WELCOME TO 'CHEZ GENETICS'

FEATURED CHEFS

Dr. Andrew Schofield ~ *Specialty:* Mendelian genetics, problem solving, mutations, biotech. & gene editing
Dr. Julie LaRoche ~ *Specialty:* Molecular biology and control of gene expression and applications

Front of House ~ Debra Grantham: *Please contact for seating, assistance, and suggestions for improvement*

APPETIZER

Why are you here? Why genetics?
Orientation Mixer in first meeting
What are the options? (Syllabus)

MAINS

Unit 1- How are traits transmitted from parents to offspring, really? Why do we all not look identical?
(Problem-solving skills through Achieve, flipped lectures, labs)

Unit 2- How are traits encoded, in what form, and how does a cell know to express them?
Why aren't all the cells in the body with identical DNA sequences the same?
(Critical thinking skills through flipped lectures, researching and writing like a scientist in lab and Achieve)

Unit 3- How do we know about genes? How do genes change spontaneously, and how do humans create changes? *(Authentic research making a difference, relating genetics to society)*

DESSERTS

Friday Live interviews

BEVERAGES

Building a cooperative and diverse learning community
Learning together through peer instruction
No deductions for trying and getting it wrong the first time

DALHOUSIE UNIVERSITY

Formal Faculty of Science Course Syllabus FALL 2021
Department of Biology
BIOL 2030.03
Genetics and Molecular Biology

Instructors:		**Student Drop-In Hours (Teams)**
Dr. Andrew Schofield (Professor - Unit 1&3) he/him	a.schofield@dal.ca	Thu 10:30-11:30 AM or appt
Dr. Julie LaRoche (Professor – Unit 2) she/her	julie.laroche@dal.ca	Wed 1:35-2:35 PM or appt
Debra Grantham (Instructor) she/her	grantham@dal.ca	Tue & Thu, 9:35-10:35 AM

Technology
BIOL 2030 will use Dalhousie-supported programs, mainly **Brightspace** and Microsoft **Teams**, and share files through Teams and Microsoft 365. All students have free access to Microsoft Office products and our assignment templates are all MS **Word**. A laptop or device with Teams, Word, Outlook and Chrome installed will give you the best class experience! Bring them to every class and lab if possible. Talk to Debra about loaners.

Covid-19 Guidelines…What if I feel sick? As Dalhousie members, we all have to respect our classmates and follow the Dalhousie Code of Conduct to reduce the chance of spreading Covid-19 to those still vulnerable who couldn't be vaccinated- check the most recent guidelines here. In summary, for BIOL 2030 will be asking everyone to wear masks when inside buildings for the month of September and to stay home if you are sick.

How will I be able to answer questions? Helpful resources are plentiful- the textbook, our recorded mini-lectures, animations, self-quizzes, and tutorial questions are all excellent sources of trusted information. You can earn credit by completing the Achieve homework every week and completing the laboratory exercises within a reasonable time. Problem-solving takes a lot of practice, so we have found problems in the text, tutorials and Achieve that allow you to struggle with important concepts and practice solving them while earning points for trying. This is called formative learning.

What are the Lecture times in the Timetable? Chez Genetics meets Monday, Wednesdays and Fridays from 12:35 – 1:25 pm in the charming and intimate Scotiabank Auditorium (Auditorium 1) in the Marion McCain Social Sciences Building. Mini-lectures are embedded in each module and what we talk about in lecture will be the same key content. If you miss a lecture, you can view the pre-recorded lecture on that topic- they're the same! Live lectures will not be recorded because all content is included in the pre-recorded videos in the modules. Please join us for a wonderful meal of hearty problem solving and convivial company, with some spice thrown in!

What are the Tutorial times? A helpful and expert guide will host group work sessions in person solving those difficult tutorial questions in the Achieve assignments. They will not lecture at you, but you can discuss any tricky concepts, interpretations, or extensions of the ideas you have or need to solve problems.

What are the Laboratory times? Laboratories are two-hour in-person sessions that allow us to tackle weightier problems, perform some experiments and collect data, and learn approaches to interpret that data. We only meet in person every two weeks, but in the week you don't come to the lab room, there

is a Teams meeting at the same time for an hour. You will meet through Teams, decide your group's gene of interest, ask questions about post-lab assignments, and exchange peer feedback on your drafts before you submit them to your TA. You can confer with your pod of 4 but show your unique and original work in your reports which are all individual. The convenience of Teams means you can join from any location: the library, your room, a patio, a park or anywhere you have internet access!

