

MDSC 508
Honours Thesis and Research Communication

Instructors:

Course Coordinators and Instructors:

Dr. Fabiola Aparicio-Ting (feaparc@ucalgary.ca)

Dr. Donna M. Slater (dmslater@ucalgary.ca)

Research Communication Small Group Preceptors:

Biomedical Sciences and Bioinformatics

1. Dr. Donna Slater (dmslater@ucalgary.ca)
2. Dr. Stephanie Borgland (slborgla@ucalgary.ca)
3. Dr. Mahalakshmi Kumaran (Mahalakshmi.kumaran@albertahealthservices.ca)
4. Dr. Karen Lithgow (karen.lithgow@ucalgary.ca)
5. Dr. Drew Neyens (DrewMackenzie.Neyens@ucalgary.ca)
6. Dr. Anthony Schryvers (schryver@ucalgary.ca)
7. Dr. Matthew Stephens (matthew.stephens@ucalgary.ca)
8. Dr. Guido van Marle (vanmarle@ucalgary.ca)
9. TBA
10. TBA

Health & Society

1. Dr. Fabiola Aparicio-Ting (feaparc@ucalgary.ca)
2. Dr. Kamala Adhikari Dahal (kamala.adhikaridahal@ucalgary.ca)
3. Dr. Allison Brown (allison.brown@ucalgary.ca)
4. Dr. Kirnvir Dhaliwal (dhaliwak@ucalgary.ca)
5. Dr. Cathy Eastwood (caeastwo@ucalgary.ca)
6. Dr. Jesse Hendrikse (jlhendri@ucalgary.ca)
7. Dr. Lindsay McLaren (lmclaren@ucalgary.ca)
8. Dr. Ranjani Somayaji (Ranjani.Somayaji@albertahealthservices.ca)
9. Dr. Gabrielle Zimmermann (glzimmer@ucalgary.ca)
10. TBA

Office Hours/Policy on Answering Student Emails

Please book appointments by email. Email communications with instructors or TAs are welcome. Please note that all course communications must occur through your @ucalgary email, and we will respond to emails sent via student's @ucalgary emails within 48 hours (excluding weekends and statutory holidays).

Teaching Assistants:

Michelle Chen (mchen@ucalgary.ca)

Kylie Hornaday (kylie.hornaday@ucalgary.ca)

Time and Location:

Fridays 2:30pm to 4:20pm. Please consult course schedule on D2L for room location of individual sessions

Prerequisite/Co-Requisite:

Enrolment in the BHSc Honours program, HSOC 408 or MDSC 408, and a minimum cumulative 3.30 GPA, or consent of the director.

Course Description:

Capstone research course in the BHSc to be conducted through any one of the basic research departments. Students would be expected to conduct research. Course also involves weekly small group sessions aimed at building research communication skills. Course culminates with submission of a written thesis that is presented and defended in front of a panel of faculty members in an oral examination.

Overarching Theme

MDSC 508 is the capstone research course in the BHSc Honours program. Students conduct research projects under the supervision of University of Calgary faculty within their major and in a topic of their choosing. This course also involves weekly small group sessions aimed at building research communication and presentation skills. These sessions are discussion based, small group classes. Direct feedback is given on presentations and progress reports. These sessions fit with the overall goal of the program to develop communication skills and to stimulate, encourage and support the importance of collaboration and interdisciplinary research.

Global Objectives

MDSC 508 is a research-intensive course. The objective is for the student to demonstrate the capacity to achieve a standard of research competence as befits the relevant discipline(s).

Course Learning Outcomes

By the end of the honours thesis research project, students will be able to:

1. Search the scholarly literature systematically with a research question in mind.
2. Assess the appropriateness and limitations of using various research designs
3. Demonstrate knowledge of the ethical principles in the design of a research proposal.
4. Summarize research effectively and critically.
5. Operate as a contributing member of a research team (either as a group or individually with their supervisor) working on a research project within their thesis area.
6. Communicate effectively with their research team and research supervisor to learn about the project.
7. Defend their thesis in an oral examination.

