical health care team and receive first hand clinical experience in a variety of skills including pelvic examination and the conduct of normal labour and delivery.

### B. Electives

The Department of Obstetrics and Gynaecology offers electives in General Obstetrics and Gynaecology (either at the IWK or in community sites), Operative Gynaecology, Gynecology, Maternal Fetal Medicine, Urogynaecology, and Reproductive Endocrinology. Students outline their learning objectives and appropriate preceptors are assigned.

### C. Postgraduate Training in Obstetrics and Gynecology

Further training required to be a specialist in Obstetrics and Gynecology involves five years of post-MD specialty training, which includes a PGYI year. We have modified this year to suit our specialty requirements, however it basically involves rotations through the various major areas of Surgery and Medicine. This includes Obstetrics and Gynecology, Neonatology, Internal Medicine, General Surgery, Surgical Intensive Care, Emergency Medicine, and elective rotations. During the PGYI year trainees may receive part of their education at the IWK Health Centre and

the QEII Health Sciences Centre in Halifax, Nova Scotia; Saint John Regional Hospital, Saint John, New Brunswick.

The remaining four years, PGYII through PGYV, involves two years of core Obstetrics and Gynecology, a year and a half of sub-specialty and electives, and six months as senior resident in Obstetrics and Gynecology. This programme is designed to meet the requirements of the Royal College of Physicians and Surgeons of Canada. Hospitals participating are the IWK Health Centre and the QEII Health Sciences Centre in Halifax, Nova Scotia, and the Saint John Regional Hospital, Saint John, New Brunswick.

A formal academic programme with pathology seminars, Grand Rounds, basic science seminars, Journal Clubs, and resident education seminars function throughout the academic year.

# Ophthalmology

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Location: Queen Elizabeth II Health Sciences Centre  
1278 Tower Road  
Halifax, NS B3H 2Y9  
Telephone:(902) 473-4343

## Professor Emeritus

MacRae, D.M.

## Professor and Head of Department

Cruess, A.F..

## Professors

Barnes, S.  
Chauhan, B.C.  
Guernsey, D.  
Kelly, M.E.  
LeBlanc, R.P.  
Maxner, C.E.  
Ramsey, M.S.

## Associate Professors

Baldrige, W.B.  
Kozousek, V.  
LaRoche, G.R.  
Nicolela, M.  
Tremblay, F.

## Assistant Professors

Andrews, D.M.  
Artes, P.H.  
De Becker, I.  
Dickinson, J.D.  
George, S.P.  
Hoskin-Mott, A.E.  
HoYuen, V.  
Humayan, M.  
MacNeill, J.R.  
Mishra, A.V.  
O'Brien, D.M.  
Orr, A.  
Rafuse, P.E.  
Robitaille, J.  
Samad, A.  
Sapp, G.A.  
Seamone, C.

## Lecturers

Beaton, J.W.  
Belliveau, D.J.  
Dayal-Gosine, L.  
Hahn, E.  
Keating, D.M.  
Lakosha, H.  
Mann, C.G.  
Mchandas, R.  
Pasternak, S.  
Pretty, B.R.  
Price, P.  
Scott, R.C.  
Silver, M.

## A. Undergraduate Medical Training

Clinical clerks will spend a core rotation in ophthalmology. They will rotate through both adult and pediatric ophthalmology clinics, exposing them to the diagnosis and management of both emergency and chronic ophthalmic conditions. There are several didactic lectures, a computer-based learning module and an audio-visual library.

Text: *Basic Ophthalmology for Medical Students and Primary Care Residents*

Electives are also available for second and fourth year students upon permission of the department.

## B. Residency Training

An integrated University residency training programme is available consisting of a five year postgraduate programme with four core clinical years meeting the requirements of the Royal College of Physicians and Surgeons of Canada. The PGY1 year consists of formative rotations in relevant services including two months of Ophthalmology. Clinical activities are carried out in the facilities of the QEII Health Sciences Centre, the IWK Health Centre, and selected community based locations. A mandatory research component of the programme is supported by a strong faculty.

# Pathology

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Location: Tupper Building  
Eleventh Floor  
Telephone:(902) 494-2091  
Fax: (902) 494-2519

## Professor Emeritus

Cooper, J.H.  
Ghose, T.  
Janigan, D.T.

## Head of Department

Moss, M.A.

## Professors

Casson, A.G. (major appointment in Surgery)  
Forward, K.  
Fraser, A.D.  
Greer, W.L.  
Guernsey, D. (cross appointment in Physiology and Biophysics)  
Hoskin, D.  
Issekutz, A. (major appointment in Pediatrics)  
Issekutz, T. (joint appointment in Pediatrics)  
Lee, T. (major appointment in Microbiology & Immunology)  
Malatjalian, D.A. (cross appointment in Medicine)  
Marshall, J.S. (joint appointment in Microbiology and Immunology)  
Moss, M.A.  
Nassar, B.A.  
Rowden, G. (cross appointment in Medicine)  
Walsh, N.  
Wright, J.R. (cross appointment in Surgery)

## Associate Professors

Dooley, K.C.  
Fraser, R.B.  
Guha, A.K.  
Gupta, R. (cross appointment in Urology)  
Haldane, D.  
Macaulay, R.  
Morova-Protzner, I. (Saint John)  
Riddell, C. (cross appointment in Biochemistry)  
West, K. (major appointment in Medicine)  
Wright, B.A. (South Shore Regional)

## Assistant Professors

Alexander, C. (Colchester)  
Anderson, D.R. (major appointment in Medicine)  
Aziz, T. (Saint John)  
Barnard, D.R. (major appointment in Pediatrics)  
Barnes, P.J.  
Bullock, M.  
Cadeau, B.J. (Saint John)  
Covert, A.A.  
Craig, S.  
Davidson, R.J. (major appointment in Microbiology & Immunology)  
Foyle, A. (cross appointment in Medicine)  
Geldenhuys, L.  
Giacomantonio, C. (major appointment in Surgery)  
Godlewski, M.K. (Saint John)  
Hardy, G.J. (Saint John)  
Hirsch, G.M. (major appointment in Surgery)  
Hossain, M. (Saint John)  
MacIntosh, R.  
McAlister, V. (major appointment in Surgery)

Murray, S.K.  
Norman, C. (Saint John)  
Obenson, K. (Saint John)  
O'Brien, A.M.E. (Saint John)  
Powell, C.V.L. (Saint John)  
Protzner, F.K. (Saint John)  
Ramsey, M. (major appointment in Ophthalmology)  
Robitaille, J. (major appointment in Ophthalmology)  
Sadek, I.  
Shawwa, A.  
Tabanda-Lichauco, R.C. (Saint John)  
Yu, W.

## Lecturers

Bowes, V.F. (Dartmouth)  
Desormeau, L. (Antigonish)  
Hayne, O.A. (major appointment in Medicine)  
Murphy, J.S. (Dartmouth)

## Honorary Adjunct

Cole, D.  
Douglas, D.J.  
Pelham, T.  
Rand, T.  
Scott, R.E.

## A. Course of Study

### First Year Medicine

General Pathology: Pathology in the first year of medicine is combined with Immunology and Microbiology to form an eight week unit (PIM Unit) in the COPS curriculum. The four weeks of pathology teaching deals with understanding of basic responses of cells, tissues and organs to various injurious stimuli with particular emphasis on the role of such responses in the pathogenesis of disease. The subjects covered by the programme are: cell injury, inflammatory responses, neoplasia, fluid and hemodynamic derangements. These are presented to the students through: (1) lectures, (2) case discussion in small group tutorial sessions, (3) laboratory sessions.

The class provides students with the basic pathology knowledge necessary to understand pathological changes in diseased organs in the subsequent years.

### Second Year Medicine

System Pathology: System Pathology forms a part of the organ oriented units established for the second year. Several members of this Department are actively involved in incorporating laboratory sessions and lectures in various system units.

### Electives

A programme is available, by arrangement, for a limited number of students who wish to have electives and extend their learning in pathology beyond what is presented in the core programme of lectures and laboratories, specifically those considering pathology as a future career.

### B. Open Conferences

A number of departmental conferences in the Dr. D.J. Mackenzie Laboratories are available to students. These are scheduled weekly throughout the year and are: surgical pathology, gross autopsy pathology, neuropathology, GI pathology, nephropathology, pulmonary, dermatopathology uropathology, transplant pathology, ear-nose-throat, cytological nervous system, eye, gynaecologic pathology rounds, lecture classes in pathobiology, clinical medical biochemistry.

### C. Residency Training

An integrated University residency training programme is available in the Department, meeting the requirements of the Royal College of Physicians and Surgeons of Canada in Anatomical Pathology, General Pathology and Hematologic Pathology. Participating hospitals are the QEII Health Sciences Centre, the IWK Health Centre for Children, Women and

Families, and the Saint John Regional Hospital in Saint John, New Brunswick.

## D. Classes

### Classes for Dentistry Students

Second Year: A systematic survey of human disease is given with special emphasis on material directly relevant to the practice of Dentistry. The class is described in detail in this calendar in the Faculty of Dentistry section.

### Classes for Graduate Students

The Department currently offers both a MSc and a PhD graduate studies programme. Please consult the Graduate Studies calendar for class information.

## Pediatrics

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Location: IWK Health Centre

Halifax, Nova Scotia

Telephone:(902) 470-8229

Fax: (902) 470-7975

### Professors

Allen, A., MD, CM (McGill) FAAP, FRCPC, Neonatology

Bortolussi, R., MD (Toronto), FRCPC, Infectious Disease

Bryson, S., PhD (McGill) Joan & Jack Craig Chair in Autism

Byers, D. BSc, MSc, PhD (Alberta), Membrane Biochemistry & Molecular Biology

Camfield, C., MD (U.Michigan) FRCPC, General Pediatrics

Camfield, P., MD (Harvard), FRCPC, Neurology

Cohen, M.M., Jr, DMD (Tufts), MsD, PhD (Minnesota), Oral & Maxillofacial Pathology

Cook, H., B Sc, MSc, PhD (Dalhousie), Membrane Biochemistry & Molecular Biology

Crocker, J., MD, CM (Dalhousie), FRCPC, Nephrology

Dooley, J., MB, BCh, BOA (Ireland), FRCPC, Neurology

Finley, J., MD (McGill), FRCPC, Cardiology

Goldbloom, R., OC, MD, CM (McGill), FRCPC, FAAP, General Pediatrics

Halperin, S., MD (Cornell), FRCPC, Infectious Disease

Issekutz, A., MD (Dalhousie), FRCPC, Infectious Disease and Immunology

Issekutz, T., MD (Dalhousie), FRCPC, Infectious Disease and Immunology

Sister Kenny, N., OC, MD (Dalhousie), FRCPC, General Pediatrics

Kronick, J., MD (McMaster) Medical Genetics, PhD, FAAP, FRCPC (Head, Dept. of Pediatrics)

McGrath, P., MA, PhD (Queens), Clinical Psychology

McMillan, D., MD (Alberta, FRCPC, Neonatology

Ward, T., MD (Sask), FRCPC, DHSA, General Pediatrics

### Associate Professors

Acott, P., MD (Dalhousie), FRCPC, Nephrology

Barnard, D., MD (Dalhousie), FRCPC, Hematology

Blake, K., MB (London), FRCPC, General Pediatrics

Dodds, L., MS (U Washington), PhD (U Toronto), Perinatal Epidemiology

Fernandez, C., MD (McMaster), FRCPC, Hematology/Oncology

Gordon, K., MD (Queens) FRCPC, Neurology

Jangaard, K., MD (Dalhousie), FRCPC, Neonatology

Lang, B., M D (Dalhousie) FRCPC, Pediatric Rheumatology

Langley, J., MD (Dalhousie), FRCPC, Infectious Disease

Larson, A., MD (California), FRCPC, General Pediatrics

McMaster, C., BSc, PhD (Manitoba), Membrane Biochemistry & Molecular Biology

Pianosi, P., MD (Toronto), FRCPC, Respiriology

Ridgway, N., BSc, MSc, PhD (UBC), Membrane Biochemistry & Molecular Biology

Sharratt, G., MB (London), FRCPC, Cardiology

Shea, S., MD (Calgary), FRCPC Developmental Pediatrics

Stadnyk, A., BSc, PhD (McMaster), Immunology

Stinson, D., MD (Western Ontario), FRCPC, Neonatology

Taylor, B., MD (U Sask), FRCPC, Pediatric Emergency Medicine

Whyte, R., MB, BS (London), FRCPC, Neonatology

### Assistant Professors

Chambers, C., PhD (UBC), Pediatric Pain Research

Chen, R., MD (Dalhousie), FRCPC, Cardiology

Chowdhury, D., MBBS, DCH, MRCP(UK), FRCP(Edin), General Pediatrics

Crooks, B., MB (Birmingham), Hematology

Cummings, E., MD (Western), FRCPC, Endocrinology

David, Y., MB (Bombay), FRCPC, General Pediatrics

Dyack, S., MD (Dalhousie), FRCPC, Clinical Genetics

Fraboni, T., MD (Ottawa), FRCPC, General Pediatrics/Emergency Medicine  
 Frager, G., MD (McMaster), FRCPC, Hematology/Oncology  
 Gatién, J., MD (Dalhousie), FRCPC, Allergy  
 Hawkins, A., MD (Memorial), FRCPC, General Pediatrics  
 Howlett, A., MD (Toronto), FRCPC, Neonatology  
 Huber, A., MD (UBC), FRCPC, Rheumatology  
 Hughes, D., MD (Dalhousie), FRCPC, Respiriology  
 Johnston, B., PhD (Calgary), Microbiology/Immunology  
 Joseph, K.S., MD (India), PhD (McGill), Perinatal Epidemiology  
 Kawchuk, J. MD (Alberta), FRCPC, General Pediatrics  
 LeBlanc, J., MD (McMaster), MSc, FRCPC, General Pediatrics  
 Lin, T.-J. PhD (China), Immunology  
 MacDonald, N., MSc, MD (Ottawa), FRCPC, Infectious Disease  
 Mokashi, A., MD (Alberta), FRCPC, Endocrinology  
 Morrison, K., MD (Dalhousie), FRCPC, General Pediatrics/Child Protection  
 Ornstein, A., MD (McGill), FRCPC, General Pediatrics/Child Protection  
 Otley, A., MD (Toronto), MSc, FRCPC, Gastroenterology  
 Ramsey, S., MD (Ottawa), FRCPC, Rheumatology  
 Rashid, M., MB, BS, FRCPC, Gastroenterology  
 Shah, S., MB (Uganda), ChB, MMed(Peds), FRCPC, Cardiology  
 Smith, D., MD (Dalhousie), FRCPC, General Pediatrics  
 Smith, L., MSc (Brown), PhD (Dalhousie), Developmental Pediatrics  
 Vincer, M., MD (Memorial), FRCPC, Neonatology  
 Warren, A., MD (Memorial), FRCPC, Cardiology  
 Weckman, J., MD (Toronto), FRCPC, General Pediatrics  
 Wood, E., MD (Dalhousie)MSc, FRCPC, Pediatrics, Neurology  
 Wren, P., MD (Queen's), FRCPC, Emergency Medicine  
 Yhap, M., MB (Bristol), FRCPC, Hematology/Oncology

### Lecturers

Kapur, S., MD (Dalhousie), FRCPC, Allergy/Immunology  
 McCulloch, D., MD (Dalhousie), FRCPC, Emergency Medicine  
 McRobert, E., MB, BCh (Trinity), FRCPC, Neonatology  
 Morley, C., MD (Dalhousie), FRCPC, General Pediatrics  
 Rex, Dr. G. MD (Memorial), FRCPC, Allergy/Immunology  
 Schwartz, S., MD (McGill), FRCPC, General Pediatrics  
 Soder, C., MD (Alberta), FRCPC, Anaesthesia  
 Szudek, E., MD (Poland), FRCPC, Neonatal Perinatal Medicine  
 Wenning, J., MD (Dalhousie), FRCSC, Obstetrics

### Regional Appointments

#### Saint John, NB

Alexander, W., MD (Memorial), FRCPC, Lecturer  
 Garey, N., MD (Dalhousie), FRCPC, Assistant Professor  
 Duncan, J., MD, CM (Dalhousie), FRCPC, Lecturer  
 Meek, D., MD (Wales), FRCPC, Assistant Professor  
 Ojah, C., MD, BS (West Indies), FRCPC, Lecturer  
 Paras, E., MD (Turkey), FRCPC, Lecturer  
 Siau, S., MD (Nat. Taiwan), Lecturer  
 Sanderson, S., MD (Toronto), FRCPC, Lecturer

#### Kentville, NS

Brown, C., MD

#### Sydney, NS

Grant, J., MD  
 Kajetanowicz, A., MD  
 Lynk, A., MD

#### Charlottetown, PE

Bethune, M., MD  
 Bigsby, K., MD  
 Noonan, P., MD  
 Siemens, R., MD  
 Zelman, M., MD

#### Summerside, PE

Wong, D. MD

### Moncton, NB

Canning, A., MD  
 Canning, R., MD

### A. Course of Study

#### First Year Medicine

First-year core pediatric material on growth and development is studied within the context of the life cycle sessions, which are a part of the first-year patient doctor unit. Within the life cycle sessions, students acquire an overview of human growth and development from infancy through old age. A series of lectures/large group sessions cover psychological, emotional, and behavioural aspects of child development. Additional large group sessions look at adulthood and old age within a developmental framework. Adolescence is studied in a case based tutorial.

First-year students, working in pairs, are assigned to follow a newborn infant and his/her family during the first year of life. The students visit the family at home on four occasions. They observe the physical and behavioural development of the infant and conduct standardized screens of development. In addition, they observe the parent/child interactions, infant temperament, and learn about common medical problems and preventive health care in the first year of life including nutrition and immunization.

Additional learning opportunities in paediatrics occur within the genetics, embryology and reproductive class, where the cases have many paediatrics-related aspects.

#### Second-Year Medicine

The programme is devoted principally to the acquisition of the basic skills of pediatric history-taking, family interviewing and the physical examination of infants and children. This programme is carried out in wards of the IWK Health Centre. Students also attend the neonatal nurseries of the IWK to develop experience and understanding of medical problems of the newborn infant. Regular home visits to the infants whose early growth and development they observed during the first year are optional in the second year schedule.

Recommended Textbook: Goldbloom, R.B., (3rd Ed), *Pediatric Clinical Skills*, W.B. Saunders, 2002.

### B. Clinical Clerkship

Core Pediatrics is a six week rotation. The students spend six weeks at the IWK or six weeks at offsite hospitals (i.e. Saint John Regional, Saint John, NB; QEII, Charlottetown, PE). At the IWK, the students spend three weeks on the general pediatric inpatient teams under the direct supervision of the residents and the attending physicians. They spend three weeks in an ambulatory care setting and attend our patient clinics, the emergency room, and subspecialty clinics. The offsite rotations cover general pediatrics on the inpatient ward with integration of ambulatory and ER. Many sites offer extensive neonatal training with certification in resuscitation. The students are active members of the team and gain considerable experience in history taking, physician examination, diagnosis, and treatment of childhood diseases. Formal and informal teaching sessions are conducted by senior members of the team and the clerks are also encouraged to attend the various clinical case conferences held daily in the hospital. COPS tutorials are held throughout the rotation and a wide range of common pediatric problems are encountered. (These tutorials are teleconferenced (video or audio) to the offsites. The students are evaluated for each month of their rotation and there is an end of rotation MCQ and an OSCE examination.

Recommended Texts:

1. *Nelson's Textbook of Pediatrics*, R.R. Behrman and V.C. Vaughn III, Editors, latest edition, W.B. Saunders Company.
2. *Pediatrics*, A.M. Rudolph and J.J.E. Hoffman, Editors, latest edition, Appelton and Lange.
3. *Essential Pediatrics*, D. Hull, D.I. Johnston, Editors, 4<sup>th</sup> edition, Churchill Livingstone.
4. *Pediatrics, A Primary Care Approach*, C.D. Berkowitz, 2<sup>nd</sup> edition, W.B. Saunders Company.

### C. Electives

The Department of Pediatrics offers elective programmes for interested students in all four years. Arrangements for these electives may be made through the Department early in each academic year. The department elective representative for the first two years is Dr. D. Hughes, 470-8218, and for the clerkship years is Dr. P. Yhap, 470-8778 and Dr. K. Blake, 470-6499. Inquiries regarding elective programmes at other medical schools or from students at other schools should be directed to the Undergraduate Medical Education and Student Affairs Office.

### D. Residency Training

The Department of Pediatrics at Dalhousie University offers a four-year postgraduate training programme in paediatrics. Successful completion of this residency renders the trainee eligible for the specialty examinations in paediatrics offered by the Royal College of Physicians and Surgeons of Canada, and by the American Board of Pediatrics. The programme is based primarily at the IWK Health Centre. This institution with pediatric beds, serves as the tertiary care pediatric referral centre for the three Maritime provinces of Canada, Nova Scotia, New Brunswick, and Prince Edward Island. In addition, it serves as a community pediatric hospital for the Halifax Regional Municipality. The population of the metropolitan area is approximately 339,000. The referral base in the Maritime provinces is approximately 1.8 million.

Residents also rotate to Neonatology and Perinatology at the IWK Health Centre (6000 deliveries per year) An active Regional Reproductive Care Programme encourages antenatal referrals of all high-risk pregnancies from Nova Scotia and PEI. Exposure to normal newborns and an extremely busy neonatal intensive care unit provide a broad range of neonatal exposure for residents. Pediatric residents also attend all high-risk deliveries.

The Saint John Regional Hospital is a facility which has a pediatric unit affiliated with Dalhousie University. Residents rotate through general inpatients pediatrics and ambulatory pediatrics at the Saint John Regional which provides secondary and some tertiary care for children from a large area of New Brunswick. Saint John is a city of 130,000. Accommodation is provided for residents who are on rotation in Saint John.

The programme in paediatrics is designed to provide a well-rounded experience, covering all "core" areas, but also providing time for specialization in areas of individual interest. The first three years of training cover the core requirements established by the Royal College of Physicians and Surgeons of Canada. Specific rotations will include the Emergency Department, Ambulatory Clinics, In-patient general Pediatric wards, Newborn Intensive Care Units, Pediatric Intensive Care Unit, Pediatric Surgery, Child Psychiatry, Behavioural and Developmental Pediatrics, and many of the Pediatric subspecialty services. In addition to time set aside for research, the fourth year of the programme can usually be individually designed to meet the specific training needs and interests of the resident.

There is ample time for electives, which may be spent pursuing a clinical specialty, or engaging in a research project. Many of the faculty members are actively involved in research, and resident participation is mandatory.

The training programme provides "graded responsibility" to house staff according to the level of seniority and expertise. House staff will be on call no more than one night in four. Senior trainee do less on call. Each resident is permitted four weeks paid vacation per year, and is permitted to attend one educational conference per year.

In Halifax there are 50 full-time members of the Department, (with expertise in general pediatrics and most pediatric sub-specialties) and 10 part-time faculty members. Most of the latter group are general pediatricians practicing in the community. In addition, a further 10 individuals from the Departments of Dentistry, Dermatology, Surgery, Psychiatry, Physical Medicine and Rehabilitation, Gynecology and Psychology have cross appointments with the Department of Pediatrics. In Saint John, New Brunswick, the faculty is made up of 2 full-time and 7 part-time members.

### E. Resident Evaluation

All pediatric postgraduate trainees must take the annual in-training examination of the American Board of Pediatrics. This examination, the cost of which is partially subsidized by the Department, provides valuable feedback concerning areas of strength or weakness in clinical knowledge. It also helps the Department to assess its own deficiencies or weaknesses. After each clinical rotation, an in-training evaluation report is completed and is reviewed with the trainee. The trainees are interviewed twice annually to review evaluations and general progress. The clinical skills of the resident staff are assessed regularly by means of oral and clinical examinations.

### F. Rounds and Conferences

At the IWK Health Centre, regularly scheduled conferences include weekly Grand Rounds, Admission Rounds, Radiology Rounds and many subspecialty conferences. In addition, there is a dedicated educational time set aside for pediatric trainees. A weekly schedule of pediatric conferences and teaching sessions also exists at the Saint John Regional Hospital. All residents are subsidized to attend one approved national or international scientific meeting per year.

### G. Continuing Medical Education

Members of the Department of Pediatrics participate in the activities of the Division of Continuing Medical Education, offering annual short classes in selected topics of pediatric interests, preceptorships for periods of two to four weeks, and special training programmes tailored to individual needs of physicians interested in their own continuing education. In addition, Departmental teachers attend clinical teaching conferences at various hospitals throughout the Maritime Provinces.

# Pharmacology

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Location: Tupper Building, Sixth Floor  
Telephone:(902) 494-3435

## Professors Emeriti

Aldous, J.G.  
Ruedy, J.R.  
Vohra, M.M.  
White, T.D.

## The Carnegie and Rockefeller Professor and Head of Department

Robertson, H.A.

## Professors

Downie, J.W.  
Ferrier, G.R.  
Hall, R.I. (major appointment in Anesthesia)  
Howlett, S.E.  
Hung, O.R. (major appointment in Anesthesia)  
Kelly, M.E.M.  
Peterson, T. (major appointment in Medicine)  
Pollak, P.T. (major appointment in Medicine)  
Renton, K.W.  
Robertson, G.S.  
Robertson, H.A.  
Rusak, B. (major appointment in Psychiatry)  
Sawynok, J.

## Associate Professors

Acott, P. (major appointment in Pediatrics)  
Alda, M. (major appointment in Psychiatry)  
Anderson, G. (major appointment in Surgery)  
Blay, J.  
Gajewski, J.B. (major appointment in Urology)  
Lynch, M.E. (major appointment in Psychiatry)

## Assistant Professors

Denovan-Wright, E.M.  
Gardner, D.M. (major appointment in Psychiatry)  
Nachtigal, M.W.  
Pasumarthi, K.  
Sinal, C.

## Adjunct Professor

Cribb, A. (major appointment in Anatomy and Physiology, Vet College, and UPEI)

Pharmacology in the first year of Medicine introduces students to the principles of pharmacology and some specific drug groups primarily through a case-oriented problem-stimulated (COPS) approach. Students attend small group tutorial sessions where cases are discussed and learning issues addressed. These sessions are supplemented with lectures, patient simulation labs, and a Drug-Literature Evaluation (DLE) project.

## A. MD/PhD Programme

The Department of Pharmacology offers a combined MD/PhD Programme in Pharmacology.

## B. BSc (Med) Programme

The Department of Pharmacology offers a BSc (Med) programme in Pharmacology. Please consult the Department for details.

## C. Electives

Opportunities for elective work in pharmacology are open to students. Laboratory (research) experience should include work during the summer months as paid summer research assistants.

## D. Continuing Medical Education

The Department participates in this programme either in planning or through presentation of lectures given at various centres in the Maritime Provinces.

## E. Residency Training

The Department provides formal and informal sessions for residents. With approval, training in various research laboratories of the department can be arranged for residents to enhance their research skills.

## F. Classes

### Classes for Dental Students

Separate Pharmacology classes for dental students are given throughout the Dental programme. These are designed to emphasize those drugs most commonly employed by dentists. However, other drugs are also discussed, especially in connection with medical problems their patients may have which are not necessarily associated with their dental problems. Drug interactions and allergic reactions are stressed.

Students in the dental hygiene programme receive a separate class of lectures (DH 3007) directed at their requirements.

### Classes for Arts and Science Students

Introductory classes are offered as a credit in the Honours BSc (Biology and Biochemistry) programmes under the designation Biology 4404A, 4405B, Biochemistry 4804A, 4805B, Neuroscience 4374A, 4375B.

### Graduate Studies

Advanced work leading to the MSc, PhD and MD/PhD degrees is offered to both science and medical graduates. The Calendar of the Faculty of Graduate Studies should be consulted.

### Classes for Health Professions Students

Students registered in First Year of the College of Pharmacy receive instruction in systematic pharmacology designated as PHAC 1470.03. Students in the Occupational Therapy programme receive a class of lectures designated OCCU 4400.03.

# Physiology and Biophysics

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Location: Tupper Building, Third Floor  
Telephone:(902) 494-3517  
Fax: (902) 494-1685

## Professor Emeritus

Szerb, J.C.

## The Carnegie and Rockefeller Professor and Head of Department

Murphy, P.R.

## Professors

Barnes, S.A.

Croll, R.P.

Fine, A.M.

French, A.S.

Guernsey, D.L. (major appointment in Pathology)

Horacek, B.M.

Horackova, M.

McDonald, T.F.

Meinertzhagen, I.A. (major appointment in Psychology)

Murphy, P.R.

Pelzer, D.J.

Rasmusson, D.D.

Wilkinson, M. (major appointment in Obstetrics & Gynaecology)

Wolf, H.K.

## Associate Professors

Brown, R.E. (major appointment in Psychology)

Chauhan, B. (major appointment in Ophthalmology)

Holland, J.G.

Kozey, C.L. (major appointment with School of Physiotherapy)

Linsdell, P.

Morgunov, N.

Murphy, M.G.

Pelzer, S.

Torkkeli, P.H.

## Assistant Professors

Ali, I.S. (major appointment in Surgery)

Chen, R. (major appointment in Pediatrics)

Cowley, E.A.

Landymore, K.M. (major appointment in Obstetrics & Gynaecology)

Tremblay, F. (major appointment in Ophthalmology)

Villarroel, A.

Wang, J. (major appointment in School of Human Communication Disorders)

## Adjunct Professors

Armour, J.A.

Martin, S. (major appointment in Biology, Mount Saint Vincent University)

Rittmaster, R. (Glaxo Wellcome Inc.)

Seyfarth, E.-A. (major appointment, Privaldozent Zoological Institute, J.W. Goethe University, Frankfurt am main, Germany)

## A. Course of Study

### First Year Medicine

First-year studies follow the Case-Oriented Problem-Simulated (COPS) curriculum. The department has members serving as tutors in the various units of Med I, and provides cases, lectures and laboratory/conference sessions in the Metabolism and Function Unit.

## Second Year Medicine

The department has a major role in the Brain and Behaviour unit.

## B. Clinical Clerkship

### Electives

The Department offers two types of elective programmes to limited numbers of medical students. The Department or Office of the Dean of Medicine may be contacted for details.

1. small research projects under the direction of staff members, and
2. investigations in some depth of published work on a topic of the student's choice, utilizing the resources of the staff member and the Kellogg Health Sciences Library.

## C. Graduate-Level Classes

The Department offers suitably qualified students an opportunity to study for the degrees of Master of Science and Doctor of Philosophy. Advanced graduate seminars and lecture classes are given in cell and molecular physiology, cardiovascular physiology, membrane physiology, endocrinology, neurophysiology etc. A complete description of these programmes is in the calendar of the Faculty of Graduate Studies.