Communication

Questions related to content? Post in the Discussion forum 'Any questions?' and your post will be answered in 24 hours. If you know the answer, please help out a classmate!
Tutorial questions? Ask during your **tutorial** session, weekly meetings held here.
Need to talk to one of the lecturers about specific problems? Drop into their student hours on Teams (posted above) or make an appointment for an online or in-person meeting. Please wear a mask if you're meeting in person.
Personal questions or problems affecting your success in this course? I'm here to help you succeed in the class. We know you can improve and do well in genetics! Contact Debra Grantham. Email responses may take up to 2 days and are not answered outside working hours – 9-5 M-F AST

Autonomy and independent learning

One of the most important outcomes of a university education and a skill that you can use forever is your ability to learn independently. We will guide you and give you opportunities and choice over what you do to learn as much as we can, but you are ultimately responsible for your learning in this, and any course. **We believe that you have the capacity to be successful at Genetics!** Please reach out to us if you're struggling and we'll do what we can to help.

Course Description (from the Calendar)

The power and prominence of modern genetics are emphasized through a blend of classical and molecular approaches. Topics include: Mendelian, population and quantitative genetics; chromosome structure and variation; structure and function of nucleic acids; DNA replication, transcription and translation; gene expression; gene mutations; and genetic engineering. Course-based research experience in lab.

Course Prerequisites

-Courses:

A grade of C or higher in BIOL 1010.03 or (BIOL 1020.03, BIOL 1030.03, BIOA 1002.03, SCIE 1507.09). RECOMMENDED: CHEM 1011.03 and CHEM 1012.03
EXCLUSIONS: GENE 2000.03

-**Knowledge/skills:**

You will draw on these skills you have developed in previous courses:

- Compare and contrast the fundamental characteristics of eukaryotic, prokaryotic, diploid and haploid organisms
- Describe the stages of mitosis and meiosis and the cell cycle.
- Recall the basic concept of heredity, and that genetic information is encoded in DNA.
- Define genotype, phenotype, chromosome, gene, allele, recessive and dominant.
- Contrast the basic differences between DNA and RNA and describe how information flows from DNA to RNA to protein.
- Identify the minimal regulatory elements and how they function in the control of gene expression of inducible operons in prokaryotes.
- Define the principal classes of physical and chemical mutagens, the changes mutation introduces to the amino acid sequence of a polypeptide, and the resulting effect on phenotype.
- Describe the basic methodology of gene cloning and DNA technology/biotechnology, some applications, and their ethical and societal implications.
- Interpret the concepts of evolution as changes in allele frequencies and the Hardy-Weinberg principle. Calculate expected genotype and allele frequencies in simple cases.
- Describe the components of a scientific paper.
- Collect scientific literature using library resources, incorporate information from them into a scientific paper, and properly cite these sources.
- Explain the importance of academic integrity

Course Objectives/Learning Outcomes

If you've built on those skills though this course you can:

- Defend the importance of genetics to society and the study of biology and explain this to non-specialists.
- Manipulate Mendelian principles of heredity for both autosomal and sex-linked inheritance.
- Apply rules of heredity to the eukaryotic cell cycle. Relate meiotic crossing over and genetic linkage.
- Show how complex genetic systems lead to modifications of the basic principles of Mendelian inheritance.
- Summarize the basic principles of population and quantitative genetics and apply these principles to real biological systems.
- Diagram the structure of DNA, DNA replication, how DNA is transcribed to RNA, and how RNA is translated into proteins.
- Diagram the structure of RNA and how post-transcriptional processing modifies it prior to translation.
- Interpret genetic and protein variability using detailed knowledge of the genetic code and the processes of transcription and translation.
- Compare and contrast the regulation of gene expression in prokaryotic and eukaryotic cells
- Relate chromosome structure, the types of rearrangements that occur, and the consequences of variations in chromosomal number.

