

METHODS IN DEVELOPMENTAL PSYCHOLOGY SYLLABUS

Department of Psychology and Neuroscience Faculty of Science

PSYO 3091.03 Fall 2024

Dalhousie University acknowledges that we are in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaq People and pays respect to the Indigenous knowledges held by the Mi'kmaq People, and to the wisdom of their Elders past and present. The Mi'kmaq People signed Peace and Friendship Treaties with the Crown, and section 35 of the Constitution Act, 1982 recognizes and affirms Aboriginal and Treaty rights. We are all Treaty people.

Dalhousie University also acknowledges the histories, contributions, and legacies of African Nova Scotians, who have been here for over 400 years.

Course Instructor	Email	Office Hours
		Thursdays 1:00 to 2:00 pm
Dr. Sophie Jacques	sophie.jacques@dal.ca	LSC-Psychology 2531
		or by appointment
Teaching Assistant		
Gabrielle Zeller		

Course Description

This course provides a survey of research methods in *Developmental Psychology*. It assumes knowledge of basic methodology and design and concentrates on methods of relevance to the study of human development. In addition to lectures, students conduct several research exercises to gain experience in conducting research with children.

Course Prerequisites: PSYO 2000.03 or NESC 2007.03, PSYO 2501.03, and PSYO 2090.03

Course Structure

The course is a lab course with both lectures and labs that will be delivered in person.

Lectures & Labs: Tuesdays & Thursdays 2:35 pm to 3:55 pm in Studley HENRY HICKS ACADEMIC ADMIN 217

Note in class attendance for Lab 4, both tests, and both talk sessions is mandatory and attendance will be taken.



Course Learning Objectives and Outcomes

The purpose of the course is to familiarize students with issues related to conducting developmental research, including design, measurement, and ethical considerations. The course also is designed to provide an overview of existing research techniques that developmental researchers have specifically devised to study various aspects of development in infants, preschoolers, and young children. By the end of the course, students should be able to:

- identify scientific questions that are developmental in nature
- describe methodological strengths and weaknesses specific to developmental research
- articulate basic ethical principles and explain how challenges regarding each principle arise in developmental research
- conduct different aspects of child research (including observing, coding, scoring, and analyzing data)
- identify basic methodologies used at different ages to assess cognitive, perceptual, socio-emotional, and language development
- explain how and why studying developmental psychopathologies provides a means of understanding development more generally
- write and present about the pros and cons of developmental research on controversial issues
- criticize media reports of developmental research

Course Assessments

Assessment Components Weight (% of Final Grade) Due Dat	Due Dates
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Tests

Two In-Class Tests (24% each) 48% Oct 15 and Nov 28 (80 minutes each)

Assignments (to be submitted in "Assignments" or available in "Quizzes" on **Brightspace**)

Syllabus Quiz	1%	Sep 12 by 11:59 pm Halifax Time
Seven Labs (3% each)	21 %	Sep 19; Sep 26; Oct 08 (2 labs); Oct 31; Nov 21; Dec 05
Research Paper	20%	Oct 03 by 11:59 pm Halifax Time
4-minute "TED" Talk	10 %	Nov 05 or Nov 07 in class

Experimental Participation 2 bonus marks

Total 102 marks (maximum 100%)

Conversion of numerical grades to Final Letter Grades follows the <u>Dalhousie Grade Scale</u>

A+ (90-100)	B+ (77-79)	C+ (65-69)	D (50-54)
A (85-89)	B (73-76)	C (60-64)	F (<50)
A- (80-84)	B- (70-72)	C- (55-59)	



Course Materials

Online platforms to be used include: Brightspace

- Students will need access to a computer with internet access to Brightspace and other websites.

PDFs of Lecture Slides as well as video links of examples and required readings (library links or articles themselves) will be made available on Brightspace

- Students will need to log into Dalhousie Libraries to access library links for the required readings when off campus.
- In class, we will watch video examples of research methods typically available from YouTube or other video sharing sites. Links to these will also be available on **Brightspace**.