## D. Classes

### Classes for Students in the Health Professions, Dentistry, and Other Faculties

- Dentistry 1119.01: For Students in Dentistry
- Dental Hygiene 2853.06: For students in Dental Hygiene
- Physiology 1000X/Y.06: Distance Education class equivalent to Physiology 1010X/Y.06
- Physiology 1010X/Y.06: For students in Health Professions and Dental Hygiene
- Physiology 1400.06: For students in Pharmacy
- Physiology 2030X/Y.06: For students in Physiotherapy, Occupational Therapy, Health and Human Performance
- Neurophysiology 3110.03: For students in Physiotherapy and Occupational Therapy
- Physiology of the Nervous System 3140X/Y.06: For students in Occupational Therapy
- Exercise Physiology 3120.03: For students in Physiotherapy
- Physiology 4320.03: For senior undergraduates, fourth year honours Science students
- Physiology 4322.03: For senior undergraduate, fourth year Honours Science students

# Psychiatry

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Location: 9th Floor, Abbie Lane Building  
QEII Health Sciences Centre  
Halifax, NS  
(902) 473-2470 (telephone)  
(902) 471-4887 (fax)

International Psychiatry  
Room 9406  
(902) 473-2614 (telephone)  
(902) 473-4887 (fax)

Head Office  
Room 9212  
(902) 473-2464 (telephone)  
(902) 473-4887 (fax)

Administration  
Room 9208, 9216  
(902) 473-3868/7355/7358 (telephone)  
(902) 473-4887 (fax)

Education Office  
Room 9415  
(902) 473-5664 (telephone)  
(902) 473-4545 (fax)

Research Office  
Room 9412  
(902) 473-2466 (telephone)  
(902) 473-4596 (fax)

Child Psychiatry  
IWK Health Centre  
4th Floor - Link  
Head  
Orlik, H. (Acting)  
(902) 470-8375 (telephone)  
(902) 470-8937 (fax)

## Professor Emeritus

McCormick, W.O.  
Munro, A.

## Professor and Head of Department

(Vacant) Acting - Stokes, A.

## Professors

Doane, B.K.  
Flynn, P.  
Hirsch, D.  
Hirsch, S.  
Kopala, L.  
Kutcher, S.  
Leighton, A.H.  
McGrath, P.  
Munro, A.  
Murphy, J. (Adjunct)  
Rusak, B. (Killam Professor)

## Associate Professors

Alda, M.  
Carrey, N.  
Connolly, J.  
Kusumakar, V.  
Lynch, M.

Michalon, M.  
Milliken, H.  
Morehouse, R.  
Orlik, H.  
Reynolds, P.  
Rosenberg, E.M.  
Schwartz, M.  
Stokes, A.  
Teehan, M.

## Assistant Professors

Abbass, A.	Bassett, A. (Visiting)
Birnie, W.	Brooks, K.
Brooks, S.	Burley, J.
Bush, H.	Buffett, L.M.
Chengapa, V.	Chisholm, T.
Cook, A.	Covert, K.
de Coutere, I.A.A.	Devarajan, S.
Eastwood, D.	Ervin, F.R. (Adjunct)
Fisk, J.D.	Gardner, D.
Hipwell, A.	Howard, R.J.
Howes, J.L.	Kiss, I.
Leblanc, J.	MacDonald, D.D.
MacDonald, G.W.	MacDonald, J.
Maynes, D.F.	Morrison, D.
O'Donovan, C.	Rubens, M.
Westra, H.	Whitby, D.Vallis, M.

## Lecturers

Abbott, C.M.	Akoto, A.
Bergin, S.	Bhaskara, S.
Black, K.A.	Brooks, A.
Butler, G.	Bruer, R.A.
Cane, D.	Crist, W.B.
Curtis, J.	D'Costa, J.
Edwards, W.	Eskes, G.
Evans, R.	Feltham, I.
Flynn, M.	Foley, B.
Forsythe, P.	Gabriel, J.
Garvey, B.	George, P.
Good, K.	Gray, G.
Gusella, J.	Guzman, R.
Hicken, W.B.	Johl, A.K.
Joshi, V.S.	Junek, W.
McIntosh, D.	Mulhall, D.
Muthu, M.S.	Neilson, G.
O'Neill, M.T.	Onuora, A.
Pearce, P.	Pelley, R.E.
Pilon, D.	Rachwal, T.W.
Rajda, M.	Roberts, D.
Ross, M.	Rowe, H.
Santor, D.	Smith, W.E.
Steele, C.	Sullivan, M.
Theriault, P.S.	Tomlinson, M.
Wadhwa, U.	Walentynowicz, M.
Walker, J.	Williams, I.C.
Whitehorn, D.	Woulff, N.
Wilson, A.	

## Clinical Instructors

Addleman, D.  
Ahmad, K.  
Aquino, E.  
Aspin, J.  
Casson, S.  
Costanza, L.  
French, B.  
Kronfli, R.  
Payette, T.  
Perry, P.E.  
Spears, B.  
Todd, F.R.  
Watt, G.

The objectives of undergraduate teaching in the Department of Psychiatry are: to underline the significance of biopsychosocial factors in normal human development and in illness, to enable students to recognize psychiatric disorders, and to treat these disorders within their competence, or refer the patient for psychiatric investigation and management.

## A. Course of Study

### First Year Medicine - Human Behaviour

1. Within the Patient/Doctor Unit, students will receive several sessions of didactic teaching on topics including normal cognitive, social and emotional development stages, learning theory and defense mechanisms.
2. Two multidisciplinary seminars focus on infant temperament and family functioning.
3. A multidisciplinary approach to the assessment and management of psychiatric illness in adolescents follows.
4. The patient contact programme consists of three sessions, each of three hours, with seven to eight students supervised by senior psychiatrists. These are designed to introduce students to psychiatric disorders by exposing them to actual patient interviews. Students will also observe diagnostic and treatment sessions.

### Second Year Medicine - Clinical Psychiatry

Psychiatry, neurology and physiology produce an integrated unit in second-year called the Brain and Behaviour Unit. Three major psychiatric cases are studied over a period of three weeks. A series of 8 lectures and two laboratory sessions (3 hours each) complement the case studies. This Unit runs in parallel with a patient contact programme consisting of five sessions of three hours each. Groups of three to four students are supervised by junior and senior faculty. Using pre-circulated guidelines, the students learn to complete a psychiatric history and to assess the patient's mental status. They then discuss diagnosis and management with their facilitator.

### Third and Fourth Year Medicine

The clinical clerkship has been revised. In Year III - Phase I of the clerkship - Psychiatry along with the Department of Family Medicine have developed the Behavioural Medicine & Primary Care Block with the help of other specialities. During this 12-week block, students will do a 4-week core rotation in Psychiatry, a 4-week core rotation in Family Medicine, and a 4-week choice rotation. During the Psychiatry core rotation, students have a 4-week experience in either inpatient-outpatient, child, consultation-liaison psychiatry at one of the following sites: QEII Health Sciences Centre, IWK Health Centre in Halifax; The Nova Scotia Hospital in Dartmouth; Valley Regional Hospital in Kentville; or the Saint John Regional Hospital, New Brunswick. As part of the seminar programme, there are four weekly seminars. Some of the lectures are in didactic form and some are clinical vignettes which give the students an opportunity to discuss clinical issues with experts in the area. Students will also be encouraged to discuss patients they have encountered.

Year IV -- during Phase II of the clerkship, students will have the opportunity to complete 12 weeks of electives in the area(s) of their choice. In addition, students will complete the Continuing & Preventive Care Unit designed to prepare them to practice in a multidisciplinary setting and to expand their expertise in the care of patients with chronic health problems. Time is also allotted for vacation and CaRMS interviews.

## B. Electives

Electives are offered in all four years. These vary from supervised individual patient psychotherapy to involvement in research projects.

## C. Residency Training

This covers Postgraduate Years (PGY) 1 to 5.

PGY-1: This year provides broad clinical training in the following areas: psychiatry, internal medicine, emergency medicine, paediatrics, obstetrics and gynaecology, choice of selective for one month and one month of elective time.

PGY-2 to -5: These years of integrated university residency training are planned to meet the requirements of the Royal College of Physicians and Surgeons of Canada. Participating units and hospitals are the Queen Elizabeth II Health Sciences Centre Abbie Lane Building, IWK

Community Health Services, Valley Regional Hospital, Izaak Walton Killam-Grace Health Centre, The Nova Scotia Hospital and Saint John Regional Hospital.

Each postgraduate student spends at least 2 years in the central university programme to complete the mandatory rotations required by the Royal College. The remaining months are spent in a variety of psychiatric or related clinical or research settings in the Maritime Provinces or elsewhere.

Electives available in the senior years include additional training beyond the minimum time in geriatric or consultation/liaison psychiatry or experience in eating disorders, sleep/wake disorders, neuropsychiatry, forensic psychiatry, semi-rural community psychiatry, pain management, research projects or secondment to relevant non-psychiatric experience, such as neurology.

On the successful completion of the Residency Programme and the Royal College written and oral examinations, an individual can seek further subspecialty training in the Fellowship Programme. This programme has been developed to enhance training in psychiatric medicine which will meet the clinical service needs of the Province of Nova Scotia and the academic initiatives of the Department.

## D. Continuing Medical Education

The Department offers refresher classes (in collaboration with the Division of Continuing Medical Education) for general practitioners and specialists. General practitioners may come for a clinical traineeship in the Department of Psychiatry, and the Department takes part in the general classes offered by the Division of Continuing Medical Education. On a regular basis throughout the academic year, clinical case conferences and university rounds presentations are given at the Metro teaching hospitals.

# Diagnostic Radiology

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Location: QEII Health Sciences Centre  
Victoria General Site, Third Floor  
Halifax, Nova Scotia  
Telephone:(902) 473-5452

## Professor Emeritus

Fraser, D.B.

## Head of Department

Lo, C.

## Professors

Daniels, C.  
LeBron, G.P.  
Miller, R.M.

## Associate Professors

Andrew, J.  
Barnes, D.  
Daniels, C.  
Fraser, J.D.  
Fried, L.A.  
Iles, S.  
Jackson, J.R.  
Johnson, A.J.  
Jones, G.R.M.  
Lo, C.D.  
Mason, W.F.  
Matte, G.  
Mawko, G.  
Miller, R.M.  
Mitchell, M.J.  
O'Brien, K.  
Riding, M.D.

## Assistant Professors

Abraham, R.  
Anderson, I.  
Barry, M.  
Caines, J.S.  
Covert, W.N.  
D'Arcy, R.  
Dobson, R.  
Flemming, B.K.  
Gates, L. (cross appointment with Radiation Oncology)  
Gordon, D.  
Iles, D.  
Llewellyn, G.  
Macken, M.B.  
Maloney, W.J.  
Martin, R.H.  
Murphy, G.F.  
Ross, A.  
Schaller, G.  
Schmidt, M.  
Thompson, D.  
Vandorpe, R.  
Whelan, J.F.  
Yeadon, D.E.

## Lecturers

Acton, D.  
Allen, J.

Archer, B.  
Barton, W.F.  
Berry, R.  
Borganokar, J.  
Boyd, G.  
Brown, N.P.  
Burrell, S.  
Burke, J.  
Cartier, Y.  
Cheverie, D.  
Colter, K.  
Ellis, R.  
Englund, M.  
Ferguson, D.  
Heelan, J.  
Ingham, A.  
Joy, G.  
MacSween, M.  
Normore, W.  
Oxner, J.H.  
Pass, B.  
Pittman, C.  
Pringle, C.  
Psooy, B.  
Rowe, J.  
Salgado, M.J.  
Simms, J.D.

## A. Course of Study

### First and Second Year Medicine

Through the cases in the COPS curriculum, the student becomes familiar with the many diagnostic imaging modalities (x-ray, ultrasound, computerized tomography, magnetic resonance, and nuclear medicine) and with interventional radiology such as needle biopsy, angioplasty, percutaneous tubal drainage, and vascular embolization. Electives are available for first and second COPS clerkship.

There are four three hour compulsory Wednesday afternoon educational sessions. The emphasis is placed on the investigation of patient problems, using various imaging modalities, interventional diagnostic and therapeutic radiology. One month electives are also available in clerkship.

Texts:

- Appleton, Hamilton, Simon, *Surface and Radiological Anatomy*

The following books are suggested reading:

- Squire - *Fundamentals of Roentgenology*
- Meschan - *Synopsis of Roentgen Signs*, and Armstrong - *X-Ray Diagnosis*.

## B. PGY1

One month electives available from September to June inclusive.

## C. Residency Training

An integrated University residency training programme is available in the Department consisting of a five year programme meeting the requirements of the Royal College of Physicians and Surgeons of Canada in Diagnostic Radiology. Participating hospitals include QE II Health Sciences Centre, IWK-Grace Health Centre, the Victoria General Hospital, and Saint John Regional Hospital.

## D. Fellowship Training

Clinical fellowships are available in Cardiovascular, Gastrointestinal, Musculoskeletal, Neuroradiology, and General Imaging.

## E. CME Programs

The department offers two week clinical traineeships in General Imaging (CT, Nuclear Medicine, Ultrasound, Cardiovascular, Interventional, Mammography, General Pediatric Radiology and Neuroradiology) between October and May.

## Radiation Oncology

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Location: Nova Scotia Cancer Centre  
5820 University Avenue  
Halifax, NS B3H 1V7  
Telephone:(902) 473-6010  
Fax: (902) 473-1273

### Acting Head

Padmos, A.

### Associate Professors

Andrew, J.W.  
Carson, J.  
Joseph, P.  
Rheaume, D.E.

### Assistant Professors

Hale, M.E.  
Meng, J.S.  
Mulroy, L.  
Nolan, M.  
Rajaraman, M.  
Rutledge, R.  
Saunders, S.L.  
Schella, J.W.  
Wilke, D.R.

### Lecturers

Cwajna, W.  
Grant, J.B.  
Grant, N.

### A. Undergraduate

Members of the department, while not having direct responsibility for the didactic aspects of undergraduate teaching, participate in the educational experience of these students at every opportunity. A large volume of clinical material is available at the NSCC/QEII HSC, and students attend many of the multidisciplinary oncology clinics, particularly in their senior years. This is particularly relevant to their understanding of the complex issues involved in the management of patients with various malignancies.

### B. Electives

Student electives, up to one month in duration, are strongly encouraged. The time is spent with department faculty and preceptors, and students are exposed to the clinical and technical aspects of radiation oncology. It provides an overview of a clinical modality central to a broader oncology program. Small clinical research projects are encouraged and supported.

### C. Residency Training

This is an accredited programme of the Royal College of Physicians and Surgeons of Canada. Training is intensive, and provide the residents with solid grounding in the basic sciences of radiation biology, physics and oncology, along with ongoing clinical training. Residents from other programs spend elective time in the department and specific lectures are frequently given by departmental faculty to graduate students in other departments.

### D. Continuing Medical Education

Department faculty participate fully in several CME programs across the Maritime Provinces.

## Surgery

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Location: Department of Surgery  
V.G. Hospital  
1278 Tower Road  
Halifax, NS  
Telephone:(902) 473-2246  
Fax: (902) 473-4442

### Professors Emeriti

Gillis, D.A.  
Norvell, S.T.  
Ross, E.F.  
Stevenson, W.D.

### Professor and Head of Department

Stone, R.M.

### Professors

Alexander, D.I.  
Attia, E.  
Bitter-Suermann, H.  
Casson, A.  
Gross, M.  
Holness, R.O.  
Hugenholtz, H.  
Hyndman, J.C.  
Jamieson, C.G.  
MacDonald, A.S.  
Mendez, I.  
Parkhill, W.S.  
Stanish, W.D.  
Sullivan, J.A.  
Yabsley, R.H.

### Associate Professors

Ali, I.  
Amirault, J.D.  
Clarke, K.D.  
Giacomantonio, J.M.  
Howes, W.J.  
Leahey, J.L.  
Lee, T.D.G. (cross appointment in Microbiology and Immunology)  
Leighton, R.K.  
Morris, S.F.  
Paletz, J.  
Reardon, G.  
Vair, D.B.  
Wilson, K.L.  
You, C.K.

### Assistant Professors

Ali, Imtiaz  
Bance, M.  
Bendor-Samuel, R.  
Bethune, D.C.G.  
Brownstone, R.  
Clarke, D.B.  
Coady, C.M.  
Cook, C.  
Corsten, G.  
Dunbar, M.  
Fleetwood, I.  
Giacomantonio, C.  
Hancock-Freisen, C.

Henteleff, H.  
Higgins, H.G.  
Hirsch, G.M.  
Howes, W.J.  
Jones, S.  
Kirkpatrick, D.  
Klassen, D.  
Legare, I.F.  
MacKean, G.  
Massoud, E.  
McIntyre, P.B.  
Morris, D.  
Nasser, J.  
O'Blenes, S.  
O'Brien, J.  
Oxner, W.  
Porter, G.  
Siguidson, L.  
Taylor, M.  
Topp, T.  
Trites, J.  
Wali, M.N.  
Walling, S.  
Wood, J.  
Wright, J. (cross appointment in Pathology)  
Yanchar, N.

### Lecturers

Curry, J.P.  
Gow, N.  
Johnston, D. G.

### Instructors

Calverley, V.  
LeGay, D.

The Department provides basic instruction in those diseases which fall within the field of surgery. Opportunities are provided to students so that they may become familiar with patients having surgical diseases, their diagnosis, investigation, and treatment. Students may pursue elective or research studies if they so desire.

## A. Course of Study

### First and Second Year Medicine

Members of the Department of Surgery participate in the pre-clerkship curriculum in the following areas:

1. As tutors in various problem-based-learning units that make up the COPS curriculum.
2. As preceptors for elective students in surgery.
3. As clinical teachers in the Med II Patient-Doctor component of the curriculum where students learn basic skills, history taking and physical examination.

## B. The Clerkship

At the completion of the second year, the student enters an 88-week clerkship, of which 12 weeks are spent in the Department of Surgery doing four rotations, each of three weeks.

The first four weeks are "Introduction to the Clerkship". The learning objectives for these surgical rotations are the skills and knowledge related to the Principles of Surgery. The clerk may be on any of the surgical units, but attends daily seminars and subsequently writes an examination on the Principles of Surgery.

During the three rotations the students will take emergency call in the hospitals.

Additional opportunities for the students exist in the form of electives in surgery under the supervision of an identified surgeon, either in Halifax or elsewhere.

## C. Residency Training

Integrated University Residency Training Programmes in the disciplines of General Surgery, Orthopedic Surgery, Cardiac Surgery, Pediatric General Surgery, Neurosurgery, Otolaryngology, and Plastic Surgery are available in the department. The training programmes in these disciplines are accredited by the Royal College of Physicians and Surgeons of Canada. Participating hospitals include the QEII Health Sciences Centre, IWK Health Centre, and Saint John Regional Hospital, Saint John, New Brunswick.

### General Surgery

The General Surgery Programme is a five-year programme. The programme is designed so that its graduates are prepared to pursue community practice, or to compete for clinical and/or research fellowships. There is considerable flexibility in the General Surgery training programme. The mandatory rotations include Intensive Care and Pediatric General Surgery (three months each), and a minimum of 30 months in General Surgery. Many elective rotations are available, including Orthopedics, Plastics, Trauma, Research, Community Surgery, and others. The final year is spent as the senior resident on a General Surgery service.

### Neurosurgery

The Division of Neurosurgery provides for a year of basic training in the neurological sciences, and at *least* thirty-six months of clinical neurosurgery (including pediatric neurosurgery) with progressive responsibility. A full education programme in allied neurological science fields is a part of this programme.

### Cardiac Surgery

The cardiac surgery residency programme is an integrated six year process which incorporates two years of core surgery, six months of general surgery, six months of adult cardiac surgery, six months of thoracic surgery, six months of pediatric cardiac surgery and twelve months of senior cardiac surgery resident. In addition, there is one year for academic enrichment. For those considering an academic career, this can consist of a research year, which may lead to a MSc or PhD, while others may choose to develop an area of special clinical interest or expertise.

### Orthopedic Surgery

The Division of Orthopedic Surgery conducts a five-year programme. During the first year, residents rotate through such specialties as Plastic Surgery, Neurosurgery, ICU, Cardiac Surgery, and Vascular Surgery. Elective rotations are available during this period of time. The three core years of Orthopedic Surgery are designed for the resident to gain experience in Adult, Pediatric and Traumatic Orthopedic Surgery. Residents are encouraged to carry out a post training year as a Fellow at this or another centre.

### Otolaryngology

The Division of Otolaryngology offers an integrated university resident training programme, consisting of a five-year rotation meeting the requirements of the Royal College of Physicians and Surgeons of Canada. Residents are accepted into the programme at the PGY1 level. Arrangements are made through the Department of Surgery to have two years of basic surgical training. From PGY3-PGY5, the residents are based at the QEII Health Sciences Centre and IWK Health Centre.

### Plastic Surgery

The Division of Plastic Surgery is similar in that the first two years are spent in general surgical rotations with particular reference to those subspecialties that are appropriate to plastic surgery. The two core years of Plastic Surgery are designed for the resident to gain experience in adult and pediatric traumatic and reconstructive surgery.

### Pediatric General Surgery

The Division of Pediatric General Surgery offers a two year fellowship programme, one of six Royal College approved programmes in Canada, to trainees who have completed training in General Surgery.

A formal academic programme, in each specialty, with pathology seminars, grand rounds, basic science seminars, journal clubs, etc., functions throughout the year. The surgical divisions provide the funds for

residents to travel to meetings to present their work. Funding is also provided for residents to attend two additional meetings during their period of training.

#### **D. Continuing Medical Education**

The Department sends its members to various centres throughout the Maritime provinces at the request of the Division, for meetings, conferences, etc. This is an important function in that it is now realized that continuing medical education is essential for the continuing competence of the graduate doctor.

## **Urology**

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Location: 5th Floor, Victoria General Site  
QEII Health Sciences Centre  
Halifax, Nova Scotia  
Telephone: (902)473-5853

#### **Professors Emeriti**

Mack, F.G.  
Awad, S.A.

#### **Professor and Head of Department**

Norman, R.W.

#### **Professors**

Belitsky, P.  
Chesley, A.E.  
Downie, J.W. (major appointment in Pharmacology)  
Gajewski, J.B.  
Lawen J.G.

#### **Associate Professors**

Alkhudair, W.K.  
Anderson, P.A.  
Auld, R.B.  
Bell, D.G.  
Butler, L.J. (major appointment in Nursing)  
Grantmyre, J.E.  
Millard, O.H.  
Schwarz, R.D.

#### **Assistant Professors**

Bailly, G.G.  
Gupta, R. (major appointment in Pathology)  
Morse, M.J.  
Rendon, R.A.  
Tewari, H.D.  
Wentzell, P.G.  
Whelan, T.F.

#### **Lecturer**

Ashfield, J.E.  
Bagnall, P.S.  
Palmer, B.W.

### **I. Undergraduate Training**

#### **A. The Pre-clinical Years (Med I and II)**

The renal/urology component in Med II occupies two weeks of integrated introduction to a few of the pathologic processes in urology. In addition, every effort is made to co-ordinate with other units in the COPS programme. Individual faculty from the Department serve as tutors.

#### **B. The Clinical Years (Med III and IV)**

Urology is currently a surgery selective for all clinical clerks. During this three week experience, the students work with an individual staff preceptor at one of the main Dalhousie teaching hospitals. The clerks are responsible under the supervision of faculty and residents for patient care on the wards and in the out-patient settings. They are also exposed to common operative urological procedures. The ambulatory experience includes many of the specialty clinics in Urology. During the rotation, the students are expected to meet clinical challenges with an open, enquiring mind and to internalize an understanding of basic principles of urological physiology and pathology. There is a daily topic-based seminar programme with the faculty to facilitate this process. The objectives of the

rotation include clinical hypothesis formation and supervised decision making. These objectives are practised in all clinical settings but particularly in the out-patient clinics.

For those students wishing to carry on greater study of urologic principles, an elective experience is offered. This experience can be tailored to an individual student's needs and interests.

### **C. Family Medicine Residency**

Urology is offered as an elective. The four-week period can be spent at the Victoria General Hospital, the Halifax Infirmary, the IWK Health Centre or the Saint John Regional Hospital. The duties and assignments have been designed specifically to prepare the candidate for family practice.

### **D. Residency Training**

Specialty training in Urology is available in the Department. The five year training programme includes two years of core Surgery (specially designed) and three years training in Urology. Successful completion fulfils the requirements for the Royal College of Physicians and Surgeons of Canada specialty examinations.

During their training the residents are expected to meet clinical problems with an open, enquiring mind and are given increasing responsibilities, commensurate with their experience. A wide exposure to a variety of urological conditions and procedures is provided. The rich clinical and surgical experience is supplemented by departmental grand rounds, seminars and journal clubs. At the end of the training the resident is proficient in the specialty of Urology.

Participating hospitals include the QEII Health Sciences Centre, IWK Health Centre, and Saint John Regional Hospital.

## **Medical Computing and Media Services (MCMS)**

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Location: Sir Charles Tupper Building, Basement Level  
Director of I.T.:494-2709

Telephone: Finance & Administrative Manager (902) 494-3120  
Media Services Manager (902) 494-1933  
Computing Services Manager (902) 494-1266

Fax: (902) 494-2046

E-mail: MCMS@DAL.Ca

Web site: [www.medicine.dal.ca/mcms/](http://www.medicine.dal.ca/mcms/)

Below you will find a small sampling of the services we provide. Please call for further information, advice and/or a copy of our brochure outlining our many services.

### **A. Information Technology**

Phone: (902)494-1234

E-mail: MCMS@DAL.CA

In the areas of research, instruction and administration, providing services to help meet your computing needs for hardware and software support.

Networking services include:

- Local Area Networks (word processing, spreadsheets, graphics, databases);
- Internet (E-mail, ftp); and
- FTP access from home.

We also support web pages for your department. Staff are available for service and repair work, and purchases advice.

### **B. Digital Photography**

Phone: (902) 494-1263

E-mail: PHOTO@DAL.CA

Covering all your photographic needs from passports to clinical slides. Check out our stock slides, maps, charts and aerial views of Halifax and Dalhousie University.

- scanning
- printing
- 35mm slide production
- film processing
- digital video and audio production
- image compressing for power point presentations
- streaming video

### **C. Graphics/Imaging**

Phone: (902) 494-1267

E-mail: TUPAV1@IS.DAL.CA

FTP: IMAGE.MED.DAL.CA,reports

### **D. Instructional Support Services**

Phone: (902) 494-1290

Cellular: (902) 471-9372

E-mail: CLASS@DAL.CA

Providing and maintaining media support for more than 100 classrooms, seminar rooms, and labs, in the Tupper, Forrest, Burbidge, Fenwick, and Dental buildings.

- teleconferencing
- health science equipment pool
- conference support
- data projection
- videotaping & audio

## **E. Dalhousie University Video Conferencing Services**

Phone: (902) 494-2867

E-mail: VIDEOCON@DAL.CA

Videoconference to anywhere in the world. One of the best videoconferencing facilities of its kind. Excellent for meetings, distance education, interviews.

## **F. Web Site Development/Design**

Phone: (902) 494-5128

E-mail: Medical.Communications@dal.ca

Producing engaging, interactive, informative web sites and providing site hosting/maintenance services.

## **G. DalMedix**

Phone: (902) 494-1234

FTP: dalmedix@dal.ca

Faculty of Medicine Intranet

## Centres and Institutes

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A number of centres and institutes for study and research in specific fields are based at the University. These are:

### Atlantic Health Promotion Research Centre

Director: Renee Lyons, PhD  
Co-ordinator: S. Crowell, MPA

The AHPRC is a cooperative effort between the Faculties of Health Professions, Medicine and Dentistry, and the four Atlantic Departments of Health, with support from Health Canada, other government granting agencies and the private sector. The Centre conducts and facilitates health promotion research that influences policy and contributes to the health and well-being of Atlantic Canadians.

Examples of research projects include rural health and sustainability, healthy communities, mid-life aging and air quality in schools.

For information see: [www.medicine.dal.ca/ahprc](http://www.medicine.dal.ca/ahprc).

Opportunities exist for faculty members and students to participate in the Centre's projects and activities. Students can also become involved with the Centre as volunteers, through field placements and research internships.

### Atlantic Institute of Criminology

Director: D.H. Clairmont, BA, MA, PhD

The Atlantic Institute of Criminology was established to provide a centre for research in the areas of criminology, policing, and other concerns of the justice system. Associate memberships are available to interested and qualified persons.

### Atlantic Region Magnetic Resonance Centre

Director: T.B. Grindley, BSc, MSc, PhD  
Coordinator: M.D. Lumsden, BSc, PhD  
Operators: B. Berno, BSc, MSc, PhD and U. Werner-Zwanziger, BSc, PhD

Established in 1982 with assistance from the Natural Sciences and Engineering Research Council, the Centre is located in the Department of Chemistry and involves faculty, researchers and graduate students in all Maritime universities and many Dalhousie Departments. It is concerned with applications of magnetic resonance spectroscopy to problems in chemistry, materials science, biology, biochemistry, and related areas. Its current instrumentation includes Bruker AC-250 (Tecmag upgrade) and Avance-500 NMR spectrometers for liquids, Bruker Avance 400 and Avance 700 NMR spectrometers for solids and a dual purpose solids/liquids Bruker AMX-400 NMR spectrometer. The Avance-500 and Avance-700 NMR spectrometers were installed in 2003 with funding from NSERC, the Canadian Foundation for Innovation and the Atlantic Innovation Fund. 2003 has also marked an increase in the level of expertise available with the appointments of Professor J. Zwanziger to a Tier I CRC chair in NMR of materials and Dr. U. Werner-Zwanziger as operator of the Avance 700.

The Centre offers facilities for hands-on use by researchers and also provides NMR spectra and expertise to scientists throughout the Atlantic Region. It also interacts widely with Maritime industries.

### Atlantic Research Centre

Director: D.M. Byers, MSc, PhD

Established in 1967, the Centre conducts basic biomedical research in the fields of lipid metabolism and cell signalling and trafficking. It also provides education in these fields to undergraduate and graduate students

and the general public. The Centre's staff hold appointments in the Departments of Pediatrics and Biochemistry and Molecular Biology in the Faculty of Medicine. Research at the Centre is supported by agencies such as the Canadian Institutes of Health Research, NSERC, Heart and Stroke Foundation, Dalhousie Medical Research Foundation, IWK Grace Research Foundation and GlaxoSmithKline.