- Explain and illustrate the fundamental biochemistry required in the application of modern techniques of molecular biology: (i) gel electrophoresis; (ii) contemporary methods used for determination of DNA sequences, and the key similarities and differences among them; (iii) amplification of DNA via the polymerase chain reaction (PCR); (iv) evaluation of gene expression via quantitative PCR; (v) determination of epigenetic methylation of DNA sequences.
- Classify physical and chemical mutagens, identify chemical mutagens by the Ames test, and predict the effect of different types of mutation on phenotype.
- Describe recombinant DNA technology and different approaches to the genetic modification of multicellular organisms.
- Explain approaches to the study of genetic variation at the molecular level and some of the key applications of these approaches.
- Manipulate the theories and topics covered in lecture and readings by solving problems in lecture, tutorials and labs.
- Develop a testable scientific hypothesis and design a research approach with appropriate controls.
- Apply techniques used in genetic and molecular biology laboratories.
- Generate, organize, interpret, and critique data collected from experiments in the laboratory and communicate results by an original and individually written scientific paper.
- Summarize, cite and reference scientific literature to avoid plagiarism.

Course Materials

If you'd like to learn well you'll need:

1. **Achieve Access (for grades from the modules) and a version of the text:**
   - **Option 1 (a good deal)**: Achieve access + Pierce, Benjamin A. Genetics, A Conceptual Approach (7th ed) 2020. (Ebook) ~$70.00 Willolabs through link in course Brightspace

   OR

   - **Option 2:** Pierce, Benjamin A. Genetics, A Conceptual Approach (7th ed). 2020. NY: W.H. Freeman (Looseleaf) + Solutions Manual + Achieve access for ~$117 Willolabs through link in course Brightspace or through Dal Bookstore
   - **Option 3:** Pierce, Benjamin A. Genetics, A Conceptual Approach (7th ed). 2020. NY: W.H. Freeman (Hardcover) + Solutions Manual + Achieve access for ~$256 Willolabs through link in course Brightspace or through Dal Bookstore
   - If you are in need of an alternative option, please contact me at grantham@dal.ca

2. **BIOL2030 Course website**: Connect through my.dal.ca (Brightspace). Weekly modules to work through asynchronously, but live session every Wednesday 12:30-1:30 pm Halifax time and weekly synchronous lab session at your registered time. What is going on this week? What is due? What should I be working on?
3. **Microsoft Teams**: Install the desktop app early from Office 365 for interacting with your lab team members and the genetics Faculty.

Additional help:

4. Knisely, Karin. 2017. *A Student Handbook for Writing in Biology*. 5th ed. VA: W.H. Freeman. If you don't have a copy, follow the miRNA paper guidelines provided by your lab instructor and the Writing for Biology video series. Individual pages will be posted.

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CLASS CODE OF CONDUCT

For the month of September, for safety reasons you will need to wear a non-medical mask for all in-person meetings including lectures, tutorials and labs. In this classroom, because your voice will be heard when we discuss societal issues based on genetics, consider extending this courtesy to everyone in the class. We are all learning and mistakes will be made and understand you can communicate your discomfort or opposition either in class or privately to me outside of class (grantham@dal.ca). I would appreciate suggestions on how to make BIOL 2030 more inclusive and diverse. We all have different stories and experiences, and our class is a safe space to share them.

Course Assessment

Course assessments are designed to align with learning outcomes:

Formative(F): Designed to give you immediate feedback on what you are learning- no or low marks but important for you to be aware of what you do know and do not know. This is called Metacognition.

Summative(S): Designed to assess whether you have mastered all the learning outcomes, or which outcomes you have mastered. More weight for marks, to encourage you to prepare for them by practicing problems and testing yourself before the assessment.

Both types of assessments are better for your learning if first attempted without looking at notes.

Use of any online "homework" sites like Chegg or CourseHero will lead to an academic integrity investigation.

Component	**Weight (% of final grade)***	**Date**
*Achieve tutorial assignments (**F**) (best 10/11)*	12	Weekly, start at in-person Tutorial and complete by 5 days after your tutorial by 11:59 pm
*Unit Midterms (end of each Unit) (**S**)* *In-person, closed book, no notes*	60	Midterm 1 Wed. Oct 20 6:30-8:30PM Midterm 2 Tues. Nov 23 6:30-8:30PM
*Lecture Assignments (Individual) (**S**)* Blogs	8	Fri. Oct 15 Fri. Dec 3
Laboratory Assignments:		
Individual:		
Pre-lab quizzes/assignment (4) (F)	2	Due by lab start time
*Post-lab assignment (1) **(S)***	2	Due by next lab start time

*Drafts of scientific paper (**F**)*	4	Due by 11:30pm AST, day after lab when peer reviewed
*Final version scientific paper (**S**)*	10	Due by 11:30pm AST day after your lab day during the week of Nov. 27th-30th.
Group: *In-lab team assignments (**F**)*	*2*	Due by 9:30 am AST, day after your lab session.