By the end of the Research Communication group sessions, students will be able to:

8. Appreciate the value of multiple research approaches.
9. Articulate the importance of knowledge exchange and transfer.
10. Collate, critically review, and give an oral presentation summarizing the literature, relevant background information and research in progress regarding their honours thesis research project.

Transferable Skill Development:

Many of the skills and abilities that you are developing in your coursework are transferable to the workforce, graduate and professional studies and other facets of life. Employers seek applicants with transferable skills because they can be an asset in the workplace, regardless of industry or sector. Transferable skills are core skills for your success in building your future career.

The work that you will do in MDSC 508 will help you build the following transferable skills:

- **Collaboration:** Work respectfully with others from different backgrounds, cultures, and countries.
- **Verbal Communication:** Learn and share information by presenting, listening, and interacting with others.
- **Creativity and Innovation:** Find different and better ways to do things, being curious, thinking imaginatively.
- **Critical Thinking:** Actively and skillfully conceptualize, apply, analyze, synthesize, and/or evaluate information (data, facts, observable phenomena, and research findings) to make a reasoned judgement or draw a reasonable conclusion.
- **Information Literacy:** Find, understand, and use information presented through words, symbols, and images
- **Numeracy:** Use mathematical information such as numbers, symbols, words, and graphics to do tasks.
- **Problem solving:** Identify an issue, find and implement a solution, and assess whether the situation has improved.
- **Project Management:** Conceptualize, initiate, plan and execute a plan to achieve a predetermined goal (project) by effectively prioritizing activities and meeting deadlines.
- **Written Communication:** Share ideas and information by using words, images, and symbols.

Learning Resources

There are no required textbooks or readings for this course.

Recommended Textbooks/Readings

Supplemental resources for academic writing and oral presentations are posted on the course D2L site.

Learning Technology Requirements

Brightspace (by D2L) is located on the University of Calgary server and will be used extensively for communication with students. **It is the student's responsibility to ensure that they receive all posted communications and documents and that they receive emails sent by instructors or fellow students through D2L.** Only your @ucalgary.ca email address may be linked to D2L. Please ensure that you are regularly checking your @ucalgary.ca account.

Evaluation

The University policy on grading and related matters is described in section F of the 2022-2023 Calendar.

In determining the overall grade in the course, the following weights will be used:

Assessment *	% Grade	Due Date	Assessed by:	Learning Objectives
Honours Research Project & Thesis				
Research Proposal	10%	October 14, 2022 Submitted through D2L by 12pm	Supervisor	1, 2, 3, 4
Progress Report	2%	January 13, 2023 Submitted through D2L by 12pm	Group Preceptors	4
Research Performance Assessment	20% total (10% Fall 10% Winter)	(Submitted by supervisor) December 16, 2022 March 31, 2023	Supervisor	5, 6
Written Thesis	30%	March 17, 2023 Submitted through D2L by 12pm	Supervisor and 2 other examiners	1, 2, 3, 4
Honours Thesis Oral Exam	20%	March 31, 2023 (Schedule -will be posted in D2L)	Supervisor and 2 other examiners	2, 4, 7
Research Communication (Friday afternoon sessions)				
Research Exchange Sessions –mandatory attendance	Part of participation grade	Oct. 28 and Nov. 4, 2022 (Group schedules posted in D2L)	Group Preceptors	10
Research in Progress Oral Presentations – mandatory attendance	10%	Feb 3, 10,17 and Mar 3, 2023 (Group schedules posted in D2L)	Group Preceptors	9, 10
Participation (attendance and thoughtful contribution to group sessions)	8%	All group sessions	Group Preceptors	8, 9, 10

* Descriptions of each assessment item are included in the MDSC 508 Student Handbook. Templates and rubrics are posted in D2L.

** *Note:* There is no Registrar-scheduled final examination

*** *Note:* Students who do not complete the Written Thesis OR Thesis Oral Exam will be considered as not passing the course; this will be reflected on the students' official transcript as a grade of 'F'.