### Canadian Institute of Fisheries Technology (CIFT)

Director: R.A. Speers, PhD  
Telephone: (902) 494-6030  
Fax: (902) 420-0219  
Web site: [www.dal.ca/~cift](http://www.dal.ca/~cift)

The Canadian Institute of Fisheries Technology was established in 1979 at the former Nova Scotia Technical College (later TUNS). The federal Department of Fisheries and Oceans provided much of its early specialized laboratory and seafood pilot scale processing equipment, and Industry Canada provided start-up funding and designated CIFT a centre of excellence. As a government-approved laboratory for advanced technology, it also provides R&D services on a cost-recovery basis to industry and to various governmental agencies. The Institute promotes technology transfer and the development of advanced technologies aimed at more effective commercial utilization of fish supplies in Canada and throughout the world.

In addition, the CIFT offers unique opportunities for undergraduate, graduate and doctoral training and research through the Department of Food Science and Technology. Major areas of emphasis are: food biochemistry; fats, oils and nutraceuticals; physical properties of foods; fish/food process engineering; computerized control in the food processing industry; food safety and preservation; seafood toxins; food rheology, food fermentation and beverage science.

### Facilities

The Canadian Institute of Fisheries Technology is located in the MacDonald building of Sexton Campus at 1360 Barrington Street in downtown Halifax. The Institute's facilities include:

- fats and oils laboratory
- seafood chemistry laboratory
- food development laboratory
- sensory evaluation laboratory
- food process engineering pilot plant
- low temperature storage facility
- food physical properties laboratory
- food microbiology laboratory

These areas contain specialized instruments and food processing equipment to enable experimental processing, laboratory analysis, and product storage evaluation. In addition to a computer-controlled cold-storage facility, the pilot plant is equipped for experimental processing including freezing, chilling, thermal processing, drying and smoking, centrifugal separation, meat-bone separation and modified atmosphere storage.

The pilot plant is especially well equipped for thermal processing with a modern automated retort capable of steam, steam-air, or water immersion processing research. The specially designed cold-storage facility is computer controlled and particularly useful for the study of changes in foods as a result of frozen storage history. The pilot plant is also equipped with a custom-built computer-controlled heat pump dryer that is used in food dehydration experiments.

Specialized laboratory equipment includes: automated high performance and fast protein liquid chromatography systems, gas chromatography/mass spectroscopy system, preparative ultracentrifuge, multi-purpose refrigerated centrifuge, microtube centrifuge, analytical and preparative electrophoretic/isoelectric focusing equipment, pulsed field electrophoresis system, thermocycler, DNA gel electrophoresis, Hoefer Daltsix for 2D electrophoresis, Image Master 2D elite software, capillary electrophoresis system, ultra-low temperature freezer, universal texture testing machine, various colorimeters, U.V. and visible spectrophotometer, spectrofluorometer, electrokinetic analyzer (Zetameter), workstation for mathematical modelling and computer simulation, Linkham shearing stage/microscope, Nikon microscope (various attachments), controlled

stress rheometer with a high temperature/pressure attachment, controlled rate rheometer, Viscomat, and a rolling ball viscometer.

#### **Educational Opportunities**

Undergraduate (BASC) and graduate (MSc and PhD) programmes are available through the Department of Food Science and Technology. Also post-doctoral research opportunities are offered. Graduate level class work and research opportunities relate to food science, seafood processing technology, marine oils, engineering design, packaging technology, fish post-mortem biochemistry, food microbiology, food rheology and food process science. Students with degrees in food science, engineering, chemistry/biochemistry, microbiology or biology are invited to apply.

#### **Canadian Residential Energy End-Use Data and Analysis Centre (CREEDAC)**

Dalhousie University, Department of Mechanical Engineering, 5269 Morris Street, PO Box 1000, Halifax, N.S. B3J 2X4

Telephone: (902) 494-6183

Fax: (902) 494-3165

Web site: [http://is.dal.ca/~creedac/index\\_high.html](http://is.dal.ca/~creedac/index_high.html)

The domain of focus of the Canadian Residential Energy End-Use Data and Analysis Centre (CREEDAC) is the residential energy end-use in Canada. As such, analysis, organization, dissemination and compilation of data on all aspects of residential energy end-use are within the domain of focus of the CREEDAC. The primary objective of CREEDAC is to expand the state of knowledge on energy end-use in the residential sector. To this end, CREEDAC provides technical and professional services to government institutions, private sector, consultants and researchers that include statistical data and analysis capabilities regarding energy consumption and efficiency in the residential sector; information on available residential databases, data collection and analysis projects from governmental and non-governmental sources; expertise and capability for the development and techno-economic assessment of potential strategies for residential energy efficiency and fuel substitution; expertise and capability for special research or database development projects, and research, consulting and advisory services to interested parties.

#### **Centre for African Studies**

Telephone: (902) 494-3814/2979

Fax: (902) 494-2105

Director: J.L. Parpart, MA, PhD

This Centre, established in 1975, advances instruction, publication, research and development education programmes in African Studies. Associated faculty hold appointments in departments and units concentrated in the social sciences and humanities. The Centre organizes academic and informal seminars and public policy conferences on Africa and encourages interdisciplinary interaction at all levels on African subjects and issues. It cooperates with the International Development Studies department and with the Lester Pearson International Office.

#### **Centre for Environmental and Marine Geology**

Director: Professor D.B. Scott

This center was originally founded as the Centre for Marine Geology in 1983 to promote interdisciplinary studies of various types of problems in marine Geology, capitalizing on our unique position in Canada with links to related departments such as Oceanography, Physics, Biology, the Bedford Institute of Oceanography and our hosting of the Canadian office of the ocean Drilling Programme. Since 1983 the role of the center has changed, reflected in the new name, which better describes the work being done now where marine geology is combined with environmental problems. We have 3 new faculty that expand our expertise into new chronological techniques and permafrost as well as strengthening our capacity in the petroleum-related environmental geology. Some of the objectives of the center are to: 1) continue to expand our participation in a revitalized east coast offshore energy related problems; 2) continue our climate-change work with a variety of approaches both offshore and on land; 3) expand into Arctic regions both with major oceanographic and shore-based programmes; and 4) expand our capacity to help solve some of the many environmental geology problems associated with urbanization.

#### **Centre for Foreign Policy Studies**

Director: Frank Harvey, PhD

Established in 1971 the Centre is concerned with teaching, research, publication, policy advice and other professional activities in the various aspects of foreign policy, security studies and international politics. It is funded through the Security and Defence Forum of the Department of National Defence and other foundations, government agencies, international organizations, publications' sales, and contracts.

The Centre's work is concentrated in the area of Canadian and comparative maritime strategy and oceans policy, but it also deals with international political economy, regional and global development and peace-building and democratization. Its geographical specializations include foreign policy in Canada, Europe, the South (especially Africa, Asia and the Caribbean), and the U.S. The Centre encourages activities in these areas by Senior Research & Doctoral Fellows, and advances communication among local and international communities in these fields through seminars, workshops, conferences and colloquia, often co-sponsored by local, national and/or international organizations. It publishes occasional papers and monographs on comparative and Canadian defence and security policy issues.

The Centre is an integral part of the Department of Political Science. Centre faculty offer classes through the Department in foreign and defence policy, international relations and development, and maritime affairs at both undergraduate (majors & honours) and graduate (MA and PhD) levels. They also supervise masters and doctoral theses in these fields.

For further information, consult the Centre's Web site: [www.dal.ca/~centre](http://www.dal.ca/~centre).

#### **Centre for International Business Studies**

Director: Carolan McLarney, BComm, MBA, PhD

The Centre was established in 1975 and is funded by Export Development Canada with a mission to foster international business teaching and research and enhance Canada's global competitiveness through innovative programmes and outreach services. It carries out these functions within the administrative framework of the School of Business.

CIBS supports a wide range of learning experiences: International

Internships, Foreign Study Mission, Trade Team Nova Scotia

Internships, Global Village Program. Each year the Centre hosts the International Business Research Symposium, which is an opportunity for students to present their research to academic and business leaders. CIBS offers scholarships and fellowships to International Business majors in both years of the MBA programme as well as a prize for Outstanding Achievement in Graduate International Business to a graduating student.

#### **Centre for Marine Vessel Development and Research (CMVDR)**

Director: Julio Militzer, PhD, P. Eng.

Associate Director,

Naval Architecture: Dr. Jimmy Chuang

Associate Director,

Hydraulics: Dr. Mysore Satish

The Centre was established in 1989 to provide specialized technical services to the Marine Industry. Emphasis is on pure and applied research in marine dynamics, with particular focus on the performance prediction analysis of marine vessels and offshore structures.

Areas of expertise include:

- Fundamental research in marine hydrodynamics
- Ship/boat motion and wave-loads, including response of offshore structures in waves
- Vessel seakeeping and safety studies, including swamping and capsizing behaviour in extreme seas
- Optimal hull forms for minimum resistance
- Ship maneuverability in restricted waters
- Computer simulation of ship and offshore structure motions and flow fields

- Small Craft model tank tests
- Full scale tests, at sea

CMVDR has a policy to involve graduate students of the Naval Architecture Programme as much as possible in its research contracts with industry.

#### Research Facilities

##### *Marine Craft Model Towing Tank*

The marine craft model towing tank is located in the Civil Engineering Hydraulic Laboratory on Sexton Campus. The tank's dimensions are 1m x 1m x 30m. The carriage has a maximum velocity of 4.0m/s (13ft/sec) and can sustain a constant carriage speed over a usable rail length of 25m. The fully-automated carriage control system allows the operator to pre-select a desired test velocity profile so that a maximum constant velocity window is obtained within the safe operating limits of the tank.

A computer-controlled wave-making system is installed in the tank, comprising two wave-makers, one at each end. Each can act as a wave-maker or a wave-absorber. The system can make progressive or standing waves, as well as regular or irregular waves. The maximum wave height is about 0.3m (1 ft).

##### *Computing Facilities*

CMVDR and the post-graduate Naval Architecture Programme has sophisticated and networked Computer Systems to support its advanced research work.

The computer systems are used for running numerical computations, required for the on-going development of numerical techniques to solve complex hydrodynamic problems. Advanced 2D and 3D visualization software is also developed on the systems so that real-time dynamic simulations can be carried out and displayed.

In addition to advanced hydrodynamic and hydroelastic software developed in-house, CMVDR has commercial hull design and analysis software packages, including FastShip, GHS, Shiphul 2000, AutoShip and ABS Safehull. These are used to complement research efforts, and to instruct naval architecture students.

#### **Centre for Risk Management, Faculty of Management**

The mission of the Centre for Risk Management is to study how individuals and organizations make decisions to manage risk from all sources that either threaten the achievement of strategic objectives or represent opportunities to exploit for competitive advantage. Approaches to the management of risk are of significant interest to most academic disciplines at Dalhousie and functional areas of operation within any industry. One of the important strengths of the Centre for Risk Management is a multidisciplinary approach to the research and the involvement of partners from the public and private sectors. Dalhousie researchers will bring to the Centre expertise in disciplines such as:

- **Decision Analysis:** development of formal models of decision making;
- **Statistics:** estimation of probabilities and risk matrices for extreme events;
- **Economics:** exploration of utility, trade offs and cost/benefit analysis;
- **Finance and Insurance:** use of derivative instruments and insurance for managing risk;
- **Public Administration:** consideration of the dynamics and impact of institutional, legislative and regulatory decisions;
- **Environmental Studies:** assessment of local and global environmental threats;
- **Information Studies:** framework for the organization of massive levels of information and access/security issues of information systems;
- **Legal Studies:** guidelines governing the rights and liabilities of contractual obligations designed to manage risk within national and international jurisdictions.

The Centre for Risk Management will generate a regional and national profile and create a source of competitive advantage for Dalhousie in an area of fundamental importance to public and private sector institutions. The accumulation of knowledge and skills in risk management will enrich individual faculty and strengthen the degree programs in the Faculty of Management's four Schools of Business Administration, Public

Administration, Resource and Environmental Studies and Library and Informational Studies. It also involve researchers from other Faculties such as science, law, engineering, medicine, social sciences. The Centre would lead to the creation of a knowledgeable and effective workforce capable of addressing the increasing complexities and uncertainties organizations are facing today, ultimately making a difference in building a strong and healthy society.

Guided by a prominent Executive Advisory Council, the Director of the Centre will engage in research and scholarly activities, generate funding through grants and contracts and develop conferences and programs in response to the educational demands of the risk management industry. Specifically, the Centre's activities will include:

- Initiating and conducting collaborative inter- and multi-disciplinary research nurturing an intellectual community of scholars, researchers and students from multiple disciplines and interests;
- Organizing a speaker series and occasional conferences on the research output of the Centre;
- Offering workshops and continuing education opportunities for professionals and industry partners;
- Maintaining a digital library of working papers and pre-prints and serving as a digital clearinghouse for information about and tools used in risk management;
- Developing the curriculum in existing degree programs;
- Publishing a newsletter and sponsoring a refereed journal in risk management.

The Centre has already attracted a diverse group of prominent researchers (Associates) and institutions (Affiliates) from Canada and abroad.

At this time, the institutional affiliates include:

- **Centre for Law, Economics and Financial Institutions (LEFIC)**, Copenhagen Business School
- **Salomon Center**, Stern School of Business, New York University
- **Stochastic Optimization Network (SONET)** in Spain

#### **Centre for Water Resources Studies**

Director: D.H. Waller, PhD, PEng

The Centre for Water Resources Studies was established in December, 1981, by a resolution of the Board of Governors (TUNS). The objectives of the Centre are to carry out applied research which contributes to the effective and sustainable protection of water resources in Atlantic Canada, nationally and internationally, and to facilitate the transfer of new knowledge to potential users. Research programmes directed by the Centre address the design of cost-effective on-site wastewater systems, soil erosion processes, drinking water treatment, the use of roofwater cisterns for domestic water supply, eutrophication, watershed management, the computer modeling of hydrodynamic and hydrochemical processes, as well as topics in hydrogeology. In 1982 the Centre established the Halifax Urban Watersheds Program, a long-term study of a pair of watersheds near the Halifax city limits. This study focuses on the watersheds as a field laboratory for the study of the effects of urbanization on surface water quality and quantity. To better facilitate the development of relevant research programmes and the dissemination and application of research results, the Centre has memoranda of understanding with Environment Canada, the Nova Scotia Department of Environment, Fenwick Laboratories and the Dalhousie School of Resource and Environment Studies. The Centre also has a number of research advisory panels, which involve professionals from industry, government and academia in applied research related to water use and water management.

##### *Facilities*

The Centre for Water Resources Studies is located on the fifth floor of "D" Building on Sexton Campus. Laboratory and office space is available for specific graduate research topics, as well as ongoing research carried out by Centre personnel. Analytical equipment includes instrumentation for determining low levels of major ions and nutrients, as well as trace quantities of metal ions in water. The Centre has apparatus for laboratory investigation and pilot scale testing of innovative water treatment methods using Dissolved Air Flootation (DAF) and ozonation and has worked with local consultants and municipalities to develop new

applications of the technologies. The Centre is a North American leader in the development of on-site sewage disposal and has had an active research programme in this area since 1987. In addition to numerous field installations the Centre fully has functional laboratory installations that duplicate the behaviour of sloping sand filters and septic disposal. The Halifax Urban Watershed (HUU) is the outdoor laboratory used by the Centre for much of its research. The HUU consists of 15 m<sup>2</sup> of watershed area containing five lakes. The lakes vary in the amount of development within their watersheds, from completely undeveloped to completely developed and are, therefore, ideal for studying a variety of subjects related to urban areas. The HUU is located approximately five kilometers from campus and can be reached within ten minutes. This location makes it ideal for studies requiring frequent site visits.

### **Educational Opportunities**

The Centre encourages applications from qualified graduates with experience in engineering and science who have an interest in water resources research. Graduate programmes which are offered within the Faculty of Engineering include the Ph.D., Master of Applied Science, and Master of Engineering. The Centre also participates in the programme leading to a dual degree in water resources engineering and planning, in conjunction with the School of Planning into the Faculty of Architecture and Planning.

### **Health Law Institute**

Director: Jocelyn Downie, BA, MA, MLitt, LLB, LLM, SJD  
 Associate Director: Elaine Gibson, LLB, LLM  
 Associate: Fiona Bergin, BA, LLB, MD, LLM  
 Dalhousie University  
 6061 University Avenue  
 Halifax, NS B3H 4H9  
 Telephone: (902) 494-6881  
 Fax: (902) 494-6879  
 E-mail: hli@dal.ca  
 Web site: www.dal.ca/law/hli

An Interdisciplinary Institute of the Faculties of Law, Medicine, Health Professions, and Dentistry. The Institute is committed to the advancement of health law and policy and the improvement of health care practice and health systems in Canada through scholarly analysis, professional education, and public service. It's objectives are:

1. To foster strong and innovative health law and policy scholarship by:
  - contributing to the research in health law and policy
  - providing external consultation services on matters having a significant impact on health law or policy
2. To advance health law and policy education by:
  - designing and implementing education programmes for law, medical and health professional students
  - providing continuing education opportunities for health professionals and legal practitioners
3. To serve the public in our areas of expertise by:
  - contributing to the societal understanding of health law and policy issues
  - providing expertise to organizations in the public sector
  - engaging in the policy-making process at local, regional, and national levels.

### **Institute for Research in Materials (IRM)**

Director: Mary Anne White, BSc, PhD  
 Administrative  
 Offices: 6136 Coburg Rd.  
 Halifax NS B3H 3J5  
 Phone: 902 494 6373  
 Fax: 902 494 8016  
 URL: www.irm.dal.ca

Established in 2002, IRM is a made up of nearly eighty faculty members in six faculties (Science, Engineering, Dentistry, Medicine, Architecture and Management) and twenty departments. The goals of the Institute include advancing the collective interdisciplinary research efforts in materials science and engineering at Dalhousie University, facilitating interdisciplinary teaching in materials science within the existing

discipline structure, and enhancing interactions between materials researchers at Dalhousie University with relevant government laboratories and industry, especially within the region. The Institute leads collaboration within the university on interdisciplinary applications to funding agencies for major equipment and research infrastructure and collaborates with external organizations to pursue research opportunities.

All Dalhousie University faculty members carrying out research in the area of materials are eligible to be members of IRM. Graduate students associated with these research groups are invited to become associate members of IRM.

In addition to equipment operated by individual members of the Institute, IRM is establishing the Facilities for Materials Characterization, a \$10 million suite of instruments which will be managed by the Institute.

The equipment includes:

- High-field solid-state NMR spectrometer (managed jointly with the Atlantic Region Magnetic Resonance Centre)
- Scanning electron microscope
- Focused ion beam
- X-ray photoelectron spectrometer and secondary ion mass spectrometer (XPS-SIMS)
- Sputtering system
- Ultra-high speed optical systems
- Physical properties measurement system (PPMS)
- Scanning thermal microscope (SThM)
- Beowulf computer system
- Ultrasonic testing equipment
- Hot press

Motion recorder/analyzer.

These facilities are open to external users. Please contact IRM for details.

### **Law and Technology Institute**

Director: Michael Deturbide, B.Sc., B.J., LL.B., LL.M.  
 Associate Director: Teresa Scassa, BA, LL.B./B.C.L., LL.M., S.J.D.  
 Associate: Anne Mussett, BA, LL.B.  
 Phone: (902) 494-1469  
 Fax: (902) 494-1316  
 E-Mail: amber.hall@dal.ca  
 Web site: www.dal.ca/law/lati

The Law and Technology Institute, housed at Dalhousie Law School, developed from the realization that lawmakers and legal scholars face a host of challenging and complex questions as the use of new information technologies grows in all sectors of society. The Institute sponsors guest speakers and symposia including the prestigious McCarthy Tétrault Eminent Speakers Series, and publishes the Canadian Journal of Law and Technology (<http://cjlt.dal.ca>), a peer-reviewed national journal providing coverage of legal issues relating to information technology from a Canadian and international perspective. The Institute also fosters interdisciplinary studies with the Faculty of Computer Science and the Faculty of Management at Dalhousie, and with other institutions. Dalhousie Law School offers several courses to students interested in information technology law issues, including Internet Law, Law and Technology, Privacy Law, and Information Technology Transactions. Students also have the opportunity to conduct research on information technology law issues.

### **Minerals Engineering Centre**

Director: Georges J. Kipouros, PhD, PEng

The Minerals Engineering Centre was established from the Laboratory for the Investigation of Minerals, formerly part of the Atlantic Industrial Research Institute. The Minerals Engineering Centre is intended to provide research, analytical and advisory services to industries, universities, and government bodies in Atlantic Canada. The Centre is located in G Building on Sexton Campus which also houses the Department of Mining and Metallurgical Engineering. The services offered include:

- Sample preparation of ores, soils, silts, rocks, cores and clay fraction
- Size analysis, including screening, sieving, and sub-sieve analysis
- Dense liquid analysis

- Preparation of thin sections
- Physical and chemical analytical methods using atomic adsorption, spectrographic and wet chemical techniques
- Analysis of samples including geological, metalliferous ores, industrial minerals, coals, metals, alloys and water
- Mineral processing test work covering the whole range of investigative techniques from bench scale to pilot plant, including crushing, grinding, classification, gravity separation, dense medium separation, magnetic separation, electrostatic separation, flotation, flocculation, thickening, filtration, and drying

The Minerals Engineering Centre is closely linked with the Department of Mining and Metallurgical Engineering and provides opportunities for undergraduate and graduate students to learn various analytical and mineral testing techniques applicable in their course of studies. It also offers services to faculty members to assist in their teaching and research activities.

Further information may be obtained from the Director of the Centre.

### Neuroscience Institute

Director: S. A. Barnes, PhD.  
 Contact: neuroscience.institute@dal.ca  
 Web site: www.neuroscience.dal.ca

The Neuroscience Institute was founded in 1990 to promote and coordinate research in neuroscience, the modern interdisciplinary study of the brain and nervous system. The development of the Institute parallels the establishment of many such institutes throughout the world and marks the dramatic progress in understanding the workings of the brain.

The Institute serves as an umbrella organization to foster research and training in neuroscience at Dalhousie. A major objective is to increase understanding of the functions of the nervous system in health and disease and, to this end, the Institute coordinates the activities of neuroscientists in the Faculty of Medicine and the Faculty of Science, facilitating collaboration between clinical and basic scientists in the two Faculties. Some foci of current research activity include: the autonomic nervous system; development and plasticity of the nervous system; and, sensory physiology. The Institute also provides a vehicle to seek new sources of funding, and will encourage new initiatives in all areas of neuroscience research at Dalhousie. In addition, the Institute promotes and coordinates training programmes in neuroscience currently offered through its constituent departments at both the undergraduate and graduate levels. It sponsors a seminar series annually, and coordinates a variety of community outreach events.

### The Nova Scotia CAD/CAM Centre

Location: 1360 Barrington Street  
 P.O. Box 1000  
 Halifax, NS B3J 2X4  
 Reception: 902 - 494 - 3242  
 Fax: 902 - 422-8380  
 Contact: Leigh Beauchamp Day, Business Development  
 & Public Relations Manager  
 902 - 494 - 6040

Established: April 29, 1983, as a cost-recovery, industry-oriented Centre within Dalhousie. It is primarily affiliated with the Departments of Mechanical and Civil Engineering, but also works with all other departments.

Mandate: As set out in an agreement with the Province of Nova Scotia, Dalhousie established an "industry-oriented CAD/CAM Centre to assist provincial manufacturers and consulting engineers to develop, design and utilize CAD/CAM applications". Recently, the Centre has undergone a variety of changes and is now comprised of two new groups, the Intelligent Structures and Innovative materials (ISIM) Group and the Advanced Manufacturing (AM) Group. It is also pleased to announce that it is home to the Canada Research Chair in Structural Health Monitoring which was awarded to Dr. Jean-Francois Trottier, P.Eng. in June 2001.

Director: Dr. Jean-François Trottier, P.Eng.  
 494-3990  
 Admin. Assistant: Jeanne Mutch  
 494-3242

### Advanced Manufacturing (AM) Group

Coordinator: Dr. Andrew Warkentin (494-3901)  
 Manager: Mr. Robert Warner, P.Eng. (494-6096)

Manufacturing, research and technical support services to:

- Dalhousie Faculty of Engineering
- private industry
- government agencies: DND, DREA, BIO

Areas of Expertise:

- CAD/CAM training and technical support in MasterCAM, SmartCAM, Solid Edge and Pro/Engineer
- prototype design and machining with CNC machines
- rapid plastic part prototypes by injection molding and thermoforming
- reserve engineering and inspection with a Mitutoyo CNC Coordinate Measuring Machine (CMM)

Mr. Warner teaches IENG 3321: Manufacturing Processes, and co-teaches MENG 4631: CAD/CAM and MENG 4638: Geometric Dimensioning and Tolerancing. Mr. Warner also provides evening courses for Pro/Engineer and Solid Modeling.

### Intelligent Structures and Innovative Materials (ISIM) Group

Research Professional: Dean Forgeron, P.Eng. (494-2847)

Research Professional: Christopher Barnes, P. Eng. (494-3904)

- R&D of novel reinforcing fibers and other materials for use in concrete
- fibre reinforced concrete, shotcrete and high performance concrete and their applications
- composite and advanced materials
- advanced sensors for intelligent structured health monitoring of buildings and structures
- remote monitoring and intelligent data processing
- innovative steel-free concrete decks for bridges, wharves and parking garages
- modeling of buckling and post-buckling failures
- operates ISIS - Halifax
- Non-destructive Infrastructure Inspection Applications using Impact-Echo, Spectral Analysis of Surface Waves and Ground Penetrating Radar
- resonant frequency testing of materials
- stiffness profiles of layered media and material specimens
- bridge deck deterioration
- continuous pavement layer thickness
- waterproofing membrane integrity
- detection of voids under jointed portland cement concrete pavements
- detection of water under pavements

### Equipment & Software Available for Industry and Dalhousie Use

- MasterCAM, SmartCAM, Solid Edge, Pro/Engineer
- CNC milling centre Mori-Seiki MV Junior 3-axes
- CNC turning centre lathe Mori-Seiki SL-25
- Impact-Echo Inspection System
- Spectral Analysis of Surface Waves Inspection System
- Resilient modules testing of materials
- Co-ordinate Measuring Machine (CMM), Mitutoya measuring range of 13" x 20" x 12"
- Impact testing machine Tinius Olsen Izod - Model 66
- Digital surface roughness gage
- CNC milling machine Easymill-3 2 ½ axes (for training purposes only)
- Injection Molding Machine (25 Ton Arburg, 1.2 oz shot)
- Ground Penetrating Radar Infrastructure Inspection System (400MHz to 1500 MHz)
- ASTM C1018-97 closed-loop testing
- Australian Round Determinate Panel test
- South African Waterbed test
- Creep and fatigue of materials

### Technology Transfer Activities

- contracts from and joint ventures with companies, industry and government
- training programmes for industry and government
- technical and application advisory service
- research and development
- technical services

- prototype development
- use of facilities

#### **Actively Seeking**

- collaborative projects (Research and Development)
- access to specialized equipment and facilities
- specialized testing contracts
- 

Support by:

- Canada - Nova Scotia cooperation Agreement on Technology Development
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Canada Research Chairs Programme (CRC)
- Canadian Foundation for Innovation (CFI)
- Grace Canada Inc.
- Atlantic Fiber Technologies Limited

#### **Trace Analysis Research Centre**

Director: A.Chatt, BSc, MSc, PhD

With the assistance of a grant from the National Research Council, the Centre was established in 1971 to train analytical chemists and, through research, to contribute to the advancement of analytical chemistry. A major facility of the Centre is a low-power nuclear reactor (SLOWPOKE) which is available to researchers within Dalhousie and elsewhere.

#### **Vehicle Safety Research Team**

Director and Principal Investigator: C.R. Baird, PhD, PEng

The Vehicle Research Safety Team (VSRT) is one of eight university-based teams located across Canada. These teams operate on a non-profit basis under contract to Transport Canada (Surface), and were established to conduct research into vehicular crashes.

The VSRT has been in operation since 1972 and, in addition to participating in national programs, has been involved in several other studies, including an on-going and expanding programme of seeking out and examining alleged safety-related defects. The major portion of the programme is geared to relating injuries from vehicular-crashes to the injury-causing mechanisms or sources in vehicles. As such, results of accident studies are continually being related to Transport Canada Vehicle Standards.

The team is composed of two professional engineers from the Faculty as well as two full-time investigators, one of whom is a professional engineer. In addition, an advisory committee exists, providing liaison and interaction with medical personnel, policing agencies and provincial transportation authorities.

The VSRT has special research interests in causal factor evaluation methods, in computer-aided accident reconstruction, in data base management and modular analysis procedures, particularly in relation to injury severity and injury-causal factors.

## **Resources and Services**

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### **1. Alumni Association/Alumni Relations**

The Alumni Association is comprised of over 83,000 graduates of Dalhousie University. A strong global network of volunteers keeps alumni informed and involved with the university. By providing many programmes and services, the Association fosters a strong relationship between Dalhousie and its alumni.

Dalhousie alumni play a vital role in the health and future of the university. Because of alumni leadership, Dalhousie enjoys a strong pool of applicants to its academic programmes each year. Many alumni return to Dalhousie regularly to hire our graduating students. They also serve as advocates, ambassadors and student mentors. The financial support provided by our alumni helps ensure that Dalhousie will continue to provide exceptional post-secondary education to future generations.

The Alumni Association's Board of Directors works with the Dalhousie Alumni Relations Office, located in the Macdonald Building (494-8801/1-800-565-9969). Together, the Association and Alumni Relations strive to identify opportunities for alumni involvement, and to foster an environment that invites alumni to participate fully in Dalhousie's well-being.

### **2. Anti-Plagiarism Service**

Plagiarism is considered a serious academic offence. At the recommendation of Senate (June 2002), a subscription to TurnItIn.com has been opened. Academic Computing Services and the Killam Library jointly support this service. Faculty who wish to subscribe their class to this service should e-mail a request to TurnItIn.com@dal.ca. Workshops are offered on methods to develop awareness among students, and to assist them to avoid plagiarising. Further details are available at <http://www.library.dal.ca/plagiar.htm>, and at <http://www.dal.ca/ilo>

### **3. Athletics**

Athletics and Recreational Services offers a wide range of programmes for every Dalhousie student. An extensive programme of club and intramural activities offer fun, fitness and companionship while 14 varsity sports provide excitement for athletes and spectators alike. For those who prefer less competitive activities, there are a great number of fitness, leisure and aquatic instructional programmes.