Course Policies

TUTORIAL FORMAT: Tutorial questions are embedded in each module**.** Videos of worked solutions of certain example questions are provided. There are specific tutorial TAs who understand the questions thoroughly and can help you if you become stuck.

- You have registered for a tutorial session (check Dal online) and you have the opportunity to complete some of the tutorial assignments there in groups with your classmates. (*If we move to online, you can join a breakout group of the Genetics Interactive Lectures Team and join the tutorial meeting.)*
- The Achieve tutorial assignments open at your tutorial time. There is no embedded feedback in the tutorial questions at the beginning, so those are the ones to solve together in tutorial.
- Scrap paper or a notebook will allow you to work out problems.
- The Achieve tutorial assignments have half of their questions as the tutorial questions, and half are new questions on the same topics. There are no deductions for retrying questions or using hints, just for giving up and viewing the solution.
- The online Achieve tutorial assignment closes **five (5) days after they open at your tutorial time by 11:59 pm.**
- There are 12 assignments total, with your lowest mark dropped. M1 is not graded to allow you to get used to Achieve.

IMP Register for the Achieve and textbook access to complete the tutorial assignments through the **Achieve Tutorial Assignment link** in our Brightspace course **only. You will receive a codename to protect your identity and grades from Achieve.** See the options for access above, under Course Materials.

MIDTERM FORMAT: You can complete three tests of equal weight. Each test will cover material from only one of the three units, so the weighting cannot be changed. These tests are designed to assess you on the learning outcomes in the modules, interactive lectures, the text readings and tutorials. You will not be tested on topics you've only learned about in the labs. The tests consist entirely of questions requiring multiple choice answers and will be time-limited and in-person.
You are expected to uphold academic integrity standards and rely on your knowledge and practice of problem solving.

The final test will be held during the exam period: http://www.registrar.dal.ca/exam/.

Alternate writing times for tests will be offered to students who have another Dalhousie exam or class at the same time or who are ill. Students who have a timing conflict with another class should contact the **Instructor** at least **three days** prior to the test date to arrange another time. Students who feel ill should see the "REGULATIONS REGARDING MISSED…" policy below.

TEST VIEWING: There will be brief viewing sessions after each test to look at your test. Watch for Announcements in Brightspace as to the date and times of the review sessions. Contact the lecturer if you have any questions about his/her test.

LECTURE FORMAT: In-person lectures will be a different way to get the same content as in the pre-recorded mini-lectures. In person, we'll focus on the harder topics and you will sometimes be assigned videos to watch so you can participate fully. It would be useful to bring your laptop to our lecture meetings because we will use active learning techniques throughout the term, and polling through Teams rather than you having to pay extra to use Top Hat.

Modules will open each Saturday morning and their lectures have the same slides and topics as we'll discuss that week.

LECTURE ASSIGNMENTS: There are two lecture assignments, one following Unit 1 and one following Unit 3, each worth 4%. They are **individual blog posts** on a topic that links lecture material to society. We hope you enjoy the opportunity to write a more informal writing assignment to demonstrate your application of genetics theory to the world we live in. Both will be on a topic you choose, with the second blog being your exploration of the answer to one of the big, important genetics questions we develop in the first lecture.

LABORATORY FORMAT: Labs will alternate between in-person labs with bench work and Teams labs with collaborative work in pods of four students.

The in-person labs are two hours long and are busy so you need to come prepared by doing the pre-lab reading and quiz if there is one. The Teams labs are held the next week, starting at the same time but only lasting one hour. Check the lab schedule for the complete term schedule. DAL ONLINE shows which lab section you have registered. Lab content is in a separate Module in Brightspace.