A Note regarding Writing Assignments:

Writing skills are important to academic study in all disciplines. In keeping with the University of Calgary's emphasis on the importance of academic writing in student assignments (section E.2 of 2022-23 Calendar), writing is emphasized, and the grading thereof in determining a student's mark in this course. The Bachelor of Health Sciences values excellence in writing. Competence in writing entails skills in crafting logical, clear, coherent, non-redundant sentences, paragraphs and broader arguments, as

well as skills with the mechanics of writing (grammar, spelling, punctuation). Sources used in research papers must be properly documented. The University of Calgary offers instructional services through the Students' Success Centre's Writing Support Services (<http://www.ucalgary.ca/writingsupport/>) for students seeking feedback on assignments or seeking to improve their general writing skills. Students are **strongly encouraged** to take advantage of these programs.

Grading Scheme:

Letter Grade	Description	Percentage
A+	Outstanding performance	96-100
A	Excellent performance	90-95.99
A-	Approaching excellent performance	85-89
B+	Exceeding good performance	80-84
B	Good performance	75-79
B-	Approaching good performance	70-74
C+	Exceeding satisfactory performance	65-69
C	Satisfactory performance	60-64
C-	Approaching satisfactory performance	57-59
D+	Marginal pass	54-56
D	Minimal pass	50-53
F	Does not meet course requirements	0-49

Missed Components of Term Work:

Late Research Proposals, Progress Reports or Theses will automatically receive a 20% reduction in grade within the first 24 hours of the deadline, after which late assignments will not be accepted and will receive a mark of zero. It is the agreement of all Faculty involved in MDSC 508 that **extensions will NOT be granted** on any assignment or quizzes. The only exceptions to this are those in keeping with the University Calendar (debilitating illness, religious conviction, or severe domestic affliction) that are received in writing and with supporting documentation. Traffic jams and late or full buses are common events in Calgary and are NOT acceptable reasons for late arrivals to class, meetings and examinations. Please note that while absences are permitted for religious reasons, students are responsible for providing advance notice and adhering to other guidelines on this matter, as outlined in the University Calendar (<https://www.ucalgary.ca/pubs/calendar/current/e-4.html>).

Course Evaluations and Student Feedback

Student feedback will be sought at the end of the course through the Universal Student Rating of Instruction (USRI) and a qualitative student evaluation. Students are welcome to discuss the process and content of the course at any time with the instructor. Students may also address any concerns they may have with Dr. Ebba Kurz, Associate Dean (Undergraduate Health and Science Education) in the Cumming School of Medicine (kurz@ucalgary.ca).

Attendance

Attendance is **mandatory** for the 'Research Exchange' and 'Research in Progress' presentation sessions. Absences will only be excused in keeping with the University of Calgary Calendar (debilitating illness, religious conviction, or severe domestic affliction) or at the discretion of the course coordinators, and only when the notice is received in writing and with supporting documentation. **Please notify the course**

coordinators and TAs via email in advance if you plan to be absent from an afternoon presentation session. A 1% deduction (from the 8% available) on the grade assigned for participation will be applied for every unexcused absence.

Conduct During Lectures

The classroom should be respected as a safe place to share ideas without judgement - a community in which we can all learn from one another. Students are expected to frame their comments and questions to lecturers in respectful and appropriate language, always maintaining sensitivity towards the topic. Students, employees, and academic staff are also expected to demonstrate behaviour in class that promotes and maintains a positive and productive learning environment.

As members of the University community, students, employees and academic staff are expected to demonstrate conduct that is consistent with the University of Calgary Calendar, the Code of Conduct and Non-Academic Misconduct policy and procedures, which can be found at <https://www.ucalgary.ca/legal-services/university-policies-procedures>.

Students are expected to take notes during class and should not rely solely on material supplied by the instructors.

Use of Internet and Electronic Communication Devices in Class

The Bachelor of Health Sciences program aims to create a supportive and respectful learning environment for all students. The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities. However, research studies have found that inappropriate/off-topic use of electronic devices in the classroom negatively affects the learning of others during class time.

Students are responsible for being aware of the University's Internet and email use policy, which can be found at <https://www.ucalgary.ca/policies/files/policies/electronic-communications-policy.pdf>.