Recreation facilities on campus include: Dalplex—offering a 50,000 sq. ft. fieldhouse, international-size pool, two weight rooms, two regulation-size hardwood basketball/volleyball courts, numerous “no-fee” racquet courts, an indoor jogging track, a rock climbing center, a golf driving cage, and family-fitness features such as the Fun Zone play area (the largest indoor soft modular play structure in Metro) and our Family Change Room; the Dalhousie Memorial Arena, Studley Gym, and The F.B. Wickwire Memorial Field (one of Canada's largest artificial playing surfaces). The Cardio Fitness Centre, as well as babysitting services, are available for additional fees. The F.H. Sexton Memorial Gymnasium on the Sexton Campus includes a gym, weight room, squash court and other facilities. For details on fitness and recreation at Dalhousie contact Dalplex at 494-3372, F.H. Sexton Memorial Gymnasium at 494-3550, or the Intramural Office at 494-2049.

### **4. Black Student Advising Centre**

The Black Student Advising Centre is available to assist and support new, prospective and returning students of African descent (African, American, Canadian, Caribbean, etc.) The Advisor may organize programme activities which assist students of African descent in developing contacts with other students of African descent both on campus and in the African Nova Scotian community. The Centre is intended to foster a sense of

support and community among students of African descent, with other students and to increase intercultural awareness.

The advisor will provide confidential services, programmes, individual and/or group assistance, impartial observation, relevant resource materials, along with a referral service which may benefit your academic, personal and social development on and off campus. There is a small student resource room for meeting, peer support, reading and/or studying. Awards, scholarships, employment, community information and upcoming events are also made available. Tours of local African Nova Scotian communities can be organized upon request.

The position of the Black Student Advisor was created by Dalhousie University, initiated by the Black Canadian Students' Association, to provide information to prospective students, increase access and promote retention of indigenous students of African descent.

The Centre may be beneficial to all students, faculty and staff as a means of increasing awareness and sensitivity to students of African descent issues and presence within the University community.

For further information contact: Office - Black Student Advising Centre, Student Union Building, Halifax, Nova Scotia, B3H 4J2; phone -(902) 494-6648; fax - (902) 494-8013; World Wide Web homepage URL <http://is.dal.ca/~bsac>, E-mail: BSAC@Dal.Ca.

## 5. Chaplaincy at Dalhousie

The chaplains at Dalhousie provide confidential counselling on personal and spiritual issues and provide opportunities for prayer and worship, retreats, workshops and social outings. The Chaplains' office provides a non-threatening environment where students and staff can address the basic questions of meaning and purpose in their lives.

Chaplains currently represent the Anglican, Baptist, Christian Reformed, Jewish, Lutheran, Muslim, Roman Catholic, and United Church faith traditions. They are, however, available and receptive to all students, faculty and staff regardless of religious background or can refer you to religious leaders of many other denominations and religions. For students who are concerned about religious groups on campus, the chaplains have developed four brochures, "Dalhousie Chaplaincy Office: 2000-2001," "Religious Groups: What to Expect, What to Accept, and What to Avoid," "Places of Worship At and Near Dalhousie," and "Frequently Asked Questions on the Dalhousie Chaplaincy Office."

Office hours are 9 a.m. to 4 p.m., Main Level, 1321 Edward Street. Our phone number is 494-2287. In the event of an emergency, contact the Student Union Building information desk at 494-2140 for chaplains' home telephone numbers. Feel free to drop by the office any time to introduce yourself and to find out more about the office and its services. Visit the Web site at [www.dal.ca/chaplaincy](http://www.dal.ca/chaplaincy)

## 6. Continuing Technical Education

Dalhousie offers a variety of continuing education programmes for engineers, architects, computer scientists and other technical professionals. The administrative unit responsible for these activities is the Continuing Technical Education Division (CTE). The programmes offered include seminars, evening courses and certificate programs. Within the mandate of Dalhousie, the mission of CTE is to provide needs-driven, leading edge technical training and certificate programmes to the industrial and business community, government, defence personnel and technical professionals.

Requests from Dalhousie Alumni to offer a larger variety of programmes closer to their homes led to the development of a national program. CTE now takes an active role in offering professional development programmes across Canada.

CTE maintains a close liaison with business, industry, government, defence personnel and technical professionals to ensure training needs are being met now and for the future.

For further information on our programs, contact the Director, Carol Connor at (902) 494-3208.

## 7. Counselling Services

The Counselling Services Centre offers programmes for personal, career and educational concerns. Counselling is provided by professionally trained counselors and psychologists. Strict confidentiality is ensured. Counselling is available both individually and on a group basis. Topics covered by regularly offered group programmes include Study Skills, Career Decision Making, What to do with a Degree in . . . , Exam Anxiety Reduction, Public Speaking Anxiety Reduction, Solutions for the Loss of a Relationship, Sleep and Relaxation, Overcoming Procrastination, Anger Management, Resume Writing and Job Search Skills. Information on a wide variety of careers and academic programmes is available in the Frank G. Lawson Career Information Centre. The Internet, CD-ROMS, reference files and books, magazines and newsletters, as well as a variety of takeaway tip sheets, all form part of the Centre's large and growing resource collection.

The Counselling Services offices and its Frank G. Lawson Career Information Centre are located on the 4th Floor of the Student Union Building. In addition to regular office hours, the Centre is open two evenings a week during the academic year. Inquire or make appointments by dropping in or calling 494-2081. Detailed information on services and the scheduling of group programmes and workshops is available on the Dalhousie Counselling Services Web site: [www.dal.ca/cpscic](http://www.dal.ca/cpscic).

## 8. DalCard

The DalCard (also referred to as the Dalhousie University ID Card or Campus Card) is a convenient multi-purpose card, which gives the cardholder access to various facilities and services. The DalCard is an identification card and also serves as a debit card for retail and vending purchases; for printing at Academic Computer Labs; printing and photocopying at the Libraries, Dalplex membership and access card, and a residence meal plan and access card - all in one! The DalCard must be presented to write an officially scheduled examination or to use the library facilities. In addition, some services such as the issuance of bursary or scholarship cheques, require the presentation of a valid DalCard.

The DalCard Office is located at 1443 Seymour Street. Students on the Sexton campus may obtain the DalCard at the Student Service Centre, B Building, 1360 Barrington Street. Employees may obtain a DalCard at the DalCard Office or at the Student Service Centre on the Sexton campus.

## 9. Dalhousie Arts Centre

Designed as a multipurpose facility, the Dalhousie Arts Centre is home to four University departments: Dalhousie Arts Centre (Rebecca Cohn Auditorium), Dalhousie Art Gallery, and the two academic departments of Music and Theatre. The Arts Centre is an integral part of the cultural experience in our community and stands as the only arts complex of its kind in Nova Scotia.

Of the numerous performing arts spaces in the Dalhousie Arts Centre, the Rebecca Cohn Auditorium, is the most familiar and prestigious. The 1040 seat concert hall is the home of Symphony Nova Scotia, as well as the venue of choice for a wide variety of performers ranging from The Royal Winnipeg Ballet to Blue Rodeo, The Chieftains, and Stomping Tom to name a few. Other performing and visual arts spaces in the Arts Centre include: The Sir James Dunn Theatre (240 seats), the David Mack. Murray Studio, Studio II, The MacAloney Room, and the Art Gallery.

The Dalhousie Art Gallery offers the public access to national and international touring exhibitions and initiates many ambitious and exciting exhibition programmes.

The Dalhousie Music Department presents weekly noon hour recitals in the Arts Centre. The Department also maintains a full production season including a faculty recital series and student ensemble concerts with music ranging from classical to jazz and contemporary. Further information on the Music and Theatre Departments can be found in their separate listings.

## 10. Dalhousie Student Union

Every Dalhousie student is automatically a member of the Dalhousie Student Union. The Student Union is recognized by an agreement with the University Administration and by an Act of the Nova Scotia legislature as the single voice of Dalhousie students. All student activities on campus are

organized through the Student Union, and the Student Union is the focus of all student representation. The business of the Student Union is conducted by a Council made up of 40 members. Every student is represented by one or more representatives of their faculty, elected within their faculty in the spring. As well, a number of other constituency groups are represented on the Council because they are uniquely affected by many campus issues. Also on the Council are the student representatives elected to the Senate and Board of Governors.

One of the most important resources of the Student Union is the Student Union Building located at 6136 University Avenue between Seymour and LeMarchant Streets. The SUB, which is owned by the University and administered, managed and controlled by the Student Union and is paid for through Student Union fees, was opened in 1968 as a centre for student activity on campus. The Student Union Building provides a wide range of services for students including the Student Advocacy Service, Travel Cuts, The Grawood, a Housing Board, and much more. Every student has the opportunity to take advantage of the Union's financial, physical and organizational resources. Students have an opportunity to become involved in committees dealing with various student issues. The DSU also offers over 175 clubs, societies and organizations for students to participate in. All students are invited to satisfy their curiosity by visiting the Student Union Council offices. The Student Council office is located on the second floor of the SUB and is open from 8:30 a.m. to 4:30 p.m. Monday through Friday, phone number 494-1106. Check out the Web site at [www.thedsu.com](http://www.thedsu.com)!

## 11. Housing/Residence Services

For the 65 percent of Dalhousie University students whose homes are outside the Halifax Metropolitan area, where to live while attending university is a major question. The supply of University owned housing does not meet the demand and the vacancy rate in the various private, commercial units is low. It is therefore very important that students planning to attend Dalhousie think well in advance about their accommodation needs.

Students should be aware of the following points in reference to residence accommodation. Upon admission to a programme of study, those who reside outside the Halifax region will receive a Residence Application Form. They will also be asked to pay an Admission Deposit. It is important to return the Residence Application Form and the Admission Deposit promptly as the dates these are received will determine when the Residence Application is considered. Residence Application Forms will not be distributed to, nor received from, individuals who have not gained admission to a programme of study.

Students with disabilities are encouraged to contact the Residence Office at (902) 494-1054, or e-mail: [housing@dal.ca](mailto:housing@dal.ca), for information and assistance.

The traditional style residences at Dalhousie are chiefly for undergraduate students; very few graduate spaces are allocated and in many cases students pursuing advanced degrees are not prepared to live with the exuberance of first and second year students. All students living in traditional style residences are required to participate in one of the meal plan options available.

The information below gives a description of 1. traditional on-campus residences, 2. non-traditional on-campus housing, 3. apartment style housing owned by the university, 4. the services offered by the off-campus housing office listing service and 5. general information. For information on housing fees, see the Fees section of the Calendar.

PLEASE NOTE: Academic acceptance by the University, i.e., admission to a course of study, DOES NOT GUARANTEE admission to University Housing or provision of off-campus accommodation.

It is the responsibility of the individual student in all cases to make separate application for the university housing of her/his choice, or to avail him/herself of the listing services provided by the Off-Campus Housing Office.

As available space in University residences is limited students are encouraged to complete and submit their residence application immediately upon receiving it with their letter of academic admission.

## 1. Traditional Style On Campus Residence

### A. Studley (Main) Campus

#### i. Howe Hall

Centrally located on campus, Howe Hall, provides accommodation for 701 undergraduate students. The sprawling, grey ironstone complex is divided into six houses: Bronson, Fountain, Henderson, Smith and Studley Houses are co-ed; Cameron is for men only. Each house has its own distinctive identity and student government. The ratio of seniors to first-year students is approximately 25/75.

The houses offer both double and single rooms with singles assigned to senior undergraduates and first-year students and doubles for first-year students. Facilities include a dining room, lounges, television rooms in each house, a canteen, games room, squash courts, study areas, laundry rooms, computer room and ResNet (see below).

#### ii. Shirreff Hall

The women's residence on the Dalhousie campus, Shirreff Hall, provides accommodation for 454 female students. Located in a quiet corner of the campus, it is minutes from classes, the library, Dalplex and other facilities as well as from the scenic Northwest Arm. It is divided into three houses - Newcombe, Old Eddy and New Eddy (which includes the Annex). Old Eddy and New Eddy have both single and double rooms while Newcombe has single rooms only. The Annex houses only 14 senior students and is distinct from the remainder of Shirreff Hall in that it has a separate outside entrance and is not directly accessible from the main residence.

Shirreff Hall offers a dining room, an elegant library and visitors' lounge, study areas, computer rooms, games room, television lounges, exercise room, kitchenettes, canteen, laundry room, reception desk, and ResNet (see below). Students have access to two pianos.

#### iii. Eliza Ritchie Hall

Opened in 1987, Eliza Ritchie Hall is a co-ed residence. It provides traditional residence accommodation for 92 students in predominantly single rooms.

This three-storey building is located close to the Dalplex and to Shirreff Hall, where students take their meals. Facilities include study rooms, a multipurpose room, reception area, laundry facilities, leisure lounges with kitchenettes and ResNet (see below).

#### iv. New Residence

A new dormitory style residence, yet to be named, is under construction and will be open for occupancy in September, 2004. This building is located on LeMarchant Street, behind the Student Union Building, and will offer 490 single rooms, primarily to undergraduate students. Services will include a dining room, laundry rooms, television lounges, computer room and ResNet (see below).

#### v. Lyall House, DeMille House, Colpitt House

These properties, which were formerly faculty offices, have been converted into 3 mini-residences with a shared courtyard. There are a total of 49 single rooms in a co-ed living environment, with comfortable common space available to residents of each house. All rooms are wired for ResNet (see below). Wiring for phone and cable TV is also present, although residence rates do not include provision of these services, which must be acquired separately. As in other residences, a meal plan is required and meals are taken at Howe Hall.

### B. Sexton Campus

#### i. Gerard Hall

Gerard Hall is a 12-story traditional style co-ed residence that houses 254 students, in single and double rooms. It is located at the corner of Morris and Barrington Streets. Gerard Hall offers laundry facilities, a computer lab and a big screen TV, DVD player and satellite access in the main lounge. Gerard Hall residents commonly use the O'Brien Hall dining room, only seconds away, or may use the dining halls in Howe Hall or Shirreff Hall.

## ii. O'Brien Hall

M.M. O'Brien Hall is centrally located at the corner of Morris and Barrington Streets. Unlike many modern University residences, this seven storey brick building is small and exudes an atmosphere of friendliness. Accommodation is available for 130 students. Each residence floor includes, two large washrooms, twelve single, five double rooms, one RA's room, and access to ResNet (see below). The main floor has a T.V. lounge, student dining hall and kitchen facilities.

**ResNet connects your personal computer to the Dalhousie campus network, the Internet, e-mail, etc. All residence rooms are wired for ResNet.**

## 2. Non-Traditional On-Campus Housing

### A. Main Campus

#### i. Residence Houses

Dalhousie also has two residence houses, which are co-ed. Both were once single family homes and have their own kitchens, living rooms and bathrooms. The character of these homes has been maintained as much as possible. Although they are generally occupied by students in graduate programmes or professional schools, a few spaces are reserved for undergraduates.

These houses have only single rooms, each with a bed, wardrobe, study desk, lamp and chair. Linen, cooking utensils and small appliances are not provided. Students share kitchen and living areas. A trained senior student acts as a house assistant and liaises with Residence Life Manager to provide administrative and resident related services. ResNet is available.

### B. Sexton Campus

#### i. Graduate House

This facility houses 14 graduate students, all in single rooms, and is located beside O'Brien Hall. Rooms are wired for ResNet. ResNet connects your personal computer to the Dalhousie campus network, the Internet, e-mail etc.

Two options are available to Graduate House residents. They are:

1. Room with meal plan;
2. Room without meal plan.

## 3. Apartment Style, University-Owned Housing

### i. Glengary Apartments

Located on the campus on Edward Street, Glengary Apartments is a four-storey brick building offering co-ed accommodation for 40 students. Preference is given to students in second and third year and especially to those who apply in groups of three.

Glengary has 12 furnished apartments, each with space for three students in three single rooms. Each apartment includes a kitchen, living room and bathroom. There are also four bachelor apartments which are always in high demand. Laundry facilities are located in the basement, where there is also a limited amount of storage space. ResNet is available in all apartments.

Coordinators are available for security and administrative services and also act as a resource for students who may need advice or assistance.

### ii. Fenwick Place

Dalhousie's 33-storey Fenwick Place offers students the privacy and some of the independence of apartment living. Located in south end Halifax, it is only a 15-minute walk or a short bus ride from the campus. Fenwick houses both single and married students in a harmonious living environment.

Many of the 252 apartments in Fenwick Place are furnished to accommodate students in groups of two, three or four. Priority is given to students who apply in groups and who are currently living in a Dalhousie residence. Each of these apartments has a full kitchen and bathroom, furnished living room and dining area and a balcony. Bedrooms have

desks and a mate-style bed. Heat, hot water and electricity are included in the residence fee. ResNet is available in all apartments.

Fenwick also has a number of unfurnished bachelor, one and two-bedroom apartments which are rented to married and single students. Each of these apartments has a full kitchen and bathroom. Heat, hot water, and satellite television are included in the rent.

Laundry facilities are available on every floor of Fenwick Place. The front desk is open 24 hours a day with staff available to provide security, information and advice to students.

## 4. Living Off-Campus

Dalhousie's Off-Campus Housing Office assists students who do not want to live on campus or who have been unable to find a place in residence or in University apartments and houses. Located in the Student Union Building, this office is designed to help students find privately-owned accommodation.

The Off-Campus Housing Office provides centralized information on available housing in the Halifax metro area, including apartments, shared accommodations, rooms, condos and houses. Up-to-date computerized printouts of these listings are available for viewing as well as telephones for calling landlords and material such as maps and transit schedules.

Off-Campus Housing has a Web site: <http://www.dal.ca/och>. You can search for accommodations as well as list your own place.

Although the housing staff cannot arrange, inspect or guarantee housing, they will do everything they can to help students find accommodation that is pleasant, inexpensive and close to campus.

Because of the low vacancy rate in Halifax, it is advised that students start looking for off-campus housing well ahead of the academic year.

## 5. General Information

- Application forms must be accompanied by an application fee and a deposit in Canadian funds, payable to Dalhousie University. Deposit amounts are listed on the application form.
- Acceptance into an academic programme does not mean that application for a place in residence has been approved.
- To live in any of the University-owned buildings, students must maintain full-time status at Dalhousie throughout the academic year.

For further information on living at Dalhousie, or for additional copies of the residence application form, do not hesitate to contact:

### Howe Hall, Eliza Ritchie Hall, Shirreff Hall, Gerard Hall, O'Brien Hall, Mini-Residences and Residence Houses

Location: Residence Office  
1443 Seymour St.  
Dalhousie University  
6230 Coburg Road  
Halifax, N.S. B3H 3M6  
Telephone: (902) 494-1054  
E-mail: [housing@dal.ca](mailto:housing@dal.ca)  
Web site: <http://www.dal.ca/housing>

### For Fenwick Place, Glengary Apartments, Graduate House

Location: Accommodation Office  
Fenwick Place  
Dalhousie University  
5599 Fenwick Street  
Halifax, N.S. B3H 1R2  
Telephone: (902) 494-2075  
E-mail: [housing@dal.ca](mailto:housing@dal.ca)  
Web site: <http://www.dal.ca/housing>

### Director of Housing, Conference and Ancillary Services

Location: 1443 Seymour St.  
Dalhousie University  
Halifax, N.S. B3H 3M6  
Telephone: (902) 494-3365

## For Off-Campus Housing Assistance

Location: Off-Campus Housing Office  
Student Union Building  
Room 407  
Dalhousie University  
6136 University Avenue  
Halifax, N. S. B3H 4J2

Telephone: (902) 494-3831  
E-mail: och@dal.ca  
Web site: <http://www.dal.ca/och>

## ResNet

Location: Dalhousie University  
1443 Seymour St.  
Halifax, NS B3H 3M6

Telephone: (902) 494-3365  
E-mail: [resnet@dal.ca](mailto:resnet@dal.ca)

## 12. Centre for Learning and Teaching

The Centre for Learning and Teaching (CLT), formerly the Office of Instructional Development and Technology, is mandated to initiate, lead, and coordinate activities which encourage reflection upon and improvement in learning and teaching at Dalhousie.

**Programming:** To fulfil this primary goal, CLT organizes a range of programming for faculty and teaching assistants. A series of weekly or bi-weekly workshops, presentations, and demonstrations are scheduled to address the full spectrum of instructional issues, including curriculum design, evaluation, active learning strategies, and the effective integration of Instructional Technology. All workshops are open to the full Dalhousie Community. Annual events include the Celebration of University Teaching lecture and reception, which honours Dalhousie's many teaching award winners. CLT also organizes several university-wide teaching awards, including the Dalhousie Instructional Leadership Award, the Alumni Award of Excellence for Teaching, and the President's Graduate Teaching Assistant Award. The annual Dalhousie Conference on University Teaching and Learning brings together presenters from across the University and the country to explore issues related to specific themes. CLT also oversees the Mentoring at Dalhousie initiative for new faculty members, and is responsible for the assessment of the University's Career Portfolio and Skills Transcript projects.

**Publications - Focus on University Teaching and Learning,** the CLT newsletter, is published five times a year and is available online on the CLT web site ([www.dal.ca/clt](http://www.dal.ca/clt)). Also available online is *University Teaching and Learning: An Instructional Resource Guide for Teaching Assistants at Dalhousie University*. Available to purchase or borrow from CLT are *Recording Teaching Accomplishment: A Dalhousie Guide to the Teaching Dossier and Learning Through Writing: A Compendium of Assignments and Techniques*. The extensive bibliography of materials available for loan includes both print and video resources on topics related to teaching. These may be borrowed by faculty, teaching assistants, and students.

**Instructional Media Services:** To complement its primary goal, the CLT also has responsibility for the Instructional Media Services unit which provides support to the university community in a number of areas. Audio-visual Classroom Services provides a wide range of equipment for use on the Studley campus, classroom equipment installation, and training and consultation in the use and development of instructional materials. Graphics Services offers consultation, professional production, and output services for print and presentation media and display items. They design, layout, and produce brochures, newsletters, books, forms, stationery and business cards, posters, books, charts, graphs, maps, and banners. Video and Audio Production Services provides a range of video and audio recording services to students, faculty, and staff, including consultation, scripting, shooting and editing of video, television, and world wide Web productions; on-location video and audio recording, mixing, and editing; videotape duplication; and related graphics and photography. Photography Services include digital imaging (scanning, output to prints & slides, etc.), photomicrography, scientific imaging, as well as general photographic services like portraiture and event photography, film processing, special effects duplication, and the creation of photographic

displays. The Learning Resource Centre (LCR) is equipped with a variety of resources for faculty and students to review non-print instructional materials (video or audio tapes, CD-ROMs, etc.). In addition to PC and Macintosh computers, there are VCRs and monitors, audio cassette players, as well as technical and software support for language instruction. The LRC also offers audio and video tape duplication and has a lending library of audio and video course materials. Technical Services repairs electronic equipment and provides a preventative maintenance service.

**Distance Education:** CLT also supports the development of distance education courses, and maintains an information Web site for students and faculty ([www.dal.ca/de](http://www.dal.ca/de)). Information about Distance Education courses is also available from the Registrar's Office.

Information, teaching resources, and private consultations are available through the central Centre for Learning and Teaching, located on 1234 LeMarchant St. (494-1622), ([CLT@dal.ca](mailto:CLT@dal.ca)).

## 13. International Student & Exchange Services

The International Student & Exchange Services Office (ISES) is committed to welcoming, supporting and servicing new and returning international and exchange students to Dalhousie. ISES provides a resource and activity center for international students. Advisors are available to meet with them on a variety of issues including finances, immigration matters, exchange opportunities, health coverage and personal issues. Referrals are also made to other areas on campus when necessary. The ISES Office organizes orientation activities that assist international students in adjusting to a new culture and in achieving their educational and personal goals. A variety of social, cultural and informational programmes are also held throughout the year.

Student exchange and study abroad services are facilitated by the Study Abroad Advisor at the ISES Office. This branch of the office promotes student mobility by assisting departments and faculties with the establishment of student exchange agreements, managing university wide exchange programs, advising students on international study, work and volunteer opportunities, providing pre-departure and re-entry services, administering the Study Work International Funds (SWIF) and maintaining the International Opportunities Resource Library.

The ISES Office is located in the Killam Library. You can e-mail the ISES Office at [International.Studentservices@Dal.Ca](mailto:International.Studentservices@Dal.Ca) or call (902) 494-1566. The International Student Advisor is available to meet with students at the Student Service Centre (Sexton Campus) at 1360 Barrington Street as well.

## 14. Lester Pearson International (LPI)

Lester Pearson International (LPI) was founded in 1985 to promote Dalhousie's involvement in international development activities. In 1987, LPI merged with the Centre for Development Projects and was given responsibility for the guardianship of all externally-financed international development programmes and projects at Dalhousie. Since then, its mandate has been further expanded to support a broader range of activities which help to internationalize the university.

In general, LPI supports the Dalhousie community's involvement in international activities. Towards this end, LPI helps to develop, support and oversee the university's international projects; coordinates a development education programme entitled DAL-Outreach which organizes seminars and events; disseminates information concerning international activities and opportunities to both the external and internal communities; serves as the university's International Liaison Office/Officer (ILO) which provides a central contact point for donor agencies, international officials/embassies, etc.; and hosts many official international visitors, visiting scholars, and delegations to the university. Although LPI is not an academic unit of the university, it encourages and supports the study of international issues and serves as a resource centre for students, faculty and staff. LPI is located in the Arts and Administration Building on the third floor.

## 15. Libraries

The Dalhousie University Library System is organized to accommodate the needs of the undergraduate teaching programmes, graduate and faculty research projects, and professional schools. The system is made up

of the following components: the Killam Memorial Library - Humanities, Social Sciences and Science, the Sir James Dunn Law Library, the Kellogg Health Sciences Library, and Sexton Design and Technology Library - Architecture, Engineering, and Planning.

As of April 1, 2001, the holdings of the Dalhousie Libraries include over 1,780,000 volumes of books, bound periodicals, documents and bound reports, 457,000 microfilm and microfiche, 100,000 maps and other media, 8,600 music scores and 9,000 music recordings. The libraries subscribe to 10,000 serials titles, including 6,400 electronic titles.

Dalhousie libraries participate in Novanet, a network which shares a single automated online catalogue of the holdings of the member libraries (Mount Saint Vincent University, Nova Scotia College of Art & Design, Saint Mary's University, University College of Cape Breton, University of King's College, the Atlantic School of Theology, St. Francis Xavier University, Nova Scotia Agricultural College and Nova Scotia Community College). Users borrow from Novanet libraries upon presentation of their University ID card.

## 16. Ombudsperson's Office

The Dalhousie Office of the Ombudsperson offers assistance and advice to anyone experiencing problems with the Dalhousie community, including difficulties associated with finances, academics, or accommodations. This student-run office can help resolve particular grievances and attempts to ensure that existing policies are fair and equitable. Jointly funded by the University and the Dalhousie Student Union, the Ombudsperson can provide information and direction on any University-related complaint. Clients retain full control over any action taken on their behalf by the Office of the Ombudsperson, and all inquiries are strictly confidential.

The Office of the Ombudsperson is located in Room 106, 1321 Edward Street. Regular office hours are posted on the door at the beginning of each Semester. The Ombudsperson can be reached by phoning (902)494-6583 or by E-mail: [ombudsperson@dal.ca](mailto:ombudsperson@dal.ca).

## 17. Registrar's Office

The office is responsible for high school liaison, admissions, awards and financial aid, registration, maintenance of student records, scheduling and coordinating formal examinations, and convocation. Of greater significance to students, however, is the role played by members of the staff who provide information, advice, and assistance. They offer advice on admissions, academic regulations and appeals, and the selection of programmes. In addition, they are prepared to help students who are not quite sure what sort of assistance they are looking for, referring them as appropriate to departments for advice about specific major and honours programmes or to the office of Student Services or to specific service areas such as the Counselling Services Centre. The Registrar's Office also mails tens of thousands of letters and packages annually in response to information requests and for student records, from application to graduation and beyond.

Among the staff are people with expertise in financial aid and budgeting who are available for consultation.

The summer advising programme for first year students in Arts and Social Sciences, Management, Computer Science, Engineering, Computer Science and Science is directed from the Registrar's Office. Prospective students may arrange a tour of the campus through this office.

The fact that the Registrar's Office is in contact with every student and every department means that it is ideally placed to provide or to guide students and prospective students to the source of the advice or assistance they need.

Students can access the services of the Registrar's Office at two locations. The main office is located in Room 133 of the Henry Hicks Academic Administration Building on the Studley Campus. Students attending classes at Sexton Campus can also access Registrar's Office services at the Student Service Centre which is located in Building A on the Sexton Campus.

Inquiries may be directed to:  
The Registrar  
Dalhousie University

Halifax, NS  
CANADA B3H 4H6  
Telephone: (902) 494-2450  
Fax: (902) 494-1630  
E-mail: [admissions@dal.ca](mailto:admissions@dal.ca)

## 18. Sexual Harassment Resource Group

Sexual harassment, in general terms, is unwelcome, sexually oriented attention of a deliberate or negligent nature. It can adversely affect one's working or learning environment or participation in University life. It is a form of discrimination on the basis of sex, gender and/or sexual orientation and is prohibited by the Nova Scotia Human Rights Act. Sexual harassment can take many forms including, but not limited to, comments, jokes or insults about a person's gender, sexual orientation or appearance; leering or suggestive looks; displays of offensive pictures or materials; unwanted sexual propositions or demands; persistent unwanted contact after the end of a relationship; and unwanted physical or sexual contact. It may involve promises of reward for complying with sexual demands or threats of reprisals for failing to comply with such demands. It can also create a uncomfortable environment in which to work, live or study through continued sexual comments, suggestions or pressures.

Dalhousie University is committed to an environment free from sexual harassment and has policy and procedures in place to deal with concerns. This policy can be found on the Dalhousie Web page at <http://www.dal.ca/sexualharassment/> and copies are available from members of the Sexual Harassment Resource Group and the Sexual Harassment Officer.

If you feel that you are being harassed, whether by a professor, teaching assistant, staff member, co-worker, student or client, talk to someone. Sexual harassment usually does not go away if you ignore it. If you are able, tell the person as clearly, firmly and directly as you can that the behaviour is unacceptable and that you want it to stop immediately. If this does not stop the behaviour or if you are unable to communicate your concerns (for fear of reprisal or concerns for your safety and comfort), it is time to seek help. The Sexual Harassment Resource Group and Sexual Harassment Officer provide advice, information and support to everyone involved in a concern. Contact information for members of the Sexual Harassment Resource Group is distributed regularly throughout the University community and is also available from the Sexual Harassment Officer.

Contact: Susan Brousseau, Sexual Harassment Officer  
Where: Room 2, Basement Level, Arts and Administration Building, Studley Campus  
Phone: 494-1137, 494-1658 (fax)  
E-mail: [susan.brousseau@dal.ca](mailto:susan.brousseau@dal.ca)  
Web site: <http://www.dal.ca/sexualharassment/>

## 19. Student Accessibility Services

Dalhousie University is committed to providing an accessible environment in which members of the community can pursue their educational goals. Ongoing efforts consistent with a reasonable and practical allocation of resources are being made to improve accessibility and provide special services.