Course Policies Related to Academic Integrity

Students should complete labs, talks and research papers on their own. Students cannot work together on any course component, nor can they use generative AI and large language models (e.g., ChatGPT) to prepare any component of this course.

Labs and research papers will be checked for integrity using plagiarism-detecting software licensed to Dalhousie.

See https://www.dal.ca/dept/university secretariat/academic-integrity.html for more information on what constitutes academic integrity. Maximum penalties will be imposed for any instance of plagiarism or cheating.

Course Policies

Course Announcements

All students are responsible for **all** announcements made in class *even in their absence*. It is students' responsibility to get information *from classmates* (*not* from me) on any potential announcements made in class in their absence. *Students are also responsible for knowing the information presented in this course syllabus*.

To complete the course satisfactorily, students must fulfill all the requirements as set down in the course outline.

Professor and Teaching Assistant Availability

Due to the amount of time required to answer questions via email, I will respond to email inquiries as soon as possible during workdays/hours (Monday-Friday 9 am-5 pm). I do not respond to emails regarding information already available in the course syllabus, so please look here first. All course-related emails should be directed to me, not the TA. Please do not drop by my office outside of my office hours without an appointment. Feel free to drop by any time during my office hours, though.

Cancelled Tests/Labs

Any test that is cancelled because of a Dalhousie closure will be held on the **following Thursday** 2:35 to 3:55 pm Halifax Time. Students who are not available to do Test 2 on Dec 05 will be offered an alternative make-up test. Any lab that is cancelled because Dalhousie is closed will be held the following class when possible. If not, the lab will be recorded and provided to students on Brightspace.



Test Information

The material covered in each test will not be cumulative, but for the second test, some major concepts from the first half of the course (e.g., developmental designs) may still be relevant. Tests will include multiple-choice, shortanswer, and essay-type questions.

Labs, Research Paper and Talk Information

Attendance at Lab 4, both tests, and both talk sessions is mandatory and attendance will be taken.

All labs and research papers are due **before midnight (Halifax Time)** on the day they are due and must be submitted on **Brightspace** (except for Labs 3 and 4).

Late lab assignments (except for Labs 3 and 4) without an approved SDA form will be deducted **1 mark** out of 3 per day late (including weekend days). Lab 3 cannot be handed in late (it must be submitted on Brightspace by 2:30 pm on, Tuesday, Oct 8th). Lab 4 requires in-class attendance and will be marked based solely on participation during the lab itself (Tuesday, Oct 8th). Not completing Labs 3 and 4 on time without an approved SDA form will result in all marks lost.

Late research papers without an approved SDA will be deducted 1 mark of 20 per day late (including weekends).

Students will **lose 3 marks** if they miss their **talk session** without an approved SDA form. They will have to do it during the following class or lose all marks. Arriving late or leaving early during that talk session will result in the loss of **3 marks**.

Students will **lose 3 marks** from their own talk mark if they miss the **other talk session** without an approved SDA form. Arriving late or leaving early during that talk session will also result in the loss of these marks.

Requests for Regrades

Any item that students would like to be regraded must be submitted within one week of receiving the grade in question and the feedback. In addition, students must provide a rationale for the request (e.g., calculation was wrong, part of response ungraded or missed). Students must recognize that marks can go down after a regrade, as the whole item will be regraded, not just the part identified.

Course Time Commitment Expectations

In a typical week, students will be expected to allocate approximately 1.5 hours for reading course readings, 3 hours for attending lecture and labs and 2 hours for completing lab assignments. There will also be a research paper and a 4-minute TED-Like talk to complete along with studying for tests. There will not be labs due weeks that papers are due or talks and tests are held. Thus, students should expect to spend about 8-9 hours every week on this course. I highly recommend that students do some work on their paper every week until it is due to distribute their workload.

Experimental Participation for Credit Points

Students can earn up to 2 bonus marks to their final course grade by taking part in experiments. 1 credit point will be awarded for each experimentation hour up to a maximum of 2 points. Students can sign up for experiments at https://www.dal.ca/faculty/science/psychology_neuroscience/research/credit-point-information/setting-up-asona-account.html. Students have until the last day of classes to assign credit points to Psyo3091.