- Online pre-lab quizzes must be completed before lab begins.
- In-lab assignments are due by 9:30 am AST of the day **after** your lab session.
- Although data is collected together, and group in-lab assignments will be collaborations of your pod, **all written work on your epistasis report, drafts and final scientific paper is individual.**
- Drafts of your scientific paper sections are due at the **start** of the lab session when they will be peer-reviewed. You will then have a week to make edits based on the suggestions of your peers and submit for TA feedback to the assignment dropbox **at the beginning of the next in-person lab session** (check the lab schedule for due dates).
- Drafts and your final version of your miRNA paper will be screened **by Urkund** for plagiarism.
- Late lab assignments will receive a 5% deduction for each day late, to a maximum of **5** days late.
- **Unfortunately we can't allow you to switch labs because of space limitations. If you are scik and need to attend a different lab please contact Debra.**

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Course Policies on Missed or Late Academic Requirements

Requests for an alternative quiz time due to extenuating circumstances: If you have another Dalhousie class or exam scheduled at the same time as our Unit tests or have another type of unavoidable conflict with the test, please should contact the **Instructor** at least three days prior to the quiz date to arrange another time.

Missed quizzes, tests, tutorial assignments, labs or lab reports due to illness or other exceptional circumstances: We understand that you may feel ill and should not come to Dalhousie campus. We support this! If you are slightly ill or waiting for Covid test results and can still do some coursework, you should do so and join the class work via Teams if possible. In any case, contact the instructor to arrange accommodations:

- If you must miss a due date because of illness or other reasons:

1. **Notify the Instructor (grantham@dal.ca)** by e-mail **prior** to the academic requirement deadline or scheduled time to arrange a makeup or extension. Accommodations will depend on your situation and will be decided together with the Instructor, Debra.
2. **Submit a Student Declaration of Absence Form through Brightspace** within three (3) days following the last day of absence**.** Can be used **once** per term for absences of **3 days or less** only. For more info https://www.dal.ca/dept/university_secretariat/policies/academic/missed-or-late-academic-requirements-due-to-student-absence.html
3. For absences of **longer than 4 days**, current regulations established by the University state students cannot submit a Student Declaration of Absence Form. Please contact the Instructor.

There will be times during your term when you will have deadlines in several different courses at the same time. **PLAN AHEAD. WORK CONSISTENTLY. TEST YOUR RECALL.** Your time at University should, among other things, teach you to develop effective time management skills and study habits. On the other hand, unforeseen events such as personal/family crises or illness can occur during the term. These occurrences are unavoidable, and the teaching staff of 2030 will be most understanding and willing to make alternate arrangements. Please speak to one of the teaching staff.

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Course Content

BIOL 2030.03 TENTATIVE Lecture Outline Unit 1 (FALL 2021)
(Changes to these readings may occur and will be announced in modules)

Module	Dates		TOPIC	Pierce 7th edition (pages)	Tests and Assignments
1	7-Sep	11-Sep	M1: Genes, chromosomes, and the copying genetic information	Ch 1.1 & 1.3 (p5, 12-13) Ch 2 Intro & 2.1 (p17-21) Ch 2.2 (p20-25) Ch 2.3 up to Fig. 2.18 (p27-35)	
2	12-Sep	18-Sep	M2: Heredity - Basics and Extensions & Modifications	Ch 3.1 & 3.2 (p48-67) Ch 3.3 (p56-67) Ch 5 Intro to 5.2, not dog coat colour (p110-127)	**Achieve M1 Tutorial assignment for practice** **Labs begin**
3	19-Sep	25-Sep	M3: Binomial Expansion, Sex Determination, Sex-Linkage	Ch 3.2 (p58-60) Ch 4 Intro to 4.3 (p81-99)	**Achieve M2 Tutorial assignment**
4	26-Sep	2-Oct	M4: Linkage Mapping in Eukaryotes, Mendelian Basis of Quantitative Genetics	Ch 7.1 & 7.2 (p180-190 & p193-195) Ch 7.3 Effects of Multiple Crossovers (p203-204)	**Achieve M3 Tutorial assignment**
5	3-Oct	9-Oct	M5: Quantitative Genetics and Population Genetics M5: Capstone Lectures … watched in preparation for upcoming Blog Post (Lecture Assignment 1 due Oct 15th)	Ch 24.1 (p732-737) Ch 24.2 & 24.3 (743-752) [self review p737-743] Ch 25.1 to 25.3 (p766-774)	**Achieve M4 Tutorial assignment**
Unit I - Midterm 1: Oct 20 (M1, M2, M3, M4 and M5), McCain Aud 2 (Ondaatje), 6:30-8:30 PM					