The Advisor provides support and advocacy for students with disabilities. In cooperation with faculty, staff, and other student services at the University, the Advisor endeavours to provide appropriate support services as needed by the student. Early consultation is advised to ascertain that we can fulfil your needs. We can be contacted by phone: voice (902) 494-2836, TTY (902) 494-7091, or by e-mail ([disabilities@dal.ca](mailto:disabilities@dal.ca)). Please refer to our Web site for further information: <http://www.dal.ca/~services/ssd.html>

Please note that due to chemical sensitivities of persons who work and frequent this office, our environment must be scent free.

## 20. Student Advocacy Service

The Student Advocacy Service was established by the Dalhousie Student Union and is composed of qualified students from the University. The

main purpose of the Service is to ensure that the student receives the proper information when dealing with the various administrative boards and faculties at Dalhousie. An Advocate may also be assigned to assist students with academic appeals or in a disciplinary hearing for an academic offence. Our goal is to make the often unpleasant experience of challenging or being challenged by University Administration less intimidating.

The Advocates may be contacted through:

Location: Student Advocacy Service  
Room 440  
Dalhousie Student Union Building  
Telephone: (902) 494-2205  
E-mail: dsas@is2.dal.ca  
Web site: is2.dal.ca/~dsas

## 21. Student Clubs and Organizations

Students seeking information on clubs and societies should call the Dalhousie Student Union offices at 494-1106 or check the DSU Web page at [www.thedsu.com](http://www.thedsu.com). Extracurricular activities and organizations at Dalhousie are as varied as the students who take part in them. Organizations range from small informal groups to large well organized ones; they can be residence-based, within faculties, or university-wide. Some are decades old with long traditions, others arise and disappear as students' interests change. A list of clubs, societies and organizations is available every fall to new students who are encouraged to select and participate.

## 22. Student Employment Centre

Dalhousie's Student Employment Centre (SEC) supports all Dalhousie students and recent alumni in their personal growth and development as it relates to career readiness and employment connections. A key service is to focus access to employment opportunities regionally, nationally and internationally. SEC services students and recent alumni by linking them to employers for full-time, part-time, summer, internship or seasonal employment opportunities. By maintaining relationships with thousands of employers across the country and beyond, SEC assists students in making the right connections to meet career goals. Dalhousie University and University of King's College students and recent graduates can access SEC's interactive web site, [www.dal.ca/sec](http://www.dal.ca/sec), to search, view and apply for a range of job opportunities. Eligible students can register as an SEC client at: [www.dal.ca/sec](http://www.dal.ca/sec), click on Students and sign up. SEC also offers skill building opportunities including volunteering and experiential learning as well as special events like the Halifax Career Fair.

A division of Dalhousie's Student Services, the SEC is centrally located in the Student Union Building and open year-round to serve the career, employment and volunteer needs of students, recent graduates, faculty, staff and employers. SEC operates Monday through Friday from 8:30 am - 4:30 pm. Tutoring Services also operates out of SEC.

Where: Student Employment Centre  
6136 University Ave., Rm 446  
Halifax, NS B3H 4J2  
Phone: 902-494-3537  
Fax: 902-494-1984  
E-mail: [student.employment@dal.ca](mailto:student.employment@dal.ca)  
Web site: [www.dal.ca/sec](http://www.dal.ca/sec)

## 23. Student Services

Located in Room G28 on the Main Floor of the Killam Library, the Office of the Vice-President, Student Services, provides a point of referral for any student concern. The Vice-President, Student Services, is the chief student services officer, coordinating the activities of Athletics and Recreational Services; Bookstores; Counselling Services; Health Services; Housing, Conference and Ancillary Services; International Student and Exchange Services; Learning Connections Project; Office of the Ombudsperson; Registrar's Office; Student Service Centre; Trademarks; University Food Services; Writing Workshop; and Student Resources including Black Student Advising, Chaplaincy, Student Accessibility Services, Student Employment Centre, Student Volunteer Bureau and Tutoring Service.

Students who experience difficulties with their academic programmes or who are uncertain about educational goals, major selection, honours or advanced major information, degree regulations, changing faculties, inadequate study skills, or conflicts with faculty and regulations, can seek the assistance of the Academic Advisors in the Vice-President's Office.

## 24. Tutoring Service

The Dalhousie Tutoring Service, a component of the Student Employment Centre, provides subject tutoring to students requiring academic assistance. Tutors are senior baccalaureate and masters scholars at Dalhousie. The service is available throughout the year to clients studying at university as well as pupils from the surrounding community in public and private schools. The Tutoring Service is located on the fourth floor of the SUB. E-mail: [tutoring.service@dal.ca](mailto:tutoring.service@dal.ca), Web site: [www.dal.ca/tutoring](http://www.dal.ca/tutoring)

## 25. University Bookstore

The University Bookstore, owned and operated by Dalhousie, is a service and resource centre for the university community and the general public. The Bookstore has all required and recommended texts, reference books and supplies, as well as workbooks, self help manuals and other reference material. As well, you can find titles by Dalhousie authors.

The Stationery department carries all necessary and supplementary stationery and supplies. The Campus shop carries gift items, mugs, clothing and crested wear, cards, jewelry, class rings, backpacks, novelties and briefcases. A Special Order department is located at the customer service area and will order and ship books worldwide.

The Bookstore is situated on the lower level of the Student Union Building on University Avenue, and is open year round, Monday to Saturday (Hours vary throughout the year).

The Health Sciences bookstore has the largest and most complete medical book section in Atlantic Canada, with over 2000 titles in stock. Thousands of other titles are specially ordered annually, and the department ships out books to consumers and hospitals throughout the world. The Health Sciences bookstore is located in the Dentistry building, 5981 University Avenue, and is open year round, Monday to Saturday. Hours vary throughout the year.

The Sexton Campus bookstore is located in the Student Service Centre at 1360 Barrington Street (Building A) and is open from 9:00 a.m. - 4:00 p.m. Monday to Friday. It supplies texts and reference books required for Architecture and Engineering students as well as crested clothing, stationery and other supplies.

## 26. University Computing and Information Services

University Computing and Information Services (UCIS) provides computing and communication services for students, faculty, and staff for instructional, research, and administrative purposes. It is responsible for all centrally managed computing and communications facilities.

UCIS manages a campus-wide communications network which interconnects office systems, laboratory systems, departmental computers, and central facilities. This network is connected to the CA\*Net research and education network and to the worldwide Internet. Network connections are available in most residence rooms. UCIS is also responsible for University telephones.

UCIS manages a variety of systems including IBM pSeries and xSeries Servers as well as a significant Sun Solaris and Linux presence. In cooperation with the relevant academic departments, UCIS also supports numerous personal computer teaching laboratories which are situated throughout the campus. It is strongly recommended, however, that students have access to a personally owned microcomputer with Internet access, especially for word processing, personal e-mail and WWW use, as most university facilities are heavily used for discipline-specific class work.

All students may have access to campus computing facilities on an individual basis or in conjunction with the classes that they take. Network ports for personally used computers are available in several campus locations, and also in rooms of most university residences.

UCIS also manages the campus computer store (PCPC); provides short, non-credit computer related classes, offers a hardware maintenance service for micro-computers, operates an online class delivery service (WebCT), a Web authoring service, an Electronic Text Centre, and is a partner in the Killam Library Learning commons. UCIS also is a partner with the Killam Library in providing the university's Anti-Plagiarism service.

UCIS Help Desks are operated in the Computer Centre basement of the Killam Library, and in B Building, Sexton Campus, ground floor, adjacent to the Student Service Centre.

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## **27. University Health Services**

The university operates a medical clinic, in Howe Hall, at Coburg Road and LeMarchant Street staffed by family doctors, nurses, a psychiatrist, and health educator. Further specialists' services are available and will be arranged through the Health Service when indicated. All information gained about a student by the Health Service is confidential and may not be released to anyone without signed permission by the student.

Appointments are made during the clinic's open hours, from 9 a.m. to 10 p.m., Monday to Friday and 10:00 a.m. to 6:00 p.m. Saturday and Sunday, by calling 494-2171. In the event of an urgent medical problem, students may seek medical advice during clinic hours. After hours, students may wish to seek assessment at the local emergency room. The QEII emergency room on Summer Street is the closest emergency room.

All students must have medical and hospital coverage. All Nova Scotia students are covered by the Nova Scotia Medical Services Insurance. All other Canadian students must maintain coverage from their home provinces. This is especially important for residents of any province requiring payment of premiums. All non-Canadian students must be covered by medical and hospital insurance prior to registration. Details of suitable insurance may be obtained from the Student Accounts office prior to registration. Any student who has had a serious illness within the last 12 months, or who has a chronic medical condition, should contact and advise the Health Service; preferably with a statement from the doctor.

## **28. Volunteering**

Please refer to Student Employment Centre.

## **29. Writing Workshop**

The Writing Workshop programme recognizes that students in all disciplines are required to write clearly to inform, persuade, or instruct an audience in term papers, laboratory reports, essay examinations, critical reviews and more.

This English language resource centre offers non-credit classes in language and writing, including instruction and practice in English for speakers of other languages (ESOL), a tutorial service, guidelines for acceptable standard language usage, and provides information about sources for reference. For more information about the Writing Workshop, please call 494-3379 or visit our Web site: [www.dal.ca/~workshop](http://www.dal.ca/~workshop).

# Financial Aid

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PLEASE NOTE: The contents of this section are subject to change without notice.

The University reserves the right to publicize the recipients of merit awards.

## I. Government Student Loans

Canadian students are to apply for government assistance to the appropriate agency in that province or territory in which the applicant is a bona fide resident. The addresses for Canada Student Loan authorities of those provinces and territories participating in the plan are listed below:

### Alberta

Alberta Learning - Students Finance  
P.O. Box 28000  
Station Main  
Edmonton, Alberta T5J 4R4  
(780) 427-3722

### British Columbia

Student Services Branch  
Ministry of Advanced Education, Training and Technology  
P.O. Box 9173  
Stn Provincial Government  
Victoria, British Columbia V8W 9H7  
1-800-561-1818 Fax: 1-800-262-2112

### Manitoba

Student Financial Assistance Branch  
Manitoba Education and Training  
409-1181 Portage Ave.  
Winnipeg, Manitoba R3G 0T3  
(204) 945-6321/6322 Fax: (204) 477-4596

### New Brunswick

Student Services Branch  
Department of Advanced Education and Training  
P.O. Box 6000  
Fredericton, New Brunswick E3B 5H1  
(406) 453-2577 or  
1-800-667-5625 (Atlantic Provinces, Ontario and Quebec only)  
Fax: (506) 444-4333

### Newfoundland

Department of Education  
Student Aid Division, Coughlan College  
P.O. Box 8700  
St. John's, Newfoundland A1C 4J6  
(709) 729-5849 Fax: (709) 729-2298

### Northwest Territories

Student Financial Assistance  
Department of Education  
P.O. Box 1320  
Yellowknife, Northwest Territories X1A 2L9  
(867) 873-7190 or 1-800-661-0793 Fax: 1-800-661-0893

### Nova Scotia

Student Aid Office  
Department of Advanced Education and Job Training  
P.O. Box 2290, Station M  
Halifax, Nova Scotia B3J 3C8  
(902) 424-8420 (metro)  
1-800-565-8420 (within province)  
Fax: (902) 424-0540

(Street location: Trade Mart Building, 2021 Brunswick at Cogswell Street, Halifax, N.S.)

### Nunavut

Financial Assistance  
P.O. Box 390  
Arviat, NU  
X0C 0E0  
1-877-860-0680 Fax: 1-877-860-0167

### Ontario

Student Support Branch  
Ministry of colleges and Universities  
P.O. Box 4500  
Thunder Bay, Ontario P7B 6G9  
(807) 343-7260 Fax: (807) 343-7278

### Prince Edward Island

Student Aid Office  
Department of Education & Human Resources  
P.O. Box 2000  
Charlottetown, Prince Edward Island C1A 7N8  
(902) 368-4640 Fax: 9902) 368-6144

### QuJbec

Residents of QuJbec apply to:  
MinistPre de l'enseignement superieur et de la Science  
Direction gJnJrale de l'aide financiere aux etudiants  
1035, rue de la Chevrotiere 21<sup>e</sup> etage  
Quebec, Quebec G1R 5A5  
(418) 646-4505 Fax: (418)528-0648

### Saskatchewan

Student Financial Assistance Branch Saskatchewan Education  
B21, 3085 Albert Street  
Regina, Saskatchewan S4P 3V7  
(306) 787-5620 Fax: 1-800-597-8278

### Yukon Territory

Students' Financial Services  
Department of Education  
P.O. Box 2703  
Whitehorse, Yukon Territory Y1A 2C6  
(867) 667-5929 Fax: (867) 667-8555

## II. Dalhousie Graduate Bursaries

All graduate students currently registered in a degree programme, beyond year one, are eligible to apply. Students who unexpectedly find themselves in financial need may apply to the Graduate Studies Office for university bursaries made available through the student assistance programme.

Bursaries are for students who can prove their need. Students eligible for government loans must have applied for them before a bursary application can be considered. Please note there are no appeals on bursary decisions. Bursary applications can be found on the Faculty of Graduate Studies web site at [www.dalgrad.dal.ca/forms/student.cfm#bursary](http://www.dalgrad.dal.ca/forms/student.cfm#bursary).

### A. General Information about Bursaries

It should be noted that Canada Student Loans (with or without provincial bursaries and/or loans) are expected by provincial authorities to meet the financial deficiencies of the students and that bursaries subsequently awarded by the University must be reported and are liable to be deducted (in part or in whole) from the amounts originally allocated under the Canada Student Loan Plan or provincial aid programme.

### B. Government Notification

Holders of Dalhousie University bursaries should note that the University is required, upon written request, to report its award winners to the respective Provincial Student Aid Authority.

# Fees

## Student Accounts Office

Mailing Address: Henry Hicks Academic Administration  
Building (Room 29)  
Halifax, NS B3H 4H6

Web site and online payment:  
<http://www.dal.ca/studentaccounts>

Service Location: Studley Campus - Basement Henry Hicks Academic Administration Bldg.  
Sexton Campus - Student Service Centre

Telephone: (902) 494-3998  
Fax: (902) 494-2839  
E-mail: [Student.Accounts@Dal.Ca](mailto:Student.Accounts@Dal.Ca)  
Office Hours: Studley Campus - Monday to Friday 10:00 a.m.-4:00 p.m.  
Sexton Campus - Monday to Friday 9:00 a.m. -4:00 p.m.

### 2004/2005 Important Dates:

#### September

24 Fees due for fall term  
Last day to pay without late registration fee  
Last day for complete refund

#### November

8 Last day for partial refund fall term  
5 \$50 reinstatement fees assessed on all outstanding accounts over \$200

#### January

17 Fees due for winter term and second instalment of regular session  
Last day to pay without late registration fee  
Last day for complete refund

#### March

5 \$50 reinstatement fee assessed on all outstanding accounts over \$200  
7 Last day for partial refund for winter term

NOTE: Please consult summer school timetable for registration schedule for summer school.

### Web site and Online Payments

<http://www.dal.ca/studentaccounts>

## I. Introduction

The following section of the calendar outlines the University Regulations on academic fees for both full-time and part-time students enrolled in programmes of study during the fall, winter and summer terms. A section on University residence and housing fees is also included. Students wishing to register for the summer term should consult the summer school calendar for information on registration dates and fees.

All fees are subject to change by approval of the Board of Governors of Dalhousie University. An Academic Fee Schedule will be available when the registration package is distributed. A list of miscellaneous fees is included in Table I.

NOTE: The student tuition fees and other fees that are published herein are applicable only to regular students admitted to a programme through the normal application process. Other students who are admitted to Dalhousie under a special programme or policy will be charged different tuition and other fees in accordance with such special programme or

policy. For further information regarding any fees to be charged to students who are admitted to Dalhousie under a special programme or policy, please contact Student Accounts or the dean's office of the applicable faculty.

Students should make special note of the academic dates contained in the front section of the calendar as well as fee dates. Students should also be aware that additional fees and/or interest will be charged when deadlines for payment of fees as contained herein are not met.

All the regulations in this section may not apply to Graduate Students. Please refer to the "Faculty of Graduate Studies" Calendar.

## II. University Regulations

The following general regulations are applicable to all payments made to the University in respect of fees.

- Fees must be paid in Canadian funds by cash, interac, negotiable cheque, money order, Mastercard, or Visa.
- If payment is by cheque and returned by the bank as non-negotiable, there will be an additional fee of \$20.00 and the account will be considered unpaid. Furthermore, if the bank returns a cheque that was to cover payment of tuition, the student's registration may be canceled and, if permitted to re-register, a late fee will apply.
- Accounts in arrears must be paid by certified cheque, money order, interac, Visa or Mastercard prior to registration in a future term.

### A. Deposits

#### 1. Admission Deposit

A non-refundable deposit of \$200 is payable on admission by all new students. Students in specified limited enrolment programmes (see below) must pay the deposit within three weeks of receiving an offer of admission. Undergraduate students accepted by March 15 are required to pay the deposit by May 1. Undergraduate students accepted after March 15 must pay the deposit within three weeks of receiving an offer of admission.

#### Limited Enrolment Programmes include:

- Master of Business Administration
- Master of Environmental Studies
- Master of Library and Information Studies
- Master of Public Administration

All programmes in the following faculties:

- Faculty of Dentistry
- Faculty of Health Professions
- Faculty of Law
- Faculty of Medicine

The admission deposit will be considered a registration deposit that will be credited towards fees at time of registration.

#### 2. Registration Deposit

All returning students (except those in the Faculties of Law, Medicine, Dentistry or Graduate Studies) are required to pay a registration deposit before they are eligible to register and select courses. The deposit will be credited towards fees at time of registration. Note: A registration deposit is not required if an admission deposit is paid for the term.

### B. Registration

A student is considered registered only after financial arrangements have been made with Student Accounts (i.e., a deposit has been paid as noted above).

Payment of the deposit and selection of course(s) is deemed to be an agreement by the student for the payment of the balance of fees unless written notification to withdraw is submitted to the Office of the Registrar. Students withdrawing in person must attend the Office of the Registrar and the Student Accounts Office before the withdrawal process is official. Students in Graduate and Professional programmes wishing to withdraw should initiate formal action to withdraw at the dean's office of the appropriate faculty.

## APPROVED TUITION FEES 2003/2004

Degree Programme	Programme Fee	Per Tuition Hour
Architecture		183
Arts and Social Sciences		174
Computer Science		198
Dentistry Dentistry Dental Hygiene	10,460 6,504	
Engineering		198
Health Professions Health Services Administration Health Science Nursing & Kinesiology Occupational Therapy, Physiotherapy & Pharmacy Recreation & Health Education Social Work		198 203 203 209 203 192
Law	7,368	
Management Commerce Co-op Management & Public Administration		200 175
Medicine MD Post-Graduates	10,460 2,160	
Science		198
<b>GRADUATE</b>		
<b>Masters</b>		
Architecture MArch (Post-Professional) MArch Urban and Rural Planning	6,270	210 220
Arts and Social Sciences	5,514	
Computer Science	6,270	
Dentistry	9,780	
Electronic Commerce	6,948	
Engineering	6,270	
Health Professions Health Education, Leisure Studies Health Services Administration Human Communication Disorders (Years 1 and 2) Human Communication Disorders (Year 3) Kinesiology and Nursing Occupational Therapy & Physiotherapy, and Pharmacy Social Work	6,270 7,872 6,522 6,792 7,872	212 204
LAW	7,728	
Management Business Administration (2-year programme) & Public Administration Environmental Studies & library & Information Studies Business Administration (10-month programme)	5,580 9,060	185
Marine Affairs	5,580	
Medicine Community Health & Epidemiology	6,792	
Science (Applied Science, Environmental Design)	6,270	
<b>Doctorate</b>		
Arts and Social Sciences	5,790	
Computer Science	6,552	
Engineering	6,552	
Law	7,992	
Science (Applied Science, Environmental Design)	6,552	
<b>Continuing Fee</b>		
All Programmes	1,719	
<b>International Student Differential Fee</b>		
All Programmes	4,500	Max 2,250 per term
International Health Insurance	605 per year	
Note: Complete fee schedules are available online URL: <a href="http://www.dal.ca/studentaccounts">www.dal.ca/studentaccounts</a> . The 2003/2004 fee schedule currently online is expected to be updated by June 1, 2004 with the 2004/2005 academic fees.		

## C. Late Registration

Students are expected to register on or before the specified registration dates. Students wishing to register after these dates must receive the approval of the Registrar. A late registration fee of \$50.00 will apply if registration and payment of fees has not been completed by specified dates. This fee is payable at time of payment and will be in addition to regular fees.

## D. Academic Fees

The 2004/2005 academic fee schedule is not yet available. Once fees are approved for 2004/2005, a complete schedule showing the required payments of the academic fees and deposits will be made available. The official schedule will be available when registration information is mailed to students in late June.

NOTE: Students registered in more than one programme are required to pay separate academic fees for each programme.

## E. Payment

The payment of academic fees will be received at the Student Accounts Office located on the basement level of the Henry Hicks Academic Administration building or the Student Service Centre on Sexton Campus.

For the convenience of students, non-cash payments are accepted by mail. Fees paid by mail must be received by Student Accounts on or before the deadlines specified in order to avoid late payment and/or delinquency charges.

Credit card payments can be made through our online payment site [www.dal.ca/studentaccounts](http://www.dal.ca/studentaccounts). Payments are authorized immediately and normally posted to the student's account by noon the next business day.

The following regulations apply to the payment of academic fees. For further information on regulations regarding withdrawal of registration, please refer to "Class Changes, Refunds and Withdrawals" on page 126:

- All students must pay the applicable deposit in accordance with Section A.
- Those holding external scholarships or awards paid by or through Dalhousie must provide documentation of the scholarship or award.
- Those whose fees are paid by a government or other agency must provide a signed statement from the organization at time of registration.
- Those paying the balance of their account by Canada Student Loan must negotiate the loan by September 24 or January 17 for the respective term. Interest will be charged after these dates and a late registration fee will apply.
- Those whose fees are paid by Dalhousie University staff tuition fee waiver must present the appropriate waiver form and pay applicable incidental fees. Any unused portion of the applicable registration deposit will be refunded.
- Those who are Canadian citizens or permanent residents, 65 years of age or over and enrolled in an undergraduate degree programme will have their tuition fees waived but must pay the applicable incidental fees. Any unused portion of the applicable registration deposit will be refunded.
- Scholarships or awards paid by or through Dalhousie University will be applied to academic and residence fees.
- When a Canada Student Loan, provincial loan or co-payable bursary is presented at the Student Accounts Office, any unpaid charges, will be deducted.
- Fees cannot be deducted from salaries paid to students who are employed at Dalhousie University.
- Any payments will first be applied to overdue accounts.

## F. International Students

### 1. Differential Fee

Registering students who are not Canadian Citizens or permanent residents are required to pay an additional fee referred to as a "Differential Fee" in the amount of \$2250.00 maximum per term, subject to increase in 2004/2005. There is a proportional charge for part-time international students. Graduate Students please see Section 4.8.2 of the Graduate

Studies Calendar to determine the number of years a student is required to pay the differential fee. If a student receives landed immigrant status, the differential fee will not be assessed for the current term and beyond.

## 2. Health Insurance

International students will be charged for an International Student Health Plan when they register. If a student already has health coverage, they can apply to opt out of the International Student Plan at the International Student & Exchange Services Office (ISES) before the last day to register for classes. Costs for the health plan change yearly. More details on the international student health plan costs and opt out process can be found at the ISES Web site ([www.international.studentservices@dal.ca](http://www.international.studentservices@dal.ca)).

Health Insurance - International Students (2003/2004 fees, for information only)

- Single - \$605.00 per year
- Family - \$1485.00 per year

## G. Audit Classes

All students auditing a class pay one-half of the regular tuition fee plus full auxiliary fees, if applicable. In such cases, the student is required to complete the usual registration process.

A student who is registered to audit a class who during the session wishes to change their registration to credit must receive approval from the Registrar. This must be done on or before the last day for withdrawal without academic penalty. The same deadline applies for a change from credit to audit.

## H. Class Changes, Refunds and Withdrawals

Please consult Student Accounts for all financial charges and the Office of the Registrar for academic regulations.

### Refund Conditions

**Non-attendance does not, in itself, constitute withdrawal. Withdrawals are effective when a student withdraws from classes on the Web at [www.dal.ca/online](http://www.dal.ca/online) or written notification is received at the Office of the Registrar.**

In the Faculties of Architecture and Planning and Health Professions students who wish to withdraw from the University must obtain written approval from the appropriate school or college and submit the appropriate forms to the Registrar. Students should continue to attend class until their withdrawal has been approved.

A refund of fees will not be granted unless the following conditions are met:

- Notification of withdrawal must be submitted to the Office of the Registrar, as indicated above.
- After the approval of the Registrar has been obtained (in the case of graduate and professional school, the appropriate dean), application for a refund or adjustment of fees should be requested from the Student Accounts Office immediately. The calculation of the refundable portion of fees will be based on this date. Retroactive withdrawals will not be permitted.
- No refunds will be made for 30 days when payment has been made by personal cheque or 60 days for a personal cheque drawn on a bank outside of Canada.
- A student who is dismissed from the University for any reason will not be entitled to a refund of fees.
- Refunds will be made to the National Student Loan Centre if a student has received a Canada or provincial student loan.
- Refunds will be prorated on fees paid by Dalhousie scholarships and/or fee waiver.
- A valid Dalhousie University ID must be presented in order for the student to receive a refund cheque.
- No fee adjustment will be made for a student changing their degree or programme as follows:
 

Regular (Sept. - April) and Fall Terms	After September 24
Winter Term	After January 17
Summer Term	After May 13

## I. Refund Schedule

Fall Refund Schedule			
	Parts of Term		
Incidental, Society & Miscellaneous Fees	1	2	X
Non refundable after:	Sept 24	Sept 24	Sept 24
Tuition & Differential Fee			
Up to Sept 24	100%	100%	100%
Sept 25-Oct 1	85%	85%	85%
Oct 2 - Oct 8	70%	70%	70%
Oct 9 - Oct 15	55%	0%	55%
Oct 16 - Oct 22	40%	0%	40%
Oct 23 - Oct 29	25%	0%	25%
Oct 30 - Nov 8	10%	0%	10%
After Nov 8	0%	0%	0%

Winter Refund Schedule			
	Parts of Term		
Incidental, Society & Miscellaneous Fees	1	2	Y
Non refundable after:	Jan 17	Jan 17	Jan 17
Tuition & Differential Fee			
Up to Jan 17	100%	100%	100%
Jan 18 - Jan 24	85%	85%	85%
Jan 25 - Feb 7	70%	70%	70%
Feb 8 - Feb 14	55%	0%	55%
Feb 15 - Feb 21	40%	0%	40%
Feb 22 - Feb 28	25%	0%	25%
Mar 1 - Mar 7	10%	0%	10%
After Mar 7	0%	0%	0%

### Important Information Regarding Refunds

- The refund schedule above does not apply to Medicine or Dentistry programmes. Please contact Student Accounts for further information
- A portion of fees will be assessed if withdrawal from a course occurs after September 24th (Fall Term) and January 17th (Winter Term). Withdrawals before these dates will be completely refunded, but no substitutions will be allowed from a financial perspective after these dates.
- Students wishing to withdraw from a course must notify the Registrar's Office in writing.
- The date the Registrar's Office receives notification determines the amount of the refund.
- Non-attendance does not constitute withdrawal and fees will be payable.
- The refund schedule above does not apply to the University of King's College Journalism Programme.
- For financial charges, contact Student Accounts at (902) 494-3998 or [Student.Accounts@dal.ca](mailto:Student.Accounts@dal.ca).

## J. Delinquent Accounts

Accounts are considered delinquent when the balance of fees has not been paid by September 24 for the fall term, (January 17 for students registered for the winter term). Where payment in two instalments is permitted, the remaining balance is due January 17.

Interest at a monthly rate set by the University will be charged on delinquent accounts for the number of days overdue.

At the time of printing the rate of interest is 8.00% per annum.

A student whose account is delinquent for more than 30 days will be denied University privileges including access to transcripts. The student will be reinstated upon payment of the fees outstanding, the arrears interest and a \$50.00 reinstatement fee. Students will not be permitted to register in future terms until all outstanding amounts are paid in full.

Subsequently, if the bank does not honour the payment, the student may be deregistered.

Graduating students whose accounts are delinquent on April 15 will not receive their degree/diploma parchment. For fall graduation the deadline is September 1. Transcripts are withheld until payment is received in full.

Accounts which become seriously delinquent may be placed in collection or further legal action may be taken against the individual. Students will be responsible for charges incurred as a result of such action.

### K. Canada Student Loans

Students planning to pay by Canada Student Loan should apply to their province in April or May so that funds will be available by time payment is required. The University will deduct fees/charges from the loan at the time of endorsement. Please contact the appropriate provincial office to determine eligibility as well as class load requirements. A late fee of \$50.00 will apply if the loan is negotiated after September 24, 2004. (January 17, 2005 for students registered for winter term, and May 13 for students registering for the summer term).

### L. Provincial Bursaries and University Scholarships

These cheques are distributed by the Student Accounts Office. Any unpaid fees and/or temporary loans along with charges, if applicable, are deducted and payment will be issued within one week of endorsement for any balance remaining. A valid Dalhousie University ID and Social Insurance Number must be presented in order to receive cheques. Please contact the appropriate provincial office to determine eligibility as well as class requirements for provincial bursaries. For more information on student loans, bursaries or scholarships inquiries should be directed to the Registrar's Office - on the first floor of the Henry Hicks Academic Administration building, Room 123.

### M. Income Tax Credit from Academic Fees

The amount of academic fees constituting an income tax credit is determined by Canada Customs and Revenue Agency. Currently, the tax credit for students is calculated by deducting the following from academic fees paid: Student Union fees and society fees. Seventeen percent (17%) of the remaining balance constitutes the tax credit.

A special income tax certificate (T2202A) will be available through Web for Student annually no later than February 28.

### N. Identification Cards (DalCard)

All full and part-time students should obtain identification cards upon registration and payment of appropriate fees. If a card is lost, a fee of \$15.00 is charged. Regular session ID cards are valid until August 31.

### O. Student Union Fee Distribution

Every student registered at Dalhousie is automatically a member of the Student Union and is therefore required to pay a Student Union fee as part of their registration procedure. These fees have been approved by students in referenda and, along with other revenue of the Union, are allocated each year by the Student Council in a budget.