UNIVERSITY OF CALGARY POLICIES AND SUPPORTS

Copyright

All students are required to reach the University of Calgary policy on Acceptable Use of Material Protected by Copyright (<https://www.ucalgary.ca/policies/files/policies/acceptable-use-of-material-protected-by-copyright-policy.pdf>) and requirements of the Copyright Act (<https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html>) to ensure they are aware of the consequences of unauthorized sharing of course materials (including instructor notes, electronic versions of textbooks, etc.). Students who use material protected by copyright in violation of this policy may be disciplined under the Non-Academic Misconduct Policy <https://www.ucalgary.ca/pubs/calendar/current/k.html>.

Instructor Intellectual Property

Course materials created by instructors (including course outlines, presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the instructor. These materials may **NOT** be reproduced, redistributed or copied without the explicit consent of the professor. **The posting of course materials to third-party websites such as note-sharing sites without permission is prohibited.** Sharing of extracts of these course materials with other students enrolled in the course **at the same time** may be allowed under fair dealing.

Academic Accommodations

It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The Student Accommodations policy is available at <https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations>. Students needing an accommodation based on disability or medical concerns should contact Student Accessibility Services (SAS) in accordance with the Procedure for Accommodations for Students with Disabilities (<https://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities.pdf>). SAS will process the request and issue letters of accommodations to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/.

Students who require an accommodation in relation to their coursework based on a protected ground other than disability should communicate this need in writing to Dr. Ebba Kurz (kurz@ucalgary.ca), Associate Dean (Undergraduate Health and Science Education).

Academic Misconduct

The University of Calgary is committed to the highest standards of academic integrity and honesty. The University of Calgary has created rules to govern all its members regarding the creation of knowledge and the demonstration of knowledge having been learned.

Academic Misconduct refers to student behaviour that compromises proper assessment of a student's academic activities and includes (but is not limited to): cheating, fabrication, falsification, plagiarism, unauthorized assistance, failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses, and failure to comply with exam regulations applied by the Registrar. **It also includes using of third-party websites/services to access past/current course material, essay/assignment writing services, or real-time assistance in completing assessments, seeking answers to assessment questions and similar, whether paid, bartered or unpaid.**

For information of the Student Academic Misconduct Policy and Procedures, please visit; <https://ucalgary.ca/policies/files/policies/student-academic-misconduct-policy.pdf>
<https://ucalgary.ca/policies/files/policies/student-academic-misconduct-procedure.pdf>

Additional information is available on the Academic Integrity website at: <https://ucalgary.ca/student-services/student-success/learning/academic-integrity>.

Recording of Lectures

Audio or video recording of lectures (or similar) is prohibited except where explicit permission has been received from the instructor.

Freedom of Information and Protection of Privacy Act

Student information will be collected in accordance with typical (or usual) classroom practice. Students' assignments will be accessible only by the authorized course faculty. Private information related to the individual student is treated with the utmost regard by the faculty at the University of Calgary

Appeals

If there is a concern with the course, academic matter or a grade, first communicate with the instructor. If these concerns cannot be resolved, students can proceed with an academic appeal, as per Section I of the University Calendar. Students must follow the official reappraisal/appeal process and may contact the Student Ombuds' Office (<http://www.ucalgary.ca/ombuds>) for assistance with this and with any

other academic concerns, including academic and non-academic misconduct. Students should be aware that concerns about graded term work may only be initiated **within 10 business days** of first being notified of the grade. <https://www.ucalgary.ca/pubs/calendar/current/i-2.html>

Sexual and Gender-Based Violence Policy

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. The University of Calgary's sexual violence policy guides us in how we respond to incidents of sexual violence, including supports available to those who have experienced or witnessed sexual violence, or those who are alleged to have committed sexual violence. It provides clear response procedures and timelines, defines complex concepts, and addresses incidents that occur off-campus in certain circumstances. Please see the policy available at <https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>

Resources for Support of Student Learning, Success, Safety and Wellness

Student Success Centre	http://www.ucalgary.ca/ssc/
Student Wellness Centre	http://www.ucalgary.ca/wellnesscentre/
Student Advocacy and Wellness Hub (CSM)	https://cumming.ucalgary.ca/student-advocacy-wellness-hub/home
Distress Centre	http://www.distresscentre.com/
Library Resources	http://library.ucalgary.ca

Wellness and Mental Health Resources

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness and academic success, and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the excellent mental health resources available throughout the university community, such as counselling, self-help resources, peer support or skills-building available through the SU Wellness Centre (<https://www.ucalgary.ca/wellnesscentre/services/mental-health-services>) and the Campus Mental Health Strategy (<http://www.ucalgary.ca/mentalhealth/>).