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BIOL 2030.03 TENTATIVE Lecture Outline Unit 2 (FALL 2021)
(Changes to these readings may occur and will be announced in modules)

Module	Dates		TOPIC	Pierce 7th edition (pages)	Tests and Assignments
6	10-Oct	16-Oct	M6: DNA, RNA, Replication, & Transcription	Ch 10 Intro to 10.3 (p293-308) Ch 12 Intro to 12.4 (p345-366) Review Ch 2.1 to 2.3 (p23-35) Ch 13.1 to 13.4 (p379-396) Ch 17.3 (p507-508)	**Lecture Assignment 1: Blog Post – Oct 15** **Achieve M5 Tutorial assignment**
7	17-Oct	23-Oct	M7: RNA Interference and RNA Processing	Ch 14.5 (p424-427) Ch 17.5 (p515-517) Ch 19.2 & 19.6 (p574-578, 601-602) Ch 14.1 to 14.4 (p405-424) Ch 17.4 (512-514)	**Midterm 1: Oct 20 (M1, M2, M3, M4 and M5) McCain Aud 2 (Ondaatje) 6:30-8:30 PM** **Achieve M6 Tutorial assignment**
8	24-Oct	30-Oct	M8: The Genetic Code and Translation	Ch 15 Intro to 15.2 (p435-446) Ch 18.1 (p528-530) Ch 15.3 & 15.4 (p446-458)	**Achieve M7 Tutorial assignment**
9	31-Oct	6-Nov	M9: Regulation of gene expression	Ch 16.1 &16.2 (p470-484) Ch 13.2 & 13.3 (p383-392) Ch 11.1 (p320-325) Ch 17.1 to 17.3 (p502-05, 510, 517-18) Ch 21.1 & 21.2 (651-653; 656-658) [Self-review: Ch 13.4 (p392-396) and Ch 14.2 (p416-418)]	**Achieve M8 Tutorial assignment**
Unit II - Midterm 2: Nov. 23 (M6, M7, M8, M9), McCain Aud 2 (Ondaatje), 6:30-8:30 PM					
Study Break	**7-Nov**	**13-Nov**			

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BIOL 2030.03 TENTATIVE Lecture Outline Unit 3 (FALL 2021)

(Changes to these readings may occur and will be announced in modules)

Module	Dates		TOPIC	Pierce 7th edition (pages)	Tests and Assignments
10	14-Nov	20-Nov	M10: Variations in chromosomes and consequences	Ch 8.1 to 8.4 (p224-228) Ch 18.1 to 18.3 (p525-545)	**Achieve M9 Tutorial assignment**
11	21-Nov	27-Nov	M11: Tools of the Geneticist	Ch 19.1, 19.3 (p569-571, 579-586) Ch 19.5 (p590-594) Ch 11.1 (p318-319) Ch 20.1 (p618-623, 625-628)	**Midterm 2: Nov. 23 (M6, M7, M8, M9) McCain Aud 2 (Ondaatje) 6:30-8:30 PM** **Achieve M10 Tutorial assignment**
12	28-Nov	4-Dec	M12: REs, Recombinant DNA tech, cloning, GMOs, CRISPR	Ch 19.1 (p569-574) Ch 11.3 (p327-328) Ch 19.3 (p582-587) Ch 14.5 (p426-427) Ch 19.2 & 19.7 (p574-578; 604-605)	**Lecture Assignment 2: Blog Post – Dec 3** **Achieve M11 Tutorial assignment**
13	5-Dec	7-Dec	M13: Wrap up		**Achieve M12 Tutorial assignment – Dec 7**
Unit III - Midterm 3: (M10, M11, M12, M13) - Scheduled by registrar during Exam Period (Dec 9th-19th)					

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University Policies and Statements

This course is governed by the academic rules and regulations set forth in the University Calendar and by Senate

Academic Integrity

At Dalhousie University, we are guided in all of our work by the values of academic integrity: honesty, trust, fairness, responsibility and respect (The Center for Academic Integrity, Duke University, 1999). As a student, you are required to demonstrate these values in all of the work you do. The University provides policies and procedures that every member of the university community is required to follow to ensure academic integrity.