Course Policies on Missed or Late Academic Requirements

Student Accessibility Plan

Any student who has an existing Student Accessibility Plan must ensure that their advisor in the Student Accessibility Centre forwards the plan to me. Make-up and/or prorating options for missed or late work will be developed on a case-by-case basis depending on the course component(s) missed and the student's specific accessibility plan.

Long-term versus short-term illnesses or other valid personal issue

Long-term personal, mental or physical health issues may require students to miss more than 3 days of school. If this occurs, then students will need to *contact me asap so that we can develop a plan*. Students will be directed to the Student Accessibility Center, and/or Patricia Laws, Assistant Dean of Student Affairs for mental or physical health issues that require extended accommodations. Make-up and/or prorating options for missed or late work will be developed on a case-by-case basis depending on the course component(s) missed and the nature and extend of students' difficulties. Documentation from a professional may be required in the case of long-term issues.

Short-term medical or personal issues are ones that require students to miss 3 or fewer school days because of **debilitating distress or illness**.

- No documentation from professionals is required.
- Students must contact me **before** or on the same day as the component that is missed.
- Students are required to submit the SDA via my email within one (1) week from the date of absence.
- Only one STUDENT DECLARATION OF ABSENCE (SDA) form for a short-term issue will be allowed for this
 course over the entire term.
- Any subsequent missed or late component will be marked as zero or penalized accordingly (i.e., students will not be allowed to "pick and choose" which component is to be marked as zero).

Missed components for an approved SDA for a short-term issue will be handled as follows:

Missed Test

• If a student misses a test and submits an approved SDA form, they will need to write a make-up test, which may have a different format from the regular test and will be held shortly after the original test date.

Missed Research Paper or Most Labs

• If a student cannot complete the research paper or a lab (except for Labs 3 and 4) and submits an approved SDA form, they will be allowed 3 extra days (including weekend days) to submit it without penalty.

Missed TED-Like Talk

• If a student missed their talk and submits an approved SDA form, they will have to present it during the next Tuesday class.

Missed Lab 3 or 4

• If a student misses Lab 4 or cannot complete Lab 3 by class time, and submits an approved SDA form, their final lab mark will be prorated without the missed lab. As an example, I would use the other 6 labs and prorate the student's grade out of 21 (i.e., 21 * Grade/18). There will be no make-up Lab 3 or 4.



NOTE: Only one SDA form for a short-term medical- or personal-related absence will be allowed for this course over the entire term and it will be allocated to missed components on a *chronological* basis. Any additional missed or late components that occur after the approved short-term absence has been allocated will be marked zero or penalized as per the course syllabus.

• Students must contact me before or on the day they will miss a component and **submit** the SDA form **via my email** within **one (1) week** from the due date of the missed component.

Course Content

Class Schedule

Each **Test** will be worth 24%. The **Paper** is worth 20% and the **Talks** are worth 10%. Each **Lab** will be worth 3% and all 7 labs will count. The **Syllabus Quiz** is worth 1%.

Each **Lab** assignment will be explained live in class on most **Tuesdays 2:35 to 3:55 pm Halifax Time** and most will be due 9 days later (on a Thursday night), before midnight (Labs 3 and 6 will be due later). Lab 3 is due before class on Oct 08 and Lab 4 will be marked during the lab itself on Oct 08, so attendance is mandatory. Lab notes will be available on **Brightspace**. Attendance is also mandatory during both talk sessions and both tests.