Student Ombuds' Office

The Student Ombuds' Office supports and provides a safe, neutral space for students. For more information, please visit www.ucalgary.ca/ombuds/ or email ombuds@ucalgary.ca

BHSc Student Faculty Liaison Committee (SFLC)

The BHSc SFLC, with elected representatives from all majors, serves to raise issues of interest to BHSc students to the program administration, including items pertaining to curriculum, scheduling and events. A list of current representatives can be found on the BHSc website.

Student Union (SU) Information

The SU Vice-President Academic can be reached at (403) 220-3911 or suvpaca@ucalgary.ca; the SU representatives for the Cumming School of Medicine can be reached at medrep1@su.ucalgary.ca or medrep2@su.ucalgary.ca.

Student Success Centre

The Student Success Centre provides services and programs to ensure students can make the most of their time at the University of Calgary. Our advisors, learning support staff, and writing support staff assist students in enhancing their skills and achieving their academic goals. They provide tailored

learning support and advising programs, as well as one-on-one services, free of charge to all undergraduate and graduate students. For more information visit: <https://www.ucalgary.ca/student-services/student-success>

Emergency Evacuation/Assembly Points

As part of the University of Calgary Emergency Evacuation plan, students, faculty, and staff should locate the closest Assembly Point in case of Fire Alarm. Safety signage is posted throughout the campus showing the locations and the possible route to these locations. All students, faculty, and staff are expected to promptly make their way to the nearest Assembly Point if the Fire Alarm is activated. No one is to return into campus facilities until an all clear is given to the warden in charge of the Assembly Area. For more information, see <https://www.ucalgary.ca/emergencyplan/building-evacuation/assembly-points>

Safewalk

Campus security will escort individuals, day or night, anywhere on campus (including McMahon Stadium, Health Sciences Centre, Student Family Housing, the Alberta Children's Hospital and the University LRT station). Call 403-220-5333 or visit <http://www.ucalgary.ca/security/safewalk>. Use any campus phone, emergency phone or the yellow phone located at most parking lot pay booths. Please ensure your personal safety by taking advantage of this service.

Class Schedule

The following is a list of topics for each session and assignment/exam due dates. Please note that unforeseen circumstances may cause changes to the schedule with respect to the timing of topics. Students will be notified of all changes in a timely manner by way of email and D2L announcements. **All assignment due dates and the oral exam date are firm and will not be altered.**

Date	Session	Notes	Room
Aug 31		Thesis Form and Student Supervisor MOU Due	
Sept 9	Course Introduction Ethics, Sex and Gender		Theatre Four
Sept 16	Research Proposal Overview		Libin Theatre
Sept 23	Writing workshop / Managing Timelines workshop	TA run workshop TCPS2 certificate and Sex & Gender certificates due Deadline for Research Ethics Approval secured	Theatre Four
Sept 30	National Day for Truth and Reconciliation	<i>No Lecture</i>	
Oct 7	Writing workshop / Managing Timelines workshop	TA run workshop	Theatre Four
Oct 14	Student Research Time	Proposal Due	
Oct 21	Presentation Skills / Research Exchange Intro		Theatre Four
Oct 28	Student Research Exchange I	Preceptor Groups – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Nov 4	Student Research Exchange II	Preceptor Groups – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Nov 6-12	No Class – Reading Break		
Nov 18	Student Research Time/TA Drop-in	TA drop in – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Nov 25	Student Research Time/TA Drop-in	TA drop in – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Dec 2	Thesis Preparation Session	Preceptor Groups – please check D2L for group room assignment	G500 (HSOC) Theatre 4 (BINF/BMED)
Dec 22 – Jan 2	No Class – Winter Break		

Date	Session	Notes	Room
Jan 13	Research in Progress Examples	Progress Report Due	Theater Four
Jan 20	One-on-One Progress Meetings	With Preceptors – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Jan 27	Student Research Time		
Feb 3	Student Research