What follows is the breakdown of how Student Union fees are spent. If you have any questions or comments please contact the Student Union Office located in Room 222 of the SUB Telephone No. 494-2146.

#### 2003-2004 Student Union Fees Per Term Full-Time

##### For information only

General Operation .....	\$24.15
C K D U - FM.....	2.00
Facility Improvement Fee.....	5.00
Women's Centre Fund .....	1.35
Student Accessibility Fund .....	1.00
Gazette .....	2.50
Capital Fund.....	20.00
TOTAL .....	56.00
DSU Health Insurance .....	150.00

*Students with separate health insurance may apply to the DSU on or before October 8, 2004 for reimbursement.*

### P. Laboratory Deposits

A deposit for the use of laboratory facilities in certain departments is required. The deposit is determined and collected by these departments. Students will be charged for careless or willful damage regardless of whether or not a deposit is required.

Miscellaneous Fees 2004-2005		
Fee	Amount	Payable at
Late Registration	\$50	Student Accounts
Reinstatement Fee	\$50	Student Accounts
Returned Cheque	\$20	Student Accounts
Admission Deposit	\$200	Student Accounts
Application Fee	*\$45	Registrar
Late Graduation Application	\$50	Registrar
Replacement ID	\$15	DalCard Office
Transcript	**\$5	Registrar
Priority Transcript Fee	\$15	Registrar
Same Day Transcript Fee	\$25	Registrar
Fax Fees		
Metro	\$5	Registrar
Canadian	\$10	Registrar
International	\$15	Registrar
Residence Application Fee	\$50	Residence
* Except for the following programmes which require payment of a \$70.00 application fee: Occupational Therapy, Pharmacy, Physiotherapy, Social Work; Diploma programmes in Meteorology, Outpost and Community Health Nursing, and Health Services Administration; and all programmes in the Faculties of Medicine, Dentistry (including Dental Hygiene), Law, and Graduate Studies		
** Where appropriate, contact Registrar's office for details		
Note: Indicated fees are subject to change after publication of this calendar.		

### Q. Student Service Fee

Student Service provides and supports various Dalhousie Services including health services and athletics. For information only - 2003-2004 Student Service fee is \$78.00 per term for full-time students.

The following services will be provided without additional charges unless specified:

- Change from Audit to Credit
- Confirmation of Enrolment
- Confirmation of Fee Payment
- Dalplex Membership
- Leave of Absence Fee
- Letter of Permission
- Replacement Tax Receipt (2000 or beyond)
- Transcripts (maximum of 5 requested at one time)

### R. Statements and Monthly Notices

Statements will be mailed at the beginning of each term. Subsequent monthly payment reminders which include adjustments will be sent to the student's official Dalhousie e-mail address. To receive a mailed statement in addition to an e-mail notification, please contact Student Accounts to arrange a billing address.

### III. Residence Fees

PLEASE NOTE: The following are general statements. Given the diversity of residence facilities, available practices vary slightly from locale to locale. Applications for accommodation in all residences are accepted on the understanding that the student will remain for the whole academic session.

When students who have secured a room withdraw from residence before the end of the school year, there are serious financial penalties. Written notice to withdraw is always required by the appropriate Residence Life Manager. Complete information on withdrawal from residence is available from the Residence Life Manager and is detailed in the residence agreement to be signed by all residence students.

## Room & Meal Rates (Based on the 2003/2004 academic year)

All prices are listed per student / per term

### Traditional Residences

Residence fees include Meal Plan (19 meals/wk), Residence Council Fee, ResNet, Application Fee and Confirmation Deposit.

	Fall	Winter	Total
Howe Hall Fountain House Single	\$3,752.00	\$4,062.00	\$7,814.00
Howe Hall Fountain House Double	\$3,459.00	\$3,745.00	\$7,204.00
Howe Hall Single	\$3,560.00	\$3,854.00	\$7,414.00
Howe Hall Double	\$3,267.00	\$3,537.00	\$6,804.00
Howe Hall Bunk Double	\$3,171.00	\$3,433.00	\$6,604.00
Shirreff Hall Single	\$3,555.00	\$3,849.00	\$7,404.00
Shirreff Hall Double	\$3,262.00	\$3,532.00	\$6,794.00
Eliza Ritchie Hall Single	\$3,555.00	\$3,849.00	\$7,404.00
Eliza Ritchie Hall Double	\$3,262.00	\$3,532.00	\$6,794.00
Gerard Hall Single	\$3,452.00	\$3,737.00	\$7,189.00
Gerard Hall Double	\$3,159.00	\$3,420.00	\$6,579.00
Mini Residences Single	\$3,555.00	\$3,849.00	\$7,404.00
Residence Houses Single **Room Rate only (no meals included in rate)	\$2,132.00	\$2,310.00	\$4,442.00
O'Brien Hall Single	\$3,507.00	\$3,797.00	\$7,304.00
O'Brien Hall Double	\$3,214.00	\$3,480.00	\$6,694.00
O'Brien Hall Super-Single	\$3,579.00	\$3,875.00	\$7,454.00

### Non-Traditional Residences

Meal plans are NOT included in rates

Glengary Apartments			
	Fall	Winter	Total
Bachelor	\$2,845.00	\$3,086.00	\$5,931.00
3 BR Shared	\$2,386.00	\$2,587.00	\$4,973.00
Grad House			
	Fall	Winter	Total
Single	\$2,348.00	\$2,546.00	\$4,894.00
Fenwick Place - Student-Shared (8 month agreements)			
	Fall	Winter	Total
2 BR Shared	\$2,628.00	\$2,628.00	\$5,256.00
3 BR Shared	\$2,415.00	\$2,415.00	\$4,830.00
4 BR Shared	\$2,170.00	\$2,170.00	\$4,340.00
Fenwick Place - Conventional (12 month agreements)			
	Monthly		
Bachelor	\$574.00		
1 Bedroom	\$698.00		
2 Bedroom	\$944.00		
Fenwick Place - International Exchange Floors			
	Fall	Winter	Total
Single	\$2,300.00	\$2,300.00	\$4,600.00
Double	\$2,000.00	\$2,000.00	\$4,000.00
Triple	\$1,700.00	\$1,700.00	\$3,400.00
(1) The residence term for all residences except Fenwick Place covers the time period from the Wednesday in September before classes begin in the College of Arts and Science to the last regularly scheduled examination in the College of Arts and Science in April (Christmas vacation excluded). The residence term for Fenwick Place is as follows: First semester - Labour Day to December 31, 2003; and second semester - January 1, 2004 to April 30, 2004. Those students wishing to stay beyond the residence term may do so for a daily or weekly rate. Please contact the appropriate residence for details.			
(2) The above fees will be superseded on July 1, 2004 when the 2004/2005 residence fee schedule will be published.			

No refund will be made to any resident who is dismissed for misconduct. Discretionary power in exceptional circumstances remains with the Director of Housing, Conferences and Ancillary Services or designate. Once offered admission to an academic programme of study at Dalhousie, students are eligible to submit a housing application with the required \$50.00 fee. However, only when your \$200.00 admission deposit is received by the Registrar's Office, will your housing application become "active" and will you be offered residence accommodation. All residents, new and returning, who have accepted a room assignment, will be required to pay a deposit of \$500.00 by June 7 to confirm the assigned space. Failure to make a deposit by June 7 will result in automatic cancellation of room assignment.

Once the \$500.00 deposit is paid, it is only partially refundable, as outlined in the "Housing Brochure."

Deposits may be made by cheque, bank draft, money order, or credit card (M/C or Visa) in Canadian funds and payable to Dalhousie University. No reservations will be held on post-dated or "NSF" cheques. Deposits cannot be deducted from scholarships, fellowships, or similar awards.

### A. Payment of Residence Fees

Payment may be made in full at registration or in two instalments. Scholarships may be applied to residence charges only after tuition fees for the full session are paid. The first instalment must be paid in full by September 24. Interest is assessed weekly at a rate as set by the University and will be charged on all accounts outstanding after September 24, 2004 and on any second instalment outstanding after January 17, 2005. For the 2003/2004 academic year the rate was 8% per annum. This rate is subject to change. The student will not be permitted to register for another session until all accounts are paid in full. A student whose account is delinquent for more than 30 days will be denied university privileges including access to transcripts and Dalplex. The student will be reinstated upon payment of the fees outstanding, the arrears interest, and a \$50.00 reinstatement fee.

For Howe Hall, Eliza Ritchie Hall, Shirreff Hall, Gerard Hall, Mini-Residences, and the Residence Houses fees are paid at the Student Accounts Office. For Fenwick Place and Glengary Apartments and O'Brien Hall fees can be paid at the Student Accounts Office, Fenwick Place, or the Student Service Centre (Sexton Campus).

Students should make an appointment as soon as possible with the Associate Director of Residence Life, Manager Sexton Campus, or the Manager of Student Accounts if they are having financial difficulties.

### B. Regulations and Additional Charges

The room and board session commences the day before classes begin in September in the College of Arts and Science and ends on the last day of the examination period in the College of Arts and Science in April. Please note that, except at Fenwick Place, students must vacate the residence twenty-four hours after their last exam and that residences are closed over the Christmas holidays.

No reduction in the board charge will be made for meals not taken, except that a rebate of \$200.00 per month may be considered in the case of illness or other cause necessitating absence of four weeks or more.

In Fenwick Place the rental period is based on a 34-week period beginning on Labour Day. For more specific details on dates of semesters, students should contact the accommodations office at Fenwick Place.

In all other cases, an additional fee is payable by all residents who are registered in a Faculty where the academic session commences before or continues after the session of the College of Arts and Science. Special arrangements are to be made with the appropriate Residence Life Manager for accommodation for periods prior to or following the session as defined above.

### C. Residence Rates 2004/2005

The residence term for Howe Hall, Shirreff Hall, Eliza Ritchie Hall, Gerard Hall, O'Brien Hall, Mini-Residences, Glengary Apartments and the Residence Houses cover the time period from the Wednesday in September before classes begin in the College of Arts and Science to the

last day of the examination period in the Faculty of Arts and Science in April (Christmas vacation excluded).

The residence term for Fenwick Place is as follows: First semester - Labour Day to December 31st; and second semester - January 1 to April 30th. Those students wishing to stay beyond the residence term may do so for a daily or weekly rate. Please contact the appropriate residence for details.

**After the student has paid their deposit, the balance is to be paid in two parts per the schedule in Table II: Residence Rates. The first portion by September 24, 2004 and the second portion by January 17, 2005.**

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#### **D. ResNet**

All residences have been wired with ethernet so the students can connect their personal computers to the Dalhousie University campus network, the Internet, E-mail services, and electronic class material on the web. The cost is included in residence fees. Rentals of computers are available. Check out the Web page at [www.dal.ca/housingresnet](http://www.dal.ca/housingresnet)

# Awards

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PLEASE NOTE: The contents of this awards section are subject to change without notice.

The University reserves the right to publicize the recipients of merit awards.

## I. Faculty of Dentistry

### A. Scholarships in Dentistry

PLEASE NOTE: The University's scholarships described hereunder are credited to students' fee accounts automatically. If this should result in an overpayment of fees, the amount in excess will be rebated to the students by the Student Accounts Office about mid-November.

#### 1. Entrance Scholarships

Students in the DDS programme are considered for scholarships by either of two committees. The Dental Admissions Committee assesses entering students for entrance scholarships. Scholarship applications are not required for entrance scholarship consideration. A supplementary application, however, will be required of those candidates whom the Committee will consider for the McGuigan Scholarship, which has a financial need component. The Academic Awards Committee considers continuing students for in-course scholarships which are tenable upon entering Second, Third or Fourth Year. No special application is required.

##### *Faculty of Dentistry Gifts and Memorial Scholarship Fund*

A scholarship of \$3,000 will be awarded to the student entering the first year of Dentistry with the highest scholastic standing.

##### *Dalhousie Entrance Dental Scholarship*

A scholarship of \$1,000 will be awarded to a student entering the first year of Dentistry who, in the opinion of the Faculty, merits this scholarship.

##### *The Dr. James P. McGuigan Memorial Scholarship*

This fund was established in 1983 to provide an annual entrance scholarship to an academically accomplished student who is a resident of the Atlantic provinces and who shows evidence of actual financial need. A supplementary financial application will be sent by the Dental Admissions Committee to those who are to be given further consideration.

#### 2. In-Course Scholarships

##### *Dalhousie University Dental Scholarships*

A scholarship of \$1,000 will be awarded to the student entering the Second Year of Dentistry who attained the highest scholastic standing in the first year of Dentistry at Dalhousie, provided that his/her grade point average was not less than 3.0 with no subject below a grade of "C". A scholarship of \$1,000 will be awarded to the student entering the Third Year of Dentistry who attained the highest scholastic standing in the second year of Dentistry at Dalhousie, provided that his/her grade point average was not less than 3.0 with no subject below a grade of "C."

##### *DCF ORAL-B Laboratories Undergraduate Scholarship*

The Dentistry Canada Fund Oral-B Laboratories Undergraduate Scholarship for the purpose of recognizing and encouraging excellence and providing support for deserving undergraduate dental students in second and/or third year, who, in the opinion of faculty, merit the award.

##### *The Dr. J.D. McLean Scholarship*

An endowment has been established to fund the J.D. McLean Scholarship for student(s) in any year of dental study at Dalhousie provided that his/her grade point average is not less than 3.0, no subject below a grade of "C" and who, in the opinion of the Academic Awards Committee, merits the scholarship.

##### *The Dr. Terry Ingham Memorial Scholarship and Auxiliary Fund*

This fund was established to honour a very special and unique member of the Dalhousie Faculty of Dentistry: Dr. Terry Ingham. A scholarship may be awarded annually to a deserving dental student(s) based on academic performance and financial need and who exemplifies those strong ethical and humanitarian principles demonstrated by Dr. Ingham during his lifetime.

##### *The Dr. I.K. Lubetsky Scholarship*

An endowment has been established to fund the I.K. Lubetsky Scholarship for the student in third-year who has demonstrated the greatest proficiency in the practice of Clinical Oral Surgery, provided an overall grade point average of 3.0 has been achieved consecutively. The scholarship is tenable in the fourth year.

##### *Dr. Don Stephenson Memorial Scholarship*

This scholarship has been established in memory of Dr. Don Stephenson and is to be awarded to a student(s) entering fourth year, who has achieved academic excellence over the last three years of study and who demonstrated outstanding abilities to treat his/her patient family.

## B. Prizes and Medals in Dentistry

### Graduate Programme in Oral and Maxillofacial Surgery

##### *John P. Laba Memorial Research Award*

This award is provided through a fund established in memory of John P. Laba by family, friends, patients and colleagues, and may be given annually. The recipient is to be the dentist accepted in the Graduate Programme in Oral and Maxillofacial Surgery, and is intended exclusively for the presentation, dissemination and/or publication of research related to Oral and Maxillofacial Surgery. For further information, please contact the Department of Oral and Maxillofacial Surgery.

### Doctor of Dental Surgery Programme

Students who are repeating an academic year will be ineligible for prizes and awards in that academic year.

#### 1. Fourth Year Students

##### *University Medal in Dentistry*

The University Medal in Dentistry will be awarded to the graduating student who has met the requirements for Graduation with Distinction and who in the opinion of the Faculty merits this award.

##### *The American Association of Endodontists Prize*

For exceptional ability in Endodontics, the Association sponsors an annual prize consisting of a one-year subscription to Oral Surgery, Oral Medicine and Oral Pathology, and a one-year Student Membership in the American Association of Endodontists.

##### *The American Academy of Oral Medicine Prize*

This prize, given for the greatest proficiency in Oral Medicine, Pathology and Radiology, consists of a certificate, one-year membership and subscription.

##### *The American Society of Dentistry for Children Prize*

A membership in the Society and a one-year subscription to the ASDC Journal of Dentistry for Children constitute the annual prize which the Society sponsors to recognize an outstanding student in dentistry for children.

##### *The Canadian Academy of Periodontology Prize*

This book/cash prize with the approximate value of \$100, is awarded to the student who has demonstrated the greatest proficiency in Periodontics.

##### *CDA President's Award*

The Canadian Dental Association in 1986 established this award at each of Canada's ten Dental Schools. Candidates must be student members of CDA and must demonstrate outstanding qualities of leadership, scholarship, character and humanity during dental studies. Candidates must show promise of conducting a distinguished career in the dental profession and society at large. The Academic Awards Committee is responsible for selecting the recipient for Dalhousie. An award will not

necessarily be made every year. The CDA President's Award consists of a prize cheque (paid externally) and a scroll.

#### ***Dr. Mary Foley Memorial Prize***

A cash prize valued at \$200 is awarded to the student who has shown the most professional and compassionate treatment of his/her patient family.

#### ***The Quintessence Award***

A one-year subscription to the Quintessence Journal is awarded to the student with the greatest proficiency in Restorative Dentistry.

#### ***The Quintessence Award***

A one-year subscription to the Quintessence Journal is awarded for excellence in Clinical Achievement in Periodontics.

#### ***Quintessence Award for Research Achievement***

A one-year subscription to the Quintessence Journal is awarded to the student who has demonstrated exceptional interest and research abilities during his/her four years of dental studies.

#### ***The Dr. Frank Woodbury Memorial Prize***

This book/cash prize is awarded to the student who has attained the highest academic standing.

#### ***The Dr. Frank Woodbury Memorial Prize***

This book/cash prize is awarded to the student who has attained the second-highest academic standing.

#### ***The Dr. Frank Woodbury Memorial Prize***

A book/cash prize is awarded to the student demonstrating the greatest proficiency in Comprehensive Care.

#### ***The Dr. William W. Woodbury Memorial Prize***

A cash prize is awarded for exceptional ability in Orthodontics on the third and fourth-year aggregate and on demonstrated interest in the specialty of Orthodontics.

#### ***3M ESPE Canada Student Clinical Award***

A certificate and cash prize of \$1,000.00 is awarded to the student who has demonstrated excellence and superior aptitude in the use of conservative restorative materials in the final year of the clinical undergraduate programme.

## **2. Fourth and Third Year Students**

#### ***American College of Dentists Prize (Atlantic Provinces Section)***

This is awarded to the student who has demonstrated exceptional dedication and genuine sensitivity in the dental care needs of his/her patient family, and has provided patient treatment in an ethical, compassionate and caring manner.

#### ***The Prince Edward Island Dental Association Prize***

Each year the Association sponsors a prize of \$100 for the student who has demonstrated the greatest proficiency and interest in Hospital Dentistry. The prize is paid externally.

## **3. Third Year Students**

#### ***The American Academy of Periodontology Prize***

To the student who is outstanding in Clinical Periodontics, a one-year subscription to the Journal of Periodontics is awarded.

#### ***Atlantic Orthodontic Society Prize***

The Society sponsors a book/cash prize to be awarded to the student who has shown the greatest proficiency in theoretical orthodontics.

#### ***The Dr. J. Stanley Bagnall Memorial Prize***

This prize, in the form of books with an approximate value of \$200, is awarded to the student who has achieved the highest academic standing in all subjects.

#### ***The Dr. W.H.H. Beckwith Prize***

This book prize is awarded to the student who has achieved the greatest proficiency in Clinical Operative Dentistry.

#### ***CDA/Dentistry Student Clinician Award***

The Best Table Clinic Presentation Winner receives an expenses paid trip to the national convention of the Canadian Dental Association where the

student will present his/her table clinic in a national competition, with entries from all Canadian Faculties of Dentistry.

#### ***Dr. Bruce N. Fergusson Prize***

This \$125 prize is given to the Best Table Clinic Presentation and is donated by the Halifax County Dental Society.

#### ***The Dr. Bruce N. Fergusson Memorial Award***

This award is made possible through a fund provided by family, friends, and colleagues, and may be awarded annually. The recipient will be a student entering the fourth year of Dental Studies who has demonstrated exceptional leadership, character, scholarship, and personal qualities during his/her first three years of Dental Study.

#### ***United Dental Learning Centre Table Clinic Award***

A cash prize of \$150.00 is given for the Best Table Clinic Presentation.

#### ***The Dr. F.A. Godsoe Prize***

The New Brunswick Dental Society sponsors this cash prize which is awarded to the student who has demonstrated the greatest proficiency in Foundation Sciences in Clinical Practice.

#### ***United Dental Learning Centre Table Clinic Awards***

These prizes are for second and third best table clinic presentations and are prizes of \$100 and \$50 respectively.

#### ***The Halifax County Dental Society Prize***

These prizes are for the second and third best table clinic presentation. The purses of these prizes are \$100 and \$75 respectively.

#### ***The International College of Dentists (Canadian a: Section) Award***

The College sponsors a cash award of \$500 to the student who best combines scholastic achievement, general character and participation in extracurricular activities during the third year. The College pays the award directly to the student.

#### ***United Dental Laboratory Prize***

A prize book is awarded for greatest proficiency in Clinical Removable Prosthodontics.

#### ***Nova Scotia Dental Association Prizes***

For the second highest academic standing in all subjects, books with the approximate value of \$100.

#### ***Table Clinic Fourth Prize***

A cash award of \$60 is given to the student who makes the fourth best presentation in Table Clinic.

#### ***Third Year Comprehensive Patient Care III Prize***

For the greatest proficiency in Clinical Comprehensive Patient Care III in the third year, a prize is awarded in the form of either cash or books.

#### ***Elsevier Science Prize***

A selected book is awarded for the most significant improvement in third-year.

#### ***The Dr. D.E. Williams Prize***

This book prize is awarded for the greatest proficiency in Clinical Pediatric Dentistry.

## **4. Second Year Students**

#### ***The Atlantic Society of Periodontology***

A one year subscription to the International Journal of Periodontics and Restorative Dentistry is awarded for the greatest proficiency in Periodontics.

#### ***The Charles Bell Memorial Prize***

This prize, in the form of one or more books, is awarded to the student who has attained the highest academic standing in all subjects.

#### ***The Charles Bell Memorial Prize***

This prize, in the form of one or more books, is awarded to the student who has attained the second highest academic standing in all subjects.

#### ***Dr. David Manuel Memorial Prize***

This book prize is awarded for the greatest proficiency in removable prosthodontics.

#### ***The Dr. David Manuel Memorial Prize***

A book is awarded to the student who has attained the greatest proficiency in Patient Care II.

#### ***The Nova Scotia Dental Association Prize***

The Association sponsors a book prize with the approximate value of \$100 for the student who has attained the greatest proficiency in Cariology II.

#### ***Nova Scotia Dental Association Prize***

The Association sponsors a book prize with the approximate value of \$100 for the student who has demonstrated the greatest proficiency in Growth and Development II.

#### ***Nova Scotia Dental Association Prize***

The Association sponsors a book prize with the approximate value of \$100 for the student who has demonstrated the greatest proficiency in Pharmacology.

#### ***Nova Scotia Dental Association Prize***

The Association sponsors a book prize valued at approximately \$100 for greatest proficiency in Dental Biomaterials.

### **5. First Year Students**

#### ***The Charles Bell Memorial Prize***

This prize, in the form of one or more books, is awarded to the student who has attained the highest academic standing in all subjects.

#### ***The Charles Bell Memorial Prize***

This prize, in the form of one or more books, is awarded to the student who has attained the second highest academic standing in all subjects.

#### ***The Dr. John W. Dobson Memorial Prize***

This prize is awarded to the student who has demonstrated the greatest proficiency in Periodontics. The prize may be a cash/book award of \$100.

#### ***The Dr. F.A. Godsoe Prize***

The New Brunswick Dental Society sponsors a cash award for the student who has shown the greatest proficiency in Patient Care I.

#### ***The Dr. F.A. Godsoe Prize***

The New Brunswick Dental Society sponsors a cash award for the student who has shown the greatest proficiency in Cariology I.

#### ***The Leonard Goldfarb Prize***

This book prize is awarded to the student who has demonstrated the greatest proficiency in Infectious Diseases.

#### ***Nova Scotia Dental Association Prize***

This book prize valued at approximately \$100 is awarded to the student who has demonstrated the greatest proficiency in Anatomy.

#### ***Nova Scotia Dental Association Prize***

The Association sponsors a book prize of approximately \$100 in value for the student who has demonstrated the greatest proficiency in Histology.

#### ***Nova Scotia Dental Association Prize***

The Association sponsors a book prize of approximately \$100 in value for the student who has demonstrated the greatest proficiency in Occlusion and Neuromuscular Function I.

#### ***The Saint John Dental Society Prize***

The Society sponsors an annual book prize with the approximate value of \$100 for the student demonstrating the greatest proficiency in Physiology.

#### ***Elsevier Science Prize***

Sponsors an annual selected book prize for greatest proficiency in Biochemistry.

### **C. Bursaries in Dentistry**

This subsection should be read with reference to the general bursary portion of the Financial Aid section.

#### ***Aurum Ceramic Dental Laboratories Bursary***

An annual bursary to a full-time dentistry student entering third or fourth year who is in need of financial assistance.

#### ***The Sidney D. Campbell Memorial Bursary***

This bursary will be awarded annually out of the income generated by this fund. The award will go to the third-year dental student who has demonstrated financial need and who, by scholarship and character, appears deserving of this assistance.

#### ***The Elias Bursary***

This endowment has been established to provide an annual bursary to a qualifying dental student beyond first year. Academic achievement of 70% is also required. This bursary will be of particular interest to a married student.

#### ***The Glengarry Bursary***

A bursary may be awarded annually from a donation from the Glengarry Foundation. The bursary is to be given to a Dentistry student who has demonstrated financial need and satisfactory academic progress. Preference will be given to a resident of Nova Scotia.

#### ***The Dr. I.K. Lubetsky Memorial Bursary***

Friends and colleagues of the late Dr. I.K. Lubetsky established an endowment to provide a bursary to a qualifying second-year dental student who has demonstrated financial need and who by scholarship and character appears deserving of this assistance.

#### ***The Dr. D. Brendan MacNeil Bursary***

The family of the late Dr. Donald Brendan MacNeil established an endowment at the University to provide an annual memorial bursary to a fourth-year student in the School of Dentistry.

#### ***Arrabelle MacKenzie McCallum Bursary***

Under the Will of the late Emelyn L. MacKenzie the University has been given a bequest for the purpose of funding a bursary to one or more students. The recipient must be a bona fide resident of and domiciled in, the County of Victoria (as defined by the boundaries then extant in AD 1900), Nova Scotia. Character and need are the main criteria.

#### ***The Dr. F.L. Miller Memorial Bursary***

The Fredericton Dental Society in 1979 endowed funds in memory of this distinguished graduate of Dalhousie who contributed so much to the community. A bursary from the annual income of the fund is to be awarded to a second-year dental student who has demonstrated financial need. Preference will be given to, but will not be strictly limited to, a New Brunswick student.

#### ***The Dr. Gordon Nikiforuk Bursary***

This bursary donated by Colgate-Palmolive, Canada Inc. in honour of Dr. Gordon Nikiforuk, is to be awarded to a Second Year Dentistry student based on outstanding academic ability and financial need.

## **II. School of Dental Hygiene**

### **A. In-Course Scholarships in Dental Hygiene**

#### **Dalhousie University Scholarships**

Continuing students in the Dental Hygiene programme are eligible for in-course scholarships.

### **B. Prizes and Awards**

Students in the Dental Hygiene program must complete at least 80% of the full course load in that academic year to be eligible for prizes and awards.

#### **1. Second Year Dental Hygiene Students**

##### ***Nova Scotia Dental Hygienists Association Prize***

A cash prize of \$200 is awarded for the highest academic standing in all subjects.

##### ***Newfoundland Dental Hygienists Association Prize***

For the second highest academic standing in all subjects there is a cash award of \$150.

### *Columbia Dentoform Prize*

For demonstrating the greatest proficiency in patient management and patient education, a Columbia Dentoform Model is awarded to the successful student.

### *United Dental Learning Centre Table Clinic Prize*

A cash prize of \$150 is given for the best table clinic presentation.

### *Dental Hygiene Student Society*

Sponsors cash award for the best table clinic presentation.

### *Nova Scotia Dental Hygienists' Association Prize*

The association sponsors cash awards of \$150 and \$100, for the second and third best Table Clinic presentations, respectively (or half of these amounts in the case of two students working together).

### *United Dental Learning Centre Table Clinic Prizes*

These prizes in the amounts of \$100 and \$50 respectively, are for second and third best table clinic presentations.

### *Anne Rafuse Memorial Prize*

There is a cash prize for the greatest academic and social contribution to the class.

### *Alice Hartlen Memorial Prize*

There is a cash award for the student demonstrating the greatest proficiency and creativity in community health.

### *Halifax County Dental Society Prize*

For the student demonstrating the greatest proficiency in Clinical Dental Hygiene, there is a cash award of \$100.

### *Andrea Brennan Memorial Award*

Given to the student chosen as Valedictorian. A cash award of \$250.

## **2. First Year Dental Hygiene**

### *Katie Lubetzki Memorial Prize*

A cash prize of \$200 is awarded for the highest academic standing in all subjects.

### *Prince Edward Island and New Brunswick Dental Hygienist Association Prize*

A cash award of \$150 is available to the student who achieves the second highest academic standing in all subjects.

### *Nova Scotia Dental Association Prize*

A cash award of \$100 is awarded to the student who demonstrates the greatest proficiency in Pre-Clinical Dental Hygiene.

### *Lisa Van Alphen Memorial Award*

A cash award is presented in recognition of sound standing and professional excellence, in tribute to a person of integrity and sincerity.

## **C. Bursaries Open to Students in Dental Hygiene**

Students who are requesting consideration for any of the following funds are to submit an "Undergraduate Bursary Application" form. This is available from the office of the Registrar, Room 133, Arts & Administration Building.

### *University Bursaries*

The university has a number of funds from which bursaries may be awarded to undergraduates, including Dental Hygiene students.

### *Kate MacDonald Bursary*

The income from this fund will be used to provide a bursary to a first year Dental Hygiene student who has demonstrated financial need.

### *The Jennifer Wright Memorial Bursary*

The income from this fund may be awarded annually to a second year Dental Hygiene student who has demonstrated financial need.

Faculty of Law

## **III. Faculty of Law**

### **A. Scholarships in Law**

The Student Awards Committee is responsible for the selection of scholars in the Bachelor of Laws programme and the combined LLB/MBA, LLB/MPA, LLB/MLIS, and LLB/MHSA programmes (Law portion).

Application for the pure scholarships is not required, except for those of the Law Foundation of Nova Scotia (see entry below) and the Godsoe Scholarship (see entry below).

Please note that it is University policy to credit scholarships automatically to fees. If this should result in an overpayment of fees, the portion in excess will be rebated to the students.

#### **1. Entrance Scholarships**

##### *The Francis Hugh Bell Entrance Scholarship in Law*

The purpose of the fund is to provide an annual scholarship to a student entering the first year of the program leading to the Bachelor of Laws degree (LLB) at Dalhousie University. The fund was established to honour the memory of Francis Hugh Bell through a bequest from his daughter, Barbara Bell.