Week	Tuesday In Class Activities	Thursday In Class Activities	Components Due
	2:35-3:55 pm	2:35-3:55 pm	This Week
Sep 03 & 05	Syllabus, Paper & Talk Info	Lecture 1	
		Development Designs & Measures	
Sep 10 & 12	Lab 1	Lecture 2	Syllabus Quiz 1%
	Research Questions & Measurement	Measurement Issues	(Thursday before midnight)
Sep 17 & 19	<mark>Lab 2</mark>	Lecture 3	Lab 1 3%
	Ethics	Cognitive Development	(Thursday before midnight)
Sep 24 & 26	<mark>Lab 3</mark>	Lecture 4	<mark>Lab 2</mark> 3%
	Scoresheet	Cognitive Development	(Thursday before midnight)
Oct 01 & 03	Lecture 5	Lecture 5 Continued	**Paper Due** 20%
	Cognitive Development	Catch Up	(Thursday before midnight)
Oct 08 & 10	<mark>Lab 4</mark>	Lecture 6	Lab 3 3% (Tuesday before class)
	Task Administration (In Class)	Language Development	Lab 4 3% (in Class)
Oct 15 & 17	Test 1 (Lectures 1-5)	Lecture 7	**Test 1** 24% (in Class)
	(In Class)	Language Development	
Oct 22 & 24	<mark>Lab 5</mark>	Lecture 8	
	Analyses	Socioemotional Development	
Oct 29 & 31	<mark>Lab 6</mark>	Lecture 9	Lab 5 3%
	Coding	Socioemotional Development	(Thursday before midnight)
Nov 05 & 07	Student TED Talks Session 1	Student TED Talks Session 2	**Talks** 10% (In Class)
	(In Class)	(In Class)	
Nov 12 & 14	Study Week		
Nov 19 & 21		Lecture 11	<mark>Lab 6</mark> 3%
	Socioemotional Development	Atypical Development	(Thursday before midnight)
Nov 26 & 28	Lab 7	Test 2 (Lectures 6-11)	**Test 2** 24% (in Class)
	Media	(In Class)	
Dec 03 & 05	Class ended	Term ended (Alternative date if Test 2	<mark>Lab 7</mark> 3%
	ciuss ciiucu	is cancelled the previous week)	(Thursday Dec 05 before midnight)



List of Required Readings

Some readings are available on **Brightspace**, while others can be obtained using links provided on **Brightspace** or reference information below (*ensure that you are logged into the Dalhousie Libraries when attempting to access links off campus*).

Module 1 Developmental Designs & Measurement

• Robinson, K., Schmidt, T., & Teti, D. M. (2005). Issues in the use of longitudinal and cross-sectional designs. *Handbook of research methods in developmental science* (pp. 3-20). Malden, MA: Blackwell. PDF on **Brightspace**

Module 2 Measurement Issues and Ethics

• Kazdin, A. E., & Benjet, C. (2003). Spanking children: Evidence and issues. *Current Directions in Psychological Science*, 12(3), 99-103.

Module 3 Perceptual & Cognitive Development I

- Fantz, R.L. (1964). Visual experience in infants: Decreased attention to familiar patterns relative to novel ones. *Science*, *146*, 668-670.
- Meltzoff, A.N., & Moore, M.K. (1977). Imitation of facial and manual gestures by human neonates. Science, 198, 75-79.

Module 4 Cognitive Development II

- DeLoache, J.S., Miller, K.F., & Rosengren, K.S. (1997). The credible shrinking room: Very young children's performance with symbolic and nonsymbolic relations. *Psychological Science*, *8*, 308-313.
- Wellman, H. M. (2017). The development of theory of mind: Historical reflections. *Child Development Perspectives*, 11,207–214. doi:10.1111/cdep.12236

Module 5 Cognitive Development III

- Piaget, J. (1953). How children form mathematical concepts. Scientific American, 189, 202-206.
- Zelazo, P. D. (2006). The Dimensional Change Card Sort (DCCS): A method of assessing executive function in children. *Nature Protocols*, 1(1), 297-301.

Module 6 Language Development I

- DeCasper, A.J., & Fifer, W.P. (1980). Of human bonding: Newborns prefer their mothers' voices. Science, 208, 1174-1176.
- Saffran, J.R., Aslin, R.N., & Newport, E.L. (1996). Statistical learning by 8- month-old infants. Science, 274, 1926-1928.

Module 7 Language Development II

- Baldwin, D. A. (2000). Interpersonal understanding fuels knowledge acquisition. *Current Directions in Psychological Science*, *9*, 40-45.
- Bradley, L., & Bryant, P.E. (1983). Categorizing sounds and learning to read: A causal connection. Nature, 301, 419-421.