Information: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Advising and Access Services Centre is Dalhousie's centre of expertise for student accessibility and accommodation. The advising team works with students who request accommodation as a result of a disability, religious obligation, or any barrier related to any other characteristic protected under Human Rights legislation (Canada and Nova Scotia).

Information: https://www.dal.ca/campus_life/academic-support/accessibility.html

Student Code of Conduct

Everyone at Dalhousie is expected to treat others with dignity and respect. The Code of Student Conduct allows Dalhousie to take disciplinary action if students don't follow this community expectation. When appropriate, violations of the code can be resolved in a reasonable and informal manner—perhaps through a restorative justice process. If an informal resolution can't be reached, or would be inappropriate, procedures exist for formal dispute resolution.

Code: https://www.dal.ca/dept/university_secretariat/policies/student-life/code-of-student-conduct.html

Diversity and Inclusion – Culture of Respect

Every person at Dalhousie has a right to be respected and safe. We believe inclusiveness is fundamental to education. We stand for equality. Dalhousie is strengthened in our diversity. We are a respectful and inclusive community. We are committed to being a place where everyone feels welcome and supported, which is why our Strategic Direction prioritizes fostering a culture of diversity and inclusiveness

Statement: http://www.dal.ca/cultureofrespect.html

Recognition of Mi'kmaq Territory

Dalhousie University would like to acknowledge that the University is on Traditional Mi'kmaq Territory. The Elders in Residence program provides students with access to First Nations elders for guidance, counsel and support. Visit or e-mail the Indigenous Student Centre (1321 Edward St) (elders@dal.ca).

Information: https://www.dal.ca/campus_life/communities/indigenous.html

Important Dates in the Academic Year (including add/drop dates)

https://www.dal.ca/academics/important_dates.html

University Grading Practices

https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html

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Student Resources and Support

Advising

General Advising https://www.dal.ca/campus_life/academic-support/advising.html

Science Program Advisors: https://www.dal.ca/faculty/science/current-students/academic-advising.html

Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html

Black Students Advising Centre: https://www.dal.ca/campus_life/communities/black-student-advising.html

International Centre: https://www.dal.ca/campus_life/international-centre/current-students.html

Academic supports

Library: https://libraries.dal.ca/

Writing Centre: https://www.dal.ca/campus_life/academic-support/writing-and-study-skills.html

Studying for Success: https://www.dal.ca/campus_life/academic-support/study-skills-and-tutoring.html

Copyright Office: https://libraries.dal.ca/services/copyright-office.html

Fair Dealing Guidelines https://libraries.dal.ca/services/copyright-office/fair-dealing.html

Other supports and services

Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness/services-support/student-health-and-wellness.html

Student Advocacy: https://dsu.ca/dsas

Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html

Safety

Biosafety: https://www.dal.ca/dept/safety/programs-services/biosafety.html

Chemical Safety: https://www.dal.ca/dept/safety/programs-services/chemical-safety.html

Radiation Safety: https://www.dal.ca/dept/safety/programs-services/radiation-safety.html

Scent-Free Program: https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html

Dalhousie COVID-19 information and updates: https://www.dal.ca/covid-19-information-and-updates.html

DALHOUSIE UNIVERSITY

Appendix 1: Conversion of numerical grades to Final Letter Grades follows the Dalhousie Common Grade Scale

A+ (90-100) A (85-89) A- (80-84)	**Excellent**	Considerable evidence of original thinking; demonstrated outstanding capacity to analyze and synthesize; outstanding grasp of subject matter; evidence of extensive knowledge base.
B+ (77-79) B (73-76) B- (70-72)	**Good**	Evidence of grasp of subject matter, some evidence of critical capacity and analytical ability; reasonable understanding of relevant issues; evidence of familiarity with the literature.
C+ (65-69) C (60-64) C- (55-59)	**Satisfactory**	Evidence of some understanding of the subject matter; ability to develop solutions to simple problems; benefitting from his/her university experience.
D (50-54)	**Marginal Pass**	Evidence of minimally acceptable familiarity with subject matter, critical and analytical skills.
F (<50)	**Inadequate**	Insufficient evidence of understanding of the subject matter; weakness in critical and analytical skills; limited or irrelevant use of the literature.