##### *The Law Foundation of Nova Scotia Scholarships*

The Foundation sponsors seven scholarships, each in the amount of \$10,000, which are open to exceptionally capable students who are applying to the first year of the Bachelor of Laws degree at Dalhousie. Application literature may be obtained from either the Awards Office or the Law Admissions Office. The L.F.N.S. Scholarships application must be sent to the Admissions Office, Faculty of Law, Dalhousie University, Halifax, Nova Scotia, B3H 4H9, postmarked no later than 31 March. Scholarships are renewable to the extent of \$7,000 in each subsequent year if the recipient maintains an "A" average or places within the top 15 students in the class.

##### *The J. Gerald Godsoe Scholarships*

Established in memory of Gerry Godsoe, a Dalhousie law alumnus who contributed greatly to public policy issues in Canada, these scholarships are awarded to scholars accepted to the LLB programme at Dalhousie Law School who have demonstrated a particular interest in Canadian public policy issues. The scholarships are in the amount of \$10,000, and are renewable if the student maintains a superior academic average in law school. An application is required, available from the Admissions Office, Faculty of Law, Dalhousie University, Halifax, NS, B3H 4H9.

##### *Borden Ladner Geroais LLP Scholarship*

A scholarship of \$1,000 established by the law firm of Ladner Downs, Vancouver, is to be awarded annually to a student entering the first year at the Dalhousie Law School, who intends to return to British Columbia to practice law and who either is a resident of British Columbia or has obtained an undergraduate degree in British Columbia. The scholarship is to be awarded on the basis of academic excellence and public service.

##### *The Alistair Fraser Scholarships in Law*

A generous bequest from the Estate of the Honourable Alistair Fraser endowed a fund to provide several \$1,000 entrance scholarships to the Faculty of Law, Dalhousie University.

##### *The Al MacBain Law Scholarship*

An annual scholarship in the amount of \$1,000 established in memory of Al MacBain, LLB '51, is awarded to a student entering the LLB programme at Dalhousie University.

##### *Howard Pye Memorial Scholarship in Law*

Established in memory of Howard J.G. Pye, LLB '51, a Vice-President and Secretary of Canadian National Railways, an annual scholarship in the amount of \$1,000 is awarded to a student entering the LLB programme at Dalhousie University.

#### **2. In-Course Scholarships**

##### *Blake, Cassels & Graydon Scholarship*

The Toronto law firm of Blake, Cassels and Graydon sponsors an annual award for a first year student (or two students) who has shown both academic proficiency and financial need.

### ***Blake, Cassels & Graydon LLP, Blakes Scholar***

The scholarship at Dalhousie is part of a national scholarship program which the law firm of Blake, Cassels & Graydon LLP has initiated law schools across Canada. One second year student is eligible to be a "Blakes Scholar" in an academic year. The scholarship will be awarded to a second year student who has demonstrated academic excellence in the first year of his or her law studies. To be eligible, a student has obtained an academic standing in the top 10% of the first year law school class. Financial need, membership in an historically disadvantaged group as delineated by the Nova Scotia Human Rights Act, involvement in the community, extra-curricular activities at Dalhousie, and the existence of multiple responsibilities and/or limited support, may also be considered in the selection of the Blakes Scholar. The Scholarship is renewable in third year, provided that the recipient has an academic standing in the top 20% of the second year class.

### ***The Est. Ethelind A. Bligh Scholarship***

A scholarship will be awarded to the student of the first year who, having made a high scholastic average, in the opinion of the Faculty shows the most promise of achieving high standards of professional and public service.

### ***Canadian Bar Association (NS Branch) Scholarship***

Through its more than 32,000 members the Canadian Bar Association is one of the Country's most prestigious and rapidly growing national professional associations. The objectives of the Association are to promote the administration of justice, encourage a high standard of legal education and training; uphold the honour of the profession; advance the science of jurisprudence; and foster harmonious relations and co-operation among law societies, and bench, and members of the Association. An annual scholarship of \$1,000 will be awarded on completion of second year to the student who has shown academic excellence by attaining a high scholastic average and who demonstrates, in the opinion of the faculty, the most promise of achieving the objects of the Association described above.

### ***Cape Breton Barristers' Society Scholarship***

Beginning in 1965 the Cape Breton Barristers' Society instituted an annual scholarship which is to be awarded, at the discretion of the Dean, to a student (or two students) from Cape Breton County, on a combined basis of academic performance and need.

### ***Frank M. Covert Scholarship***

Established in 1988, this scholarship is named after the late Frank M. Covert. Mr. Covert practised with the firm of Stewart MacKeen and Covert (now Stewart McKelvey Stirling Scales). Monies for the scholarship(s) have been made available by individuals and companies who had an association with Mr. Covert and by his law firm and his estate. This scholarship in the amount of \$3,000 is awarded to a student (or two students) in Second Year at Dalhousie Law School. It is open to students who have achieved a high academic performance in first year. This is defined by the terms of the scholarship as being in the 'top ten' students in the first year class. The award is to be made 'largely, but not exclusively, on the basis of academic performance.' Extra-curricular performance, bearing, speaking skills and such other factors deemed relevant by the committee may also be considered. The committee may deem it relevant to consider the extent to which a candidate possesses exceptional qualities exhibited or esteemed by Frank Covert. Financial need or the holding of other scholarships are not to be taken into account. The scholarship is renewable in third year provided that the recipient has maintained an "A" average in his or her second year.

### ***The Edward C. Foley Memorial Scholarship***

This scholarship is in memory of the late Edward (Ted) C. Foley, LLB 1980. While at law school, Mr. Foley was particularly interested in marine, international and environmental law and was President of the John E. Read International Society. He was also active in provincial politics and in Amnesty International. The scholarship is to be awarded, on recommendation of the Dean, to a second or third year student who has completed at least two classes in the international, marine and environmental areas, and who has achieved an overall average of more than "B". Consideration will also be given to the personal qualities of the candidate including leadership roles assumed at law school and

community involvement. This scholarship was established by donations from friends of Mr. Foley, from both inside and outside the Law School.

### ***The Ellorient, Donald and Hugh Fraser Memorial Scholarship***

The Fraser family has established a fund in memory of their parents, to provide an annual award to an undergraduate law student in any year of study who has been a resident anywhere in Yarmouth County for at least seven years prior to the receipt of the award. The recipient will be the student who, in the opinion of the Faculty, is the most capable student so resident in that county.

### ***The John Wilfred Godfrey Scholarship***

Established by Joan Godfrey MacKenzie in memory of her father, a former lecturer at Dalhousie Law School and member of the Nova Scotia Bar, to reward merit as well as assist need.

### ***Prince Edward Island Law Foundation Scholarship***

The PEI Law Foundation in 1985 donated the sum of \$20,000 to establish an endowment from which the annual income will provide a major scholarship. This scholarship is tenable by a student who is entering Second Year of study in law, who is ordinarily a resident of Prince Edward Island, is in financial need, and has achieved a good academic record in the Law School.

### ***The George W.W. Ross Memorial Scholarship***

This endowed scholarship, established in memory of the late George W.W. Ross by his family, is awarded annually by the Faculty of Law to a law student entering second or third year who has placed in the top third of his or her class and who, in the opinion of the Faculty, is deserving of financial assistance.

### ***The Grace Wambolt Scholarship***

This award is open to a person born in Nova Scotia to assist one or more to attend the first year of law at Dalhousie. The assessment criteria consist of academic performance and financial need. A winner may be reconsidered in subsequent years of the law programme. Where two students qualify equally and one is a woman, preference is to be given to the woman. The fund was established in 1978 by Grace Wambolt, the fifth woman to have graduated from the Faculty of Law at Dalhousie University. She was the first woman to have been elected to the Council of the Nova Scotia Barristers' Society and the first woman to be awarded a certificate for 50 years of active service at the Bar of Nova Scotia.

## **3. Graduate Scholarships in Law**

Graduate students are eligible for scholarships available to all students registered in the Faculty of Graduate Studies at the University, and for the Sir James Dunn Post-Graduate Scholarship available in the Faculty of Law. Any graduates who assist with the teaching programme at the Law School may qualify for a graduate teaching fellowship.

### ***The Roy A. Jodrey Scholarship in Law***

The will of the late Roy A. Jodrey established a fund, the income of which is to be awarded as an annual scholarship, for post-graduate study at Dalhousie Law School to a student deemed by the faculty to be outstanding.

### ***Fielding Sherwood Memorial Fund***

The fund provides a bursary which is to be awarded to an LLM or JSD student whose work concerns the environment, or relates in some way to fisheries or ocean research studies. The intent is that the bursary be directed toward travel or research. The student will be selected by the Dean, on the advice of Faculty members in the areas concerned. The annual amount is to be determined by him/her. One award may be made annually. The fund will be self-perpetuating.

### ***Viscount Bennett Fellowship***

Under the terms of a deed gift to the Canadian Bar Association from the Right Honourable Viscount Bennett PC, KC, LL.D., DCL, the Viscount Bennett Trust Fund was established to encourage a high standard of legal education, training, and ethics. The annual income from this fund is administered by the Canadian Bar Association. An award to a maximum of \$12,000 may be paid annually to a student for graduate study at an institution of higher learning approved by the Viscount Bennett Fellowship Committee on the condition that the award be the only fellowship, scholarship or grant accepted by the winner for the graduate

period. The fellowship is open to persons of either sex who are Canadian citizens and who have graduated from an approved law school in Canada or who, at the time of the application, are pursuing final year studies as undergraduate students at an approved law school. Applications shall be in writing to the Communications Director of the Canadian Bar Association and received not later than December 15 of the year previous to that in which the award is to be made. For application information write the Director of Communications, Canadian Bar Association, 1700-130 Albert Street, Ottawa, Ontario K1P 5G4.

## **B. Prizes and Medals**

### **1. Third Year Students**

#### ***Robert E. Bamford Memorial Award***

The friends, colleagues and classmates of the late Robert E. Bamford, a graduate of the Class of 1975, have established this memorial prize in his honour. Robert Bamford was formerly the treasurer and president of the Dalhousie Law Students' Society and, at the time of his death, was a doctoral student in law at the University of Edinburgh. The prize is awarded to the third-year student who best combines academic excellence with a commitment to the Law School community.

#### ***The Eunice W. Beeson Memorial Prize***

This prize is to be awarded at the discretion of the Faculty to the qualifying woman student in the Law School who seems worthy on the basis of her academic performance in the School, qualities of personality and character, and financial need. The prize was established by Mrs. Mary Beeson Mobley and friends in memory of Miss Eunice W. Beeson, the first professional Librarian in the Law School, Sir James Dunn Law Librarian and Associate Professor, 1959-66.

#### ***Borden Ladner Gervais, ON Prize***

A prize of \$500 is awarded by the Toronto law firm of Borden Ladner Gervais, Ontario, to the graduating student who has achieved the highest standing in the combination of Constitutional Law plus at least one other constitutional law class designated by the faculty.

#### ***Carswell Prize***

A book prize of the value of \$500 is awarded to the student with the highest average in the third year examinations.

#### ***The Edna Chambers Class of '77 Judicial Remedies Prize***

Established by the Class of '77 to honour the memory of Edna Chambers, and awarded to a third year student who has achieved the highest standing in the Judicial Remedies class.

#### ***Muriel Duckworth Award***

Awarded annually to a woman or women in the graduating class who best exemplifies the qualities of Muriel Duckworth by raising consciousness of women's issues and feminism in the legal community. The successful candidate shall be chosen by the Discretionary Awards Committee along with the Professor teaching Women and the Law, and a representative chosen by the Dalhousie Law School Association of Women and the Law.

#### ***G.O. Forsyth Prize (Discretionary Award)***

This prize is awarded to the student whom the Faculty deems to be the most deserving in the sense of combining the qualities of scholarship, character and need.

#### ***The Honourable W.A. Henry Prize***

Awarded to the graduating student who has achieved the highest standing in Constitutional Law subjects chosen by the faculty.

#### ***David M. Jones Memorial Award***

Awarded to a third year student whose character has been a source of inspiration and optimism to his or her classmates and the Law School community.

#### ***Robert W. Kerr Labour Law Prize***

Awarded to the graduating student who has achieved the highest standing in the Labour Law subject - Collective Agreement.

#### ***The Leonard A. Kitz, QC Prize***

A book prize donated by Leonard A. Kitz, QC, will be awarded annually for skill in oral legal argument, in moot courts or as otherwise determined by the faculty.

#### ***Maritime Law Book Company Prize***

Prizes of \$200 and \$100 will be awarded to the students who have attained the highest mark and the second highest mark, respectively, in *The Legal Profession* and *Professional Responsibility*.

#### ***The Sarah MacWalker MacKenzie Clinical Law Award***

The Dalhousie Legal Aid Service established a prize, awarded in the discretion of the Director and staff, in recognition of the contributions and exemplary service of Sarah MacKenzie. The prize is open to a third-year student who has successfully completed the Clinical Law Programme at Dalhousie Legal Aid and who has made an outstanding contribution toward the DLAS goals of education, service, community development and law reform.

#### ***Arthur R. Moreira, Q.C. Memorial Prize***

Awarded to the third year student who has demonstrated excellence in *Equity and Trusts*.

#### ***The William D. Outhit Prize in Administrative Law***

Awarded to the graduating student who has attained the highest standing in Administrative Law.

#### ***The A.S. Pattillo Prize for Advocacy***

The Toronto firm of Blake, Cassels and Graydon LLP sponsor this prize in memory of Mr. Arthur Pattillo, a renowned advocate. The prize is to be shared by the winners of the annual Smith Shield Moot Court competition.

#### ***Francois-Michael Proulx Memorial Prize***

Awarded to the visiting civil law student who has made a significant contribution in enriching the life of Dalhousie Law School.

#### ***The Honourable H.G. Puddester Prize***

This annual prize of \$250 is funded by the St. John's law firm Orsborn, Benson, Myles, in memory of The Honourable Mr. Justice Harold G. Puddester, a Dalhousie Law School graduate, and former Deputy Minister of Justice of Newfoundland and Justice of the Supreme Court of that Province. The recipient shall be either a permanent resident of Newfoundland or have the evident intention to practice law in Newfoundland. The award will be made considering (a) demonstrated academic ability in public law; (b) leadership ability; and (c) extra-curricular activities beneficial to the Law School and/or the legal profession. Preference will be given to a third year student, with the prize being based on performance over all three years. Failing a suitable third year student, preference will be given to a second year student based on the student's performance in First and Second years. Failing a suitable second year student, preference will be given to a first year student based on performance in First Year only.

#### ***The Horace E. Read Award***

Awarded to a third year student who has made the greatest overall contribution to scholarship and student life.

#### ***The Henry B. Rhude Memorial Prize***

In 1985 the law firm of Stewart, MacKeen and Covert (now Stewart McKelvey Stirling and Scales) set up this prize which is to be awarded to a student who attains the highest mark in *Taxation III*.

#### ***The George Isaac Smith Memorial Award***

An award of \$500 is available to the student in any year of Law who has shown academic excellence by attaining a high scholastic average, and who has demonstrated in the opinion of Faculty the most promise of achieving exemplary standards of professional and public service.

#### ***R.A. Smith Advocacy Prize***

An annual prize of \$500 will be awarded to the graduating student who has achieved the highest standing in the combination of *Civil Procedure*, *Civil Trial Practice* and *Insurance Law*.

#### ***University Medal in Law***

This medal may be awarded on graduation to the student who has achieved the highest cumulative average of those attaining First Class

distinction in the studies of Third Year, and who has achieved a very high standard of excellence.

(Please note that eligibility will be determined solely on the basis of law classes.)

## 2. Second or Third Year Students

### **Robert Batt Memorial Award**

Friends and associates of the late Robert John Batt (Class of 1936) have established a fund which provides a prize to the student who achieves excellent standing in the subject area of Constitutional Law.

### **Bereskin and Parr Prize**

Awarded to the student who achieves the highest mark in the *Intellectual Property Law* class.

### **The Blake, Cassels and Graydon LLP Prize**

The law firm of Blake, Cassels and Graydon LLP sponsors an annual prize of \$500 to the student who has attained the highest standing in *Business Associations*.

### **Canada Law Book Company Conflict of Laws Prize**

A book prize will be awarded to the student who receives the highest mark in *Conflict of Laws*.

### **Canada Law Book Company Prize in Family Law**

A book prize will be awarded to the student who attains the highest mark in *Family Law*.

### **Canadian Petroleum Law Foundation Prize**

A prize in the amount of \$1500 to be awarded to the student who has demonstrated outstanding performance in the *Oil and Gas Law* class.

### **The Lorne O. Clarke Prize in Dispute Resolution**

The Nova Scotia Barristers' Society, the Canadian Bar Association, the Judiciary of Nova Scotia and Dalhousie Law School established this prize to honour the distinguished career of Lorne O. Clarke, former Chief Justice of Nova Scotia. This prize will be awarded to the student who achieves the highest standing in Dispute Resolution.

### **Davies, Ward, Phillips & Vineberg LLP Prize**

A prize of \$1,000 donated by the Toronto law firm of Davies, Ward & Vineberg LLP is to be awarded to the second or third year student who has achieved the highest combined mark in *Business Associations*, *Commercial Law* and *Taxation I*.

### **The Robert T. Donald Memorial Prize**

Former students, colleagues and friends of the late Robert T. Donald, a teacher at the Law School and Dean from 1969 until his death in 1971, established an endowment fund. A portion of the net annual income is expended as a prize to the student who has achieved the highest standing in *Corporate Transactions*.

### **Robert T. Donald Prize in Insurance**

The Carswell Company and colleagues of the late Dean Donald have established a fund to provide for an annual prize to recognize the achievement of that student who has attained the highest mark in *Insurance*.

### **The Milton and Carole Ehrlich Prize**

Awarded in memory of the late Richard Weiner who was actively involved with the United Nations, this prize is given to recognize the student who has achieved the highest standing in Law of the Sea subjects.

### **The J. Gordon Fogo Prize**

The income from a fund, established by the family of J. Gordon Fogo in memory of their father, provides an annual prize to be awarded to the student with the highest standing in *Commercial Law*.

### **G.O. Forsyth Essay Prize**

Awarded to that student who submits the best essay on a legal topic, to be selected by the faculty.

### **Goldberg Thompson Prize in Business Taxation**

This prize is offered to honour the student who has achieved the highest mark in *Business Taxation*.

### **The H. Carl Goldenberg, QC, Prize**

An annual prize of \$100 is given to the student with the highest standing in Public Law subjects designated by the faculty.

### **Gowlings Law and Technology Prize**

The law firm of Gowlings, Toronto sponsors a prize in the amount of \$500 to the student achieving the highest mark in Law and Technology.

### **The J.S.D. Tory Writing Awards**

The fund was established by the law firm of Tory, Tory, DesLauriers & Binnington in memory of the late J.S.D. Tory, to provide annually one or more awards to full-time students in the Faculty of Law to reward legal writing excellence, to encourage legal scholarship, and to provide the recipients with the financial ability to do additional research and writing on an outstanding piece of written work.

### **Donald A. Kerr Memorial Prize in Admiralty Law**

The Eastern Admiralty Law Association sponsors an annual prize to be awarded to the student who has achieved high standing in the subject area of Maritime Law.

### **Stuart Clarke Lane Memorial Prize**

The Class of 1940 established an endowment fund in memory of their classmate. In 1978 the fund was supplemented by a generous bequest from the Estate of Pauline H. Lane in memory of her son. This annual prize is awarded to the student who has achieved the highest mark in *Administrative Law*.

### **Professor Ronald St. John Macdonald Prize in Public International Law**

An endowment was established by the distinguished former Dean of Law to provide an annual prize awarded to the student who attains the highest mark in *Public International Law*.

### **The McInnes Cooper Labour Law Group Prize**

This prize of \$500 is sponsored annually by the law firm of McInnes Cooper and is awarded to the student who achieves the highest mark in Labour Law.

### **The McInnes Cooper Trade Law Seminar Prize**

A prize of \$500 to be awarded to the student with the highest mark in the McInnes Cooper Seminar in *International Trade Law*.

### **McMillan Binch Prize**

The sum of \$500 is awarded to the student who attains the highest mark in the three private law courses of *Torts*, *Contracts* and *Property*.

### **The R. Graham Murray Prize**

The Class of 1954 established an endowment in honour of Professor R. Graham Murray, QC, a distinguished teacher at the Law School. The prize is awarded to a deserving student in a subject to be designated by the Faculty.

### **Osgoode Society Book Prize in Legal History**

Awarded annually to a student having demonstrated superior ability in legal history through the writing of a major paper.

### **Osler, Hoskin and Harcourt Prize**

This prize of \$500 is sponsored annually by the Toronto firm of Osler, Hoskin and Harcourt and is awarded to the student who achieves the highest mark in *Securities Regulations*.

### **The Patterson Palmer Internet Media Law Prize**

The Halifax law firm of Patterson Palmer sponsors a prize in the amount of \$300 to the student achieving the highest grade in Internet and Media Law.

### **Justice Ronald N. Pugsley Trial Advocacy Award**

The fund was established by the family of Justice Ronald N. Pugsley to honour his distinguished career, and will provide an annual prize for a second or third year student or students at Dalhousie Law School who has (have) achieved excellence in trial court or appellate court advocacy in a competitive trial or moot court competition.

#### ***The Elkanah Rafuse Prize in Admiralty Law***

An endowment was established in memory of the late Elkanah Rafuse of Halifax to provide an annual prize to the student who achieves the highest standing in *Maritime Law and Practice*.

#### ***The Horace E. Read Legislation Prize***

The establishment of a fund in memory of the late Dean Horace Read provides an annual prize to the student who attains the highest mark in *Legislation*.

#### ***The Rosenblum/Dubinsky Prize in Family Law***

A prize established in 1987 by Simon L. Gaum, QC, in honour of his uncle, C.M. Rosenblum, QC, on his 60th year of distinguished service to the bar, and his uncle, Mr. Justice J. Louis Dubinsky, for his contributions to the bench and bar; to be awarded annually to the student with the highest standing in the basic class in *Family Law*.

#### ***Professor Robert A. Samek Memorial Prize***

The establishment of a memorial fund by family, relatives and friends of the late Professor Robert A. Samek makes possible a book prize for the student who achieves the highest mark in *Legal Philosophy* or *General Jurisprudence*.

#### ***Stikeman Elliott/Carswell National Tax Award***

The large national and international law firm of Stikeman, Elliott has joined with Carswell, one of Canada's leading publishers of essential information services since 1864, to set up this prestigious award. It will recognize academic excellence by means of a \$1,000 prize for the Dalhousie Law student in second or third year who achieves the highest mark in *Taxation I*.

#### ***W.A. Tomblin Memorial Prize***

A prize awarded to the second or third year student with the highest mark in *Bankruptcy*.

### **3. Second Year Students**

#### ***Borden Ladner Gervais, BC Prize (Second Year)***

The law firm of Ladner Downs, Vancouver awards a prize annually in the amount of \$500 to a student standing first in the second year at the Dalhousie Law School, among those students who are either residents of Ontario or have obtained an undergraduate degree in Ontario.

#### ***Canada Law Book Company Civil Procedure Prize***

A book prize is awarded to the student who achieves the highest mark in *Civil Procedure*.

#### ***Carswell Prize***

The company sponsors a \$250 book prize to the student who makes the highest mark in the second-year examinations.

#### ***The Honourable Richard B. Hanson Prize***

Established by Mrs. R.B. Hanson, this endowment provides for an annual prize to the student who achieves the highest mark in *Constitutional Law*. The prize is in memory of a distinguished graduate of Dalhousie, lawyer and public servant.

#### ***Mr. Justice Vincent C. MacDonald Prize***

A prize will be awarded to the student who, in the opinion of faculty, has shown the most satisfactory progress during second year and who has attained at least second-class standing.

### **4. First or Second Year Students**

#### ***The John V. O'Dea Prize***

A prize of \$150 is to be awarded annually to a student who was admitted as a special status or a mature applicant. The prize is to be awarded after the student has completed either first or second year on the combined basis of good academic standing and contribution to the Dalhousie Law School.

### **5. First Year Students**

#### ***The Craig Bauer Memorial Law Prize***

Awarded to a first year Dalhousie Law School student who achieves high standing in first year *Tort Law* and who best exemplifies the traits that

made Craig Bauer a special person, specifically, outstanding academic achievement and excellence in intramural sports.

#### ***Borden Ladner Gervais, BC Prize (First Year)***

The law firm of Borden Ladner Gervais, Vancouver awards a prize annually in the amount of \$500 to a student standing first in the first year at the Dalhousie Law School, among those students who are either residents of British Columbia or have obtained an undergraduate degree in British Columbia.

#### ***Boyne Clarke Prize***

The law firm of Boyne Clarke awards a prize annually in the amount of \$1,000 to the first year student from Nova Scotia who has demonstrated excellence through a combination of academic achievement, participation and contribution to the law school and the broader community.

#### ***Carswell Prize***

The company sponsors a \$250 book prize to the student who achieves the highest average in first-year examinations.

#### ***CCH Canadian Limited Prize in Legal Research and Writing***

The company sponsors an annual prize which is to be awarded to the student who achieves the highest mark in the legal research and writing programme.

#### ***The Class of 1958 Prize***

An endowment fund, the gift of the Law Class of 1958, provides a prize which is to be awarded to the student who achieves the highest mark in *Criminal Justice: The Individual and the State*.

#### ***Fasken Martineau DuMoulin Prize***

Awarded to the student from Ontario who achieves the highest standing in first year.

#### ***The W. Donald Goodfellow, QC, Prize***

This Calgary lawyer, a graduate of the Law School, sponsors an annual prize of \$200 to be awarded to the student who achieves the second highest standing among those in the first-year class.

#### ***The Lang Michener LLP Prize***

This Toronto law firm sponsors an annual prize of \$300 to be awarded to the student who achieves the highest mark in *Judicial Rule-making* and the *Law of Contracts*.

#### ***The Honourable Angus L. Macdonald Prize***

This prize is awarded to the student who has attained the highest mark in the class *Tort Law* and *Damage Compensation*.

#### ***The Clyde W. Sperry Prize***

A prize from the income of a fund established in memory of Clyde W. Sperry, is to be awarded to the student who has attained the highest mark in the class *Property in its Historical Perspective*.

### **C. Bursaries**

This subsection should be read with reference to the general bursary portion of the Financial Aid section.

#### ***Mary Bailey Memorial Bursary***

To be awarded annually to a third year female law student in financial need, who has demonstrated an interest in Family Law.

#### ***The Mary C. Cleyle Bursary***

The family, friends, colleagues and classmates of the late Mary C. Cleyle, a graduate of the class of 1972, established in 1976 a bursary fund in her memory. The accrued annual interest of the fund is used as a bursary to assist students in their second or third year of studies who are in need of financial assistance.

#### ***Class of '55 Reunion Bursary***

Donated by members of the Class of '55, Law, a bursary in the amount of \$1,000 will be awarded to a student enrolled in the Bachelor of Laws Program (LLB) at Dalhousie University annually until the fund is depleted.

#### ***Class of '75 Law Reunion Bursary***

Donated by members of the Class of '75, Law, a bursary in the amount of \$1,000 will be awarded to a student enrolled in the Bachelor of Laws

Program (LLB) at Dalhousie University annually until the fund is depleted. If less than \$1,000 is remaining in the final year of awarding the bursary, the balance of the fund will be awarded.

#### ***Class of '96 Bursary***

This bursary was established by the Class of 1996, Dalhousie Law School. Recipient will be regular full-time law student of any year who demonstrates financial need and has satisfactory academic standing.

#### ***The R.T. Donald Memorial Bursary***

An endowment fund was established to provide bursaries (and a prize) in memory of the late Robert T. Donald, a former dean of the Law School. Bursaries are available to students in any year who have demonstrated financial need.

#### ***Professor Arthur L. Foote, QC, Memorial Bursary***

This bursary, in the amount of \$2,000 honours the memory of Arthur L. Foote, QC, one of the great professors of the Law School. His commitment to academic excellence and to the interests of the socially disadvantaged was matched only by his deep concern for students and their personal or academic problems. Awarded to students who show demonstrated financial need and satisfactory academic standing, "the successful candidate should exhibit, if possible, characteristics exemplified by Professor Foot, including curiosity, sensitivity, generosity, sense of humour and be hard-working, people-oriented and have high academic standards." Preference will be given to a First Year student who is a resident of Pictou County.

#### ***The George O. Forsyth Bursaries***

Awarded to student(s) deemed by the faculty to be deserving in the sense of combining the qualities of scholarship, character, and economic need.

#### ***The Donald G. Grant Bursary Fund***

This fund was established through a bequest from Donald G. Grant BA '30, LLB '32 in memory of Dr. Sidney Earle Smith, Dean of the Law School from 1929-34 to support an annual bursary for a second or third year student enrolled full time in the Bachelor of Laws degree (LLB) program at Dalhousie University. Donald Gordon Grant graduated from Dalhousie with a Bachelor of Arts in 1930 and Bachelor of Laws in 1932. While at Dalhousie, he was active in student affairs, played varsity hockey and was a member of the intercollegiate debating team. He practiced law in Halifax before joining the Canadian army where he served in the Judge Advocate General Branch. He joined the Nova Scotia Trust Company becoming General Manager and later President and CEO, a position he held until his retirement in 1971.

#### ***Reg Hamm Memorial Bursary***

An endowment fund was established to provide an annual bursary in memory of Reginald Hamm, the warm-hearted and dedicated custodian of the Weldon Law Building. The bursary is open to students in any year who have demonstrated financial need.

#### ***The David M. Jones Memorial Bursary***

Awarded on the basis of financial need and satisfactory academic standing, to a student who exemplifies the character of David Jones while he was at the Law School.

#### ***The MacIntosh Bursary***

The fund is established by A.J. MacIntosh in memory of his parents Mr. Ross MacIntosh and Mrs. Katherine MacIntosh. It is to be used to assist students who are experiencing financial difficulty. The principal criterion for any award shall be the needs of the student, rather than the achievement of academic excellence. Preference will be given to any candidate who has demonstrated a significant interest in public affairs.

#### ***Emelyn L. MacKenzie Bursary***

The University was given a generous bequest under the Will of the late Emelyn L. MacKenzie to benefit students in Arts & Science, Dentistry and Law equally. Applicants are to be bona fide residents of Victoria County, Cape Breton (as defined by the boundaries then extant in AD 1900). Financial need and character are the main criteria.

#### ***The R. Graham Murray Bursary***

In commemoration of their 25th anniversary the Law Class of 1954 established an endowment in honour of Professor R. Graham Murray, QC,

a distinguished teacher in the Faculty of Law. A portion of the annual income is awarded as a prize to a deserving student and the remainder is allocated as financial assistance to students who have shown financial need.