Module 8 Socioemotional Development I

- Ainsworth, M.S. (1979). Infant-mother attachment. *American Psychologist*, 34, 932-937. https://doi.org/10.1037/0003-066X.34.10.932 Brightspace
- Shiner, R. L., Buss, K. A., McClowry, S. G., Putnam, S. P., Saudino, K. J., & Zentner, M. (2012). What is temperament now? Assessing progress in temperament research on the Twenty-Fifth Anniversary of Goldsmith et al. *Child Development Perspectives*, *6*(4), 436-444. https://doi.org/10.1111/j.1750-8606.2012.00254.x

Module 9 Socioemotional Development II

- Seavey, C. A., Katz, P. A., & Zalk, S. R. (1975). Baby X: The effect of gender labels on adult responses to infants. Sex Roles, 1, 103-109. PDF on Brightspace
- Berenbaum, S. A. (2018). Beyond pink and blue: The complexity of early androgen effects on gender development. *Child Development Perspectives*, 12(1), 58-64. https://doi.org/10.1111/cdep.12261

Module 10 Socioemotional Development III

- Mischel, W., Shoda, Y., & Rodriguez, M.I. (1989). Delay of gratification in children. Science, 244, 933-938.
- Smetana, J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Current Opinion in Psychology*, *15*, 19-25. https://doi.org/10.1016/j.copsyc.2017.02.012

Module 11 Atypical Development

Vivanti, G., Hamner, T., & Lee, N. R. (2018). Neurodevelopmental disorders affecting sociability: recent research
advances and future directions in autism spectrum disorder and Williams syndrome. *Current Neurology and*Neuroscience Reports, 18(12), 1-9. https://link.springer.com/content/pdf/10.1007/s11910-018-0902-y.pdf



University Policies and Statements

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 at 1321 Edward St or elders@dal.ca. Additional information regarding the Indigenous Student Centre can be found at: https://www.dal.ca/campus life/communities/indigenous.html

Internationalization

At Dalhousie, 'thinking and acting globally' enhances the quality and impact of education, supporting learning that is "interdisciplinary, cross-cultural, global in reach, and orientated toward solving problems that extend across national borders." Additional internationalization information can be found at: https://www.dal.ca/about-dal/internationalization.html

Academic Integrity

At Dalhousie University, we are guided in all our work by the values of academic integrity: honesty, trust, fairness, responsibility, and respect. As a student, you are required to demonstrate these values in all 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. Additional academic integrity information can be found at: https://www.dal.ca/dept/university_secretariat/academic-integrity.html

Accessibility

The Student Accessibility Centre is Dalhousie's centre of expertise for matters related to student accessibility and accommodation. If there are aspects of the design, instruction, and/or experiences within this course (online or in-person) that result in barriers to your inclusion, please contact the Student Accessibility Centre (https://www.dal.ca/campus life/academic-support/accessibility.html) for all courses offered by Dalhousie with the exception of Truro. For courses offered by the Faculty of Agriculture, please contact the Student Success Centre in Truro (https://www.dal.ca/about-dal/agricultural-campus/student-success-centre.html)

Conduct in the Classroom - Culture of Respect

Substantial and constructive dialogue on challenging issues is an important part of academic inquiry and exchange. It requires willingness to listen and tolerance of opposing points of view. Consideration of individual differences and alternative viewpoints is required of all class members, towards each other, towards instructors, and towards guest speakers. While expressions of differing perspectives are welcome and encouraged, the words and language used should remain within acceptable bounds of civility and respect.

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 (Strategic Priority 5.2). Additional diversity and inclusion information can be found at: http://www.dal.ca/cultureofrespect.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. The full Code of Student Conduct can be found at: https://www.dal.ca/dept/university secretariat/policies/student-life/code-of-student-conduct.html

Fair Dealing Policy

The Dalhousie University Fair Dealing Policy provides guidance for the limited use of copyright protected material without the risk of infringement and without having to seek the permission of copyright owners. It is intended to provide a balance between the rights of creators and the rights of users at Dalhousie. Additional information regarding the Fair Dealing Policy can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/fair-dealing-policy-.html



Originality Checking Software

The course instructor may use Dalhousie's approved originality checking software and Google to check the originality of any work submitted for credit, in accordance with the Student Submission of Assignments and Use of Originality Checking Software Policy. Students are free, without penalty of grade, to choose an alternative method of attesting to the authenticity of their work and must inform the instructor no later than the last day to add/drop classes of their intent to choose an alternate method. Additional information regarding Originality Checking Software can be found at: https://www.dal.ca/dept/university_secretariat/policies/academic/student-submission-of-assignments-and-use-of-originality-checking-software-policy-.html

Student Use of Course Materials

Course materials are designed for use as part of this course at Dalhousie University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as books, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this course material for distribution (e.g. uploading to a commercial third-party website) may lead to a violation of Copyright law.



Student Resources and Support

University Policies and Programs

- Important Dates in the Academic Year (including add/drop dates):
 http://www.dal.ca/academics/important dates.html
- Classroom Recording Protocol: https://www.dal.ca/dept/university secretariat/policies/academic/classroom-recording-protocol.html
- Dalhousie Grading Practices Policies:
 https://www.dal.ca/dept/university_secretariat/policies/academic/grading-practices-policy.html
- Grade Appeal Process: https://www.dal.ca/campus_life/academic-support/grades-and-student-records/appealing-a-grade.html
- Sexualized Violence Policy: https://www.dal.ca/dept/university_secretariat/policies/health-and-safety/sexualized-violence-policy.html
- Scent-Free Program: https://www.dal.ca/dept/safety/programs-services/occupational-safety/scent-free.html

Learning and Support Resources

- General Academic Support Advising (Halifax): https://www.dal.ca/campus life/academic-support/advising.html
- General Academic Support Advising (Truro): https://www.dal.ca/about-dal/agricultural-campus/ssc/academic-support/advising.html
- Student Health & Wellness Centre: https://www.dal.ca/campus_life/health-and-wellness.html
- On Track (helps you transition into university, and supports you through your first year at Dalhousie and beyond): https://www.dal.ca/campus life/academic-support/On-track.html
- Indigenous Student Centre: https://www.dal.ca/campus_life/communities/indigenous.html
- Indigenous Connection: https://www.dal.ca/about-dal/indigenous-connection.html
- Elders-in-Residence (The Elders in Residence program provides students with access to First Nations elders for guidance, counsel, and support. Visit the office in the Indigenous Student Centre or contact the program at elders@dal.ca or 902-494-6803: https://cdn.dal.ca/content/dam/dalhousie/pdf/academics/UG/indigenous-studies/Elder-Protocol-July2018.pdf
- Black Student Advising Centre: https://www.dal.ca/campus life/communities/black-student-advising.html
- International Centre: https://www.dal.ca/campus life/international-centre.html
- LGBTQ2SIA+ Collaborative: https://www.dal.ca/dept/vpei/edia/education/community-specific-spaces/LGBTQ2SIA-collaborative.html
- Dalhousie Libraries: http://libraries.dal.ca/
- Copyright Office: https://libraries.dal.ca/services/copyright-office.html
- Dalhousie Student Advocacy Services: https://www.dsu.ca/dsas?rq=student%20advocacy
- Dalhousie Ombudsperson: https://www.dal.ca/campus_life/safety-respect/student-rights-and-responsibilities/where-to-get-help/ombudsperson.html
- Human Rights and Equity Services: https://www.dal.ca/dept/hres.html
- Writing Centre: https://www.dal.ca/campus life/academic-support/writing-and-study-skills.html
- Study Skills/Tutoring: http://www.dal.ca/campus life/academic-support/study-skills-and-tutoring.html
- Faculty of Science Advising Support: https://www.dal.ca/faculty/science/current-students/undergrad-students/degree-planning.html

Safety

- Biosafety: http://www.dal.ca/dept/safety/programs-services/biosafety.html
- Chemical Safety: https://www.dal.ca/dept/safety/programs-services/chemical-safety.html
- Radiation Safety: http://www.dal.ca/dept/safety/programs-services/radiation-safety.html
- Laser Safety: https://www.dal.ca/dept/safety/programs-services/radiation-safety/laser-safety.html