#### ***The James S. Palmer Bursary Fund***

This fund has been established by James Simpson Palmer, CM, QC to provide financial assistance to one or more students enrolled in the program of studies leading to a Bachelor of Laws (LLB) degree. He received his BA, McGill University in 1948 and LLB, Dalhousie in 1952. He helped build and is now the senior partner of Burnett, Duckworth and Palmer law firm in Calgary. He has had an outstanding career as a lawyer and served as Governor of the Canadian Tax Foundation. He has been extremely active in his community, receiving an award for demonstrating outstanding service to a variety of legal and community organizations on local, provincial, and national levels. He was presented with the Dalhousie Law School Weldon Law Award in 1993.

#### ***The Jack and Barbara Prince Bursary***

This bursary fund was set up in 1977 by Jack and Barbara Prince of Halifax. The income of this fund is awarded annually by the Law School to a needy student, normally resident in the Province of Nova Scotia who has been accepted into the first year of the LLB programme. The bursary may be renewable, depending on the financial position of the holder of the award. Preference in awarding the bursary will be given to black students.

#### ***Frances Stanfield Robertson Bursary***

This bursary, in the amount of \$700, is awarded to a mature female student in Second or Third Year of Law School, who has achieved a satisfactory academic standing and engaged in extracurricular activities at Law School.

#### ***The Gordon S. and Mary C. Walker Memorial Bursary***

An endowment fund was established to provide financial assistance from the net annual income to one or more students. The fund is a gift from the Estates of Gordon S. and Mary C. Walker. The late Mr. Walker was the owner of Walker Financial Company, the last privately owned bank in Canada, situated in Port Hawkesbury, N.S.

## **D. Research Assistantships in Law**

Several research assistantships are under consideration or have recently been put in place to honour the memory of distinguished alumni of Dalhousie Law School.

#### ***W.J. MacInnes, QC, Research Assistantship***

The family and friends of the late W. John MacInnes, QC have set up a fund to support a summer research assistantship for an LLB student with high academic standing who will be carrying out research for a member of the Law Faculty in the areas of either Corporate and Commercial Law or Media and Communications Law.

W. John MacInnes, QC, graduated from Dalhousie Law School in 1943, and was that year's Gold Medalist. He lectured at the Law School in the early 1960's, for which he was recognized by being appointed a Special Lecturer. He was a pre-eminent solicitor in Nova Scotia, practicing mainly in the area of corporate and commercial law.

He was for many years a senior partner of the law firm MacInnes Wilson Flinn Wickwire.

#### ***George Tamaki, QC, Memorial Research Assistantship***

The Toronto law firm of Stikeman, Elliott has set up a fund to honour the memory of George Tamaki, QC. The fund will support an annual research assistantship for a Dalhousie LLB student working under the supervision of a professor doing research in the area of taxation law. In selecting the student recipient, consideration will be given to academic merit and financial need.

George T. Tamaki, QC., graduated from the Dalhousie Law School in 1941. He was a partner with the firm Stikeman, Elliott in Toronto, where he practiced in the area of taxation law. In recognition of the high esteem with which Mr. Tamaki was held by members of the firm, and the taxation bar generally, this prize was endowed in his memory by Stikeman, Elliott.

#### *John M. Barker, QC, Memorial Research Assistantship*

The Halifax law firm of Cox Downie, in memory of John M. Barker, QC funds a summer research assistantship for a Dalhousie LLB student working in the area of civil legislation, civil procedure, insurance, or tort law, the preferred areas of practice of Mr. Barker.

John M. Barker was a senior partner in the law firm of Cox Downie where he had practiced since 1968. While at Dalhousie Law School, he held the Sir James Dunn Scholarship in Law for three years and graduated with the University Medal in Law in 1964. He was a Viscount Bennett Fellow in 1964. He graduated from the London School of Economics, with a Masters of Law in 1966, and was appointed a Queen's Council in 1983. He had a distinguished career in civil litigation, being one of only five active legal practitioners in Nova Scotia to be made a Fellow of the American College of Trial Lawyers, membership in which is limited to trial lawyers who are "unquestionably and eminently qualified". He was a member of the Council of the Nova Scotia Barristers' Society, a lecturer at Dalhousie Law School, and a member of the Federal Advisory Committee on Judicial Appointments.

## IV. Faculty of Medicine

### A. Scholarships

The Medical Admissions Committee is responsible for the selection of entering scholars. The prescribed application form will be made available by the Admissions and Student Affairs Office, to all accepted applicants. The Scholarships & Awards Committee of the Faculty of Medicine is responsible for the selection of in-course scholars. Applications are made available to students in early March each year.

### B. Entrance Scholarships and Bursaries

A variety of scholarships and bursaries are offered to all students who have been offered a place in Medicine. There are varying residence requirements. While selection depends primarily upon scholastic ability, the Admissions Committee may go beyond this in making bursary awards. The deadline to submit entrance scholarship applications is June 30th each year.

The awards are made in mid-July, subject to the acceptance of the applicant by the University for admission to the first year of the medical class in the year of award, and her/his registration as a student at the regular date in August.

#### 1. Scholarships/Bursaries Limited to or Preference Given to Residents of the Three Maritime Provinces

##### *James A. Wardrope Entrance Scholarship*

This scholarship is the income of an endowment given by the late Dr. M.J. Wardrope in memory of his son. The scholarship is to be awarded to a student of high standing entering the first year of Medicine at Dalhousie University.

##### *The Dr. A. Gaum Bursary*

This bursary, in memory of Dr. A. Gaum of Sydney, Cape Breton is to be awarded to an entering medical student who has demonstrated financial need, with preference to be given to residents of Cape Breton.

##### *Dr. J.J. Carroll Scholarships*

In memory of Dr. J.J. Carroll, the earnings from the fund will be used annually to provide two entrance scholarships to students enrolled in the Faculty of Medicine at Dalhousie University. These scholarships will be renewable at the same rate for years two and three of study in the MD programme provided that the recipient(s) maintains satisfactory academic standing. Preference will be given to applicants who are residents of Eastern Nova Scotia.

##### *Dr. D.A. Gillis Entrance Scholarship*

This scholarship in honour of Dr. D.A. Gillis was established by Faculty members of the Department of Surgery, Dalhousie University. This award is to be given to a student from the Maritime Provinces on the basis of all-round excellence of the candidate, including both academic and non-academic factors.

#### *Leslie Ann Campbell Entrance Scholarship*

This memorial award will be given annually to a resident of Nova Scotia. The recipient will have demonstrated satisfactory academic standing and financial need. The award will be renewable for years two through four of the academic programme, provided the recipient maintains satisfactory academic standing and demonstrates continued financial need. While this award is being held on a continuing basis, it will not be available as an entrance scholarship.

#### *Dr. John Quinlan Memorial Bursary*

This fund has been established in memory of Dr. John J. Quinlan and is to be awarded to a student(s) from the Maritime Provinces entering Dalhousie University Medical School. The recipient(s) will have demonstrated financial need and satisfactory academic standing. The recipient may retain the bursary in year two of the programme leading to the degree of Doctor of Medicine.

#### *The Barbara L. Blauvelt Entrance Bursary*

This bursary, in honour of Barbara L. Blauvelt, a forty-five year employee of Dalhousie, is to be awarded to a student from the Maritime Provinces in financial need. The award is to go to the student who is not in the top 25% of the applicants accepted into the programme.

#### *Dalhousie University Entrance Scholarships*

Limited funding is also available annually for disbursement by the Committee to deserving students.

### 2. Scholarships/Bursaries Open to All Entering Students

#### *Etta and Frederick Ross Memorial Bursary*

A fund has been established by Dr. James F. Ross in memory of his parents, the income of which is to be used to enable a deserving student to attend the Faculty of Medicine at Dalhousie University.

#### *Dalhousie Medical Alumni Association Entrance Scholarship*

This scholarship, established by the Dalhousie Medical Alumni Association, is to be awarded to an entering student on the basis of all-round excellence both academic and non-academic.

#### *Dr. E. James Gordon Scholarship*

This fund, in memory of Dr. E. James Gordon who graduated from Dalhousie in 1941, will be used annually to provide an entrance scholarship to a student enrolled in the Faculty of Medicine. The recipient will have demonstrated all-round excellence in both academic and non-academic factors.

#### *Halifax Medical Society Entrance Scholarship*

Through the generosity and support of the physicians in the Halifax Medical Society, an Entrance Scholarship was established to recognize academic excellence, extracurricular activities, leadership and personal qualities. Need will also be one of the elements that may be considered along with the qualities of excellence.

#### *Dr. R.C. Robb Memorial Scholarship*

This fund is to be used annually to provide a scholarship for a student entering the programme leading to the Doctor of Medicine degree. The recipient will have demonstrated high academic standing.

### C. Medals, Prizes and In-Course Scholarships

#### *Dr. C.B. Stewart Gold Medal in Medicine*

This medal is awarded annually, on graduation, to the student standing highest in the regular medical class who has reached the high standard set by the Faculty for that purpose.

#### *MD with Distinction*

This honour is awarded to students who have, on graduation, reached a high standard set by the Faculty for that purpose.

#### *Dr. Clara Olding Prize*

This prize, the interest of an endowment, given by the late Dr. A.M. Hebb, of Dartmouth, as a memorial to his wife, is awarded annually to the graduating student achieving the highest standing in the clinical years, character and previous scholarship being taken into consideration.

**Dr. John F. Black Prize**

This prize, from the income of a bequest by the late Dr. John B. Black, a former Professor of Surgery, is awarded at the completion of the fourth year to the student who reaches the highest standing in Surgery.

**Andrew James Cowie, MD Memorial Medal**

This medal, founded by the late Miss Florence J. Cowie in memory of her father, is awarded each year to the member of the fourth-year class having the highest standing in Obstetrics, provided his/her standing in other subjects is sufficiently high to justify an award.

**The Dr. J. Donald Hatcher Award**

Through funds donated in honour of Dr. J. Donald Hatcher on his retirement as Dean of the Faculty of Medicine, an endowment fund has been established to finance an annual award to the final year undergraduate medical student, who at graduation is considered to have carried out the most meritorious and significant research project during the undergraduate programme including summer electives.

**Dr. Richard B. Goldbloom Award in Paediatrics**

The award consisting of a medal and a monetary prize is to be given annually to the graduating medical student "who shows the most outstanding combination and balance of scientific medical knowledge, clinical skill and sensitivity to the social and emotional needs of children and their families".

**The Dr. Juan A. Embil Award for Excellence in Infectious Diseases Research**

This prize is awarded to the graduating student who has completed the best research project in Infectious Diseases during his/her four years of medicine. The goal of the prize is to stimulate and encourage interest and excellence in Infectious diseases and Medical Research.

**Loudres I. Embil Prize**

Awarded to a graduating student who has completed the best research project in cardiovascular diseases during his/her years in the MD program.

**Dr. J.C. Wickwire Award**

This award, established by Dr. J.C. Wickwire, is to be awarded to the graduating student who has displayed high competence in Patient Contact over the four year class.

**Poulenc Prize**

A prize, the interest on an endowment given by Poulenc Limited, will be awarded to the student standing highest in the final examination in Psychiatry in the fourth year.

**Dr. Robert C. Dickson Prize**

A prize is awarded to the student at the completion of fourth year who has had the highest standing in all examinations in Medicine in Second, Third and Fourth Years.

**Dr. John W. Merritt Prize**

A prize presented by Mrs. Merritt in memory of her husband, Dr. John W. Merritt, Associate Professor of Surgery. This prize is offered to the student standing highest in Surgery throughout the four years in medicine.

**The Dr. R.O. Jones Prize in Psychiatry**

This prize in memory of Dr. R.O. Jones is to be awarded to the new graduate who has achieved the highest grade in Psychiatry for the four years in medical school.

**Dr. Frederick S. Goodine Scholarship**

A scholarship established by the Carleton Memorial Hospital, Woodstock, N.B. is to be awarded annually to a fourth-year medical student from New Brunswick, who has shown outstanding interest or proficiency in family medicine during the clerkship year.

**Dr. Leo Horowitz Prize in Diagnostic Radiology**

A prize, established by Dr. Leo Horowitz, is to be presented at graduation to the fourth year student judged by the Department of Radiology, to have shown the greatest interest and greatest degree of inclination towards the study of Radiology.

**Dr. W.H. Hattie Prize in Medicine**

A prize initiated anonymously by the late Dr. Hattie when he was Assistant Dean, and perpetuated in his memory by Dr. Carl K. Pearlman of California, who was a recipient of the award in 1937, will be awarded at the completion of fourth year to the student who achieves the highest standing in Medicine.

**Dr. Frank G. Mack Prize in Urology**

An annual prize presented in memory of the late Frank G. Mack, Professor of Urology (1922-1950). The prize is to be awarded by the Department of Urology to the fourth-year student achieving excellence in Urology.

**Dr. Lawrence Max Green Memorial Award**

This award to be presented to the student who, during his/her clerkship in obstetrics and gynecology, has best displayed the characteristics of compassion and clinical competence. Selection of this student is the responsibility of the Department of Obstetrics and Gynecology.

**Dr. S.G. Burke Fullerton Award**

An award provided by the Nova Scotia Chapter of CFPC to the student who shows the greatest promise in Family Medicine in fourth year.

**Dr. Harold Ross McKean Award in Ophthalmology**

This prize, in memory of Dr. Harold Ross McKean, is to be awarded annually to a fourth year medical student (preferably from Nova Scotia), who has demonstrated the highest skills in Ophthalmology in the third year class.

**Dr. Ram Singari Boodoosingh Memorial Prize**

An annual book prize awarded to a graduating medical student who with clinical skill and a sense of humour, most brings art to the practice of medicine.

**Dr. Robert F. Scharf Award in Emergency Medicine**

Awarded annually to a graduating student who had demonstrated an outstanding combination of clinical ability, motivation and professionalism in Emergency Medicine throughout the undergraduate curriculum.

**Department of Surgery Prize**

A prize is awarded to the student at the end of fourth year with the highest standing in the final examinations in surgery.

**Dr. Michael Brothers Memorial Prize in Neuroscience**

An annual prize to a student graduating from the Dalhousie Medical School who has demonstrated an aptitude in the Neurosciences.

**Dr. Charles J. David Memorial Prize**

An annual prize to honour the memory of Dr. Charles J. David. Awarded to a graduating medical student who demonstrates excellence in his or her psychiatry rotation.

**Albert A. Schwartz Prize in Orthopedics**

An annual prize awarded to a graduating medical student who has demonstrated aptitude and excellence in Orthopedics.

**D. University Prizes****William Isaac MacDougall Scholarship Fund**

Under the will of the late Andrena Frances MacDougall, a fund was set up to provide "scholarships in the Medical School of the University." Further particulars of the terms and conditions of this award may be obtained from the Dean.

**Charles E. Frosst Scholarship**

This award, contributed by Charles E. Frosst and Company of Montreal, is awarded annually at the completion of the third year to a student entering the fourth year who has shown general proficiency throughout the class.

**Dr. Joan Crosby Scholarship**

A scholarship, established by a group of parents in honour of Dr. Joan Crosby for her exceptional dedication to the care of children. It is awarded to two deserving medical students in the third year of study.

***Dr. James S. Hammerling Prize in Otolaryngology***

A prize to honour Dr. James S. Hammerling on his 80th birthday to be awarded to the student who has attained the highest standing in the otolaryngology clerkship.

***The Dr. Harry Poulos Prize***

This prize is to be awarded to the second year student in the Faculty of Medicine who has the highest standing in Psychiatry.

***J. Randolph Murchison Memorial Scholarship***

A scholarship donated in memory of the late J. Randolph Murchison of Prince Edward Island is to be given to a needy medical student from Prince Edward Island.

***The R.S. Smith Medical Scholarships***

By Deed of Gift and subsequent generous bequests, Dr. James Ross Smith and his wife, Eliza Cochran Smith, established an endowment as a memorial to their son, Ross Stewart Smith. A portion of the Fund's annual income is to be expended in the form of general scholarships to students in the MD programme upon such conditions as the Faculty of Medicine, from time to time, may prescribe.

***The Dr. Walter Templeman Bursary***

The income from this endowment is to be awarded to a needy medical student.

***Harold Barnett Prize***

This prize is to be awarded annually to the student who has attained the highest standing in Respiratory Physiology.

***Arthur F. Iceton Memorial Scholarship***

This scholarship, in memory of Arthur F. Iceton, is to be awarded to a student in the Faculty of Medicine who is competing in the athletic programme at the varsity level. The scholarship will be renewed for a subsequent year should the recipient continue to qualify under its terms.

***The Dr. H. Ralph Philips Award in Clinical Hypnosis***

Established in 1992 by H. Ralph Philips, MD '50, and available through the Department of Family Medicine, this award promotes the training and use of clinical hypnosis for Dalhousie Medical students and residents by offering funds to attend accredited courses in clinical hypnosis.

***Dr. Mabel E. Goudge Prize***

The prize, established by the late Dr. Mabel E. Goudge, is to be awarded to the top female medical student in each year.

***Dr. Carl K. Pearlman Prize in Urology***

An annual award presented to the student in the fourth year judged by the Department of Urology as having the greatest aptitude and interest in Urology.

***Morris and Sarah Gold Award***

This award is to be presented to an undergraduate medical student who most distinguishes himself in the field of medical literature.

***The L.B. MacPherson Memorial Award***

This prize in Medical Biochemistry is awarded to an undergraduate medical student who has shown the greatest competency in the Biochemistry component of the undergraduate medical curriculum.

***The Annie Hamilton Scholarship***

In honour of the first female graduate in medicine and Master of Surgery in Nova Scotia (MD 1894), this fund provides an annual scholarship to a second year medical student.

***Dr. J.V. Graham Prize***

A prize, the income of a bequest by the late Dr. J.V. Graham, will be awarded to a student at the end of the second year who has attained high standing in the first and second year Anatomy class.

***Dr. Forest W. Fyfe Scholarship***

Awarded annually to a student entering the second year of studies leading to the MD degree who has achieved an excellent standard of performance in first year Anatomy.

***Professor John Cameron Prize in Anatomy***

This prize is the interest on an endowment given by the late Dr. John Cameron, former Professor of Anatomy. It is awarded to the student who attains the highest marks in Anatomy.

***Roberta Bond Nichols Memorial Prize***

This prize represents the interest in a fund initiated by the Nova Scotia Branch of the Federation of Medical Women of Canada as a memorial to Dr. Roberta Bond Nichols, and is awarded annually to the female medical student who achieved the highest standing in Anatomy.

***Dr. Donald S. Robb Memorial Award***

Awarded annually to a student who has completed the third year of study leading to the MD Degree and has demonstrated excellence in patient contact and satisfactory academic progress.

***Dr. Graham Gwyn Memorial Prize in Neurology***

This prize, in memory of Dr. Graham Gwyn, a distinguished Professor, and Head of the Department of Anatomy, is to be awarded to the student in fourth year who expresses interest and achieves excellence in neurology. The recipient must be recommended by the clinicians involved in teaching and supervising said student.

***Dr. C. E. Van Rooyen Award***

An annual award for the medical student who has shown the greatest competency in the infectious diseases component of the undergraduate curriculum.

***Lange Book Awards***

Lange Medical Publications offers book awards to one outstanding student in either first, second or third year and one to a graduating student.

***Dalhousie Medical Students' Society Prize***

Four prizes of books are awarded annually to students of the second, and fourth years in Medicine upon application to the Dalhousie Medical Students' Society. Financial need, academic standing, and activity in student affairs are considered.

***The Dr. I. Roy Gold Endowment for Medical Journalism***

Established by Mrs. Babs Gold, widow of the late Dr. I. Roy Gold, MD 1938, this fund provides an annual stipend to the student who serves as Editor of the Dalhousie Medical Journal. Dr. Gold was the founder and first editor of the journal, established in 1936.

***The Max Forman Research Prize***

This prize awarded by the Dalhousie Medical Research Foundation recognizes excellence in medical research with the aim of promoting and encouraging its pursuit in the Faculty of Medicine, Dalhousie University. The Max Forman Research Fund honours the memory of Mr. Forman, a successful Halifax businessman and philanthropist who cared about the community in which he lived. The Max Forman (Junior) Prize, awarded every other year, is open to all junior investigators including graduate and PhD students, residents and fellows. For further information, visit the Foundation's web site at [www.dmf.org](http://www.dmf.org) or contact the office at 494-3502, Room 22, 15th floor Tupper Building.

**E. Bursaries**

It is necessary to apply for these awards. Information may be obtained at the Office of the Dean of Medicine or at the Admissions and Student Affairs Office. Please refer also to the general financial section of this calendar.

***The IODE John Stewart Chapter Bursary***

A bursary awarded to a Nova Scotia student who at the completion of the second year shows proper academic standing and need of financial assistance.

***The A.B. Wiswell Scholarship***

This scholarship, established by the late Dr. A.B. Wiswell of Halifax, is to be awarded to a student completing the first year of the regular medical class. Character and financial need are to be considered, but the standing of the candidate in his class is the primary consideration.

### ***Dr. and Mrs. Edward Murray MacDonald Bursary***

This bursary, in memory of Dr. and Mrs. Edward Murray MacDonald, is awarded to a first-year medical student who is a resident of Cape Breton. The student must demonstrate to the satisfaction of the Scholarships and Awards Committee of the Faculty of Medicine, financial need.

### ***The Dr. Hector J. Pothier Bursary***

A bursary donated in memory of the late Dr. Hector J. Pothier of Beaver River, Nova Scotia, is to be given to a needy student in medicine who has expressed an interest in spending time as a family physician in a rural community.

### ***The Charles J.W. Hinman Memorial Bursary***

A bursary which was established to assist an undergraduate medical student of any year in the Faculty of Medicine who demonstrates satisfactory academic progress and who provides to the Faculty clear evidence of the need for financial assistance.

### ***The Dr. Elizabeth Catherine Weld Memorial Bursaries***

A bursary or bursaries awarded each year to medical students of any year with preference to be given, but not restricted to, minorities and those in need.

### ***Order of the Eastern Star, Halifax Chapter 7 - Medical Student Bursary***

A bursary to be awarded to a needy medical student.

### ***Marion E. and Frank A. Seaman Bursary***

This bursary, in memory of the late Marion E. and Frank A. Seaman, is to be awarded to a student who has completed the first year of medicine. The primary considerations are to be need and scholastic standing.

### ***The A.R. Merle Smith Bursary***

A bursary or bursaries to be presented to a student(s) who has or have graduated from Bathurst High School who, having completed the first year in the Faculty of Medicine, is or are enrolled on a full-time basis in the second or a subsequent year in the faculty.

### ***Dr. R.M. Pendrigh Scholarship***

The income from an endowment to be awarded to the student from New Brunswick who, in the opinion of the University, has demonstrated need and merit with preference given to students who reside in West Saint John, New Brunswick.

### ***Georgina M. Odell Bursary Award***

This award, in memory of Georgina M. Odell, is to be awarded to a needy medical student(s) by the Financial Aid Committee/Awards Committee of the Faculty of Medicine. In the event that all the income is not disbursed in any one year, the same may be accumulated that year or from year to year to be paid out as bursaries in subsequent years if required for that period.

### ***The MD Class of 1971 Memorial Bursary Fund***

Established in memory of deceased classmates, this fund provides an annual bursary to a medical student in good standing who demonstrates financial need.

## **F. Financial Aid**

### ***The John George and Emily MacDougall Bursaries***

Under the terms of the will of the late Doctor John George MacDougall, formerly a senior surgeon of the Faculty of Medicine and at the Victoria General Hospital, a perpetual trust fund was established, the income from which is to be used for "such deserving persons who being... undergraduates of the Medical School of Dalhousie are...most entitled to assistance on the grounds of worth and necessity."

### ***Dr. Annie Anderson Gilchrist Dickson Bursary Fund***

This bursary is in memory of Dr. Annie A.G. Dickson, a graduate of Dalhousie University who was prominent in public health work. It is to be awarded annually to a third year female medical student at Dalhousie University who has demonstrated financial need. If, in any given year, there are no female applicants the bursary may be awarded to a third year male medical student.

## **Faculty of Medicine Loan Funds**

Any medical student in financial need may apply for loan assistance, but ordinarily preferred consideration is given to students in the Second, Third, and Fourth Years. Forms are available in the Office of the Dean of Medicine. A loan made becomes due on May 31st of the graduating year and bears interest from that date until paid. Since the amount available in each year to loan to medical students is dependent on what is annually returned to the Fund, students are earnestly requested to plan to make the repayment of these loans their first financial priority after graduation, in order that other students may have the use of the funds. The capital of the Loan Fund has been substantially built up through the generosity of the W.K. Kellogg Foundation and The Pfizer Canada Division of the Pfizer Corporation. Additional sums were made available in the Dr. J.V. Graham Memorial Loan Fund, established by the family of the late Dr. J.V. Graham for a student in First or any subsequent year; the Malcolm B. Dockerty, MD Loan Fund, preferably given to a student in Fourth Year who is a native of Prince Edward Island; and the Dr. S. Barton Sklar Loan Fund, established by Carl Wellish (MD Dalhousie, 1963) for "qualified medical students of limited financial resources."

## **G. Faculty of Medicine Student Assistance Program**

Medical students may apply for a bursary through this programme. Application forms and guidelines are available through the Office of the Dean of Medicine.

Bursary awards are usually issued in December of each year. A second round of applications may be accepted in January for awards in March if funding is available.

## **H. Loan Funds**

### ***Maude Abbott Memorial Scholarship Loan Fund***

Information regarding these loans, to female medical students, may be obtained from: The Secretariat, Federation of Medical Women of Canada, CMA House, 1867 Alta Vista Drive, P.O. Box 9502, Ottawa, Ontario, K1G 3U2

## **I. Postgraduate Fellowships & Scholarships**

### ***Dalhousie Medical Research Foundation Fellowships***

Fellowships are available to medical graduates or graduates of recognized Ph.D. programs to undertake postgraduate training at Dalhousie in basic or clinical science for a period of one to three years. The level of support will be determined by the Medical Research Council of Canada's scale of pay for MD's, based on the number of years of postgraduate training. Preference will be given to candidates who have potential to contribute to academic medicine in the Maritime provinces of Canada.

Fellowship competitions are generally held in April each year but deadlines will vary. To obtain a current schedule of competitions, terms of reference and applications visit the Foundation's homepage at [www.dmrp.org](http://www.dmrp.org) or contact the Dalhousie Medical Research Foundation, 15th Floor, Sir Charles Tupper Medical Building, College Street, Halifax, Nova Scotia, B3H 4H7 or by calling (902) 494-3502.

### ***Killam/Ross Stewart Smith Fellowships/Scholarships***

Applications and regulations for the following three awards can be obtained from the Admissions Office, c/o Ms. Christine Silver Smith, Room C-126, Lower Level, Clinical Research Centre, 5849 University Avenue, Halifax, Nova Scotia, B3H 4H7 telephone number (902) 494-1885. The deadline for submission of these applications for consideration by the Scholarships and Awards Committee is **November 30th**.

### ***Killam Postgraduate Medical Scholarships***

These scholarships were established by the late Mrs. Izaak Walton Killam. They are awarded to postgraduate students in the third, fourth, or fifth year of training in a clinical department of the Faculty of Medicine, Dalhousie University or elsewhere. Selection by the Faculty Awards Committee is based on the recommendation of the department head that the candidate is likely to contribute to the advancement of learning or to win distinction in his/her specialty and could be recommended for appointment to the faculty of a medical school on completion of training.

### ***The Ross Stewart Smith Memorial Fellowship in Medical Research***

This Fellowship, being a portion of the income from a generous bequest to Dalhousie University, was established by Dr. James Ross Smith and his wife, the late Mrs. Eliza Cochran Smith, as a memorial to their son, Ross Stewart Smith, who died while attending Dalhousie. It is open to students of exceptional ability following graduation from the Faculty of Medicine, Dalhousie University. The research may be in clinical medicine or in the basic medical sciences.

### ***Family Medicine Fellowship***

A one year Fellowship position is available with the Department of Family Medicine for an individual completing Family Medicine residency training at Dalhousie University. The position must be initiated and designed by the incumbent to meet his/her particular requirements. Five 1/2 days per week clinical with approximately \$40,000-45,000 per year. The remaining five 1/2 days/week could be used for work in an area of special interest, i.e. Women's Health, Sports Medicine, etc. The individual must have C.C.F.P. and a full license to practice in Nova Scotia. If interested, or for further inquiries, please contact: Lynn Pope, Residency Training Coordinator (902) 473-4749 e-mail: lynn.pope@dal.ca

### ***Dr. B.L. Jewett Memorial Prize***

The recipient will be the post graduate Resident judged to have presented the best clinical or basic science research paper on a topic related to head and neck surgery at the annual Dalhousie Residents' Research Day Competition. Eligibility would include (but not be restricted to) residents in Otolaryngology, Ophthalmology, Plastic Surgery, General Surgery, Neurosurgery, Oral Surgery, and Surgical Oncology. The selection of the recipient will be made by the judges who review and evaluate the presentations. The amount of this prize is \$500.

### ***Transfusion Medicine Fellowship***

The aim of the Transfusion Medicine Fellowship is to make available one or two years of support for physicians in Canada to acquire training in Transfusion Medicine through exposure to the work carried out in the Red Cross Blood Centres. It is intended that successful candidates will have some commitment to transfusion medicine in their future career plans. The Fellowship offers a stipend based on the current level of housestaff salaries appropriate to the level of training provided for in the provincial scale of the province in which the Fellowship is awarded, as well as a first year research and travel allowance of \$10,000. The number of awards will be no more than two in any year. Candidates must be in the final year of preparation for certifying examinations by the Royal College of Physicians and Surgeons, or should be newly qualified in a specialty of the Royal College. Priority will be given to those with interest and experience in the areas of infectious diseases, epidemiology, public health and blood utilization. Applications are available from Medicine Research Services, Room, C-202, CRC Building, 902-494-1887 (carla.ross@dal.ca).

## **J. Research Fellowships**

### ***Foundation Fellows***

These fellowships are available to medical graduates or graduates of recognized PhD programmes to undertake postgraduate training at Dalhousie in basic and clinical science for a period of two to three years. Support will also be extended to postdoctoral fellows already at Dalhousie when such support would advance research in the Faculty of Medicine and the research programmes of a faculty member. Preference will be given to candidates who have potential to contribute to academic medicine in the Maritime provinces of Canada. The level of support will be determined by the number of years of training following graduation based on MRC scales for fellowships (for PhD's) or on resident scales of pay for MD's. Deadline for receipt of applications is 1 May and 1 October or as funds and circumstances permit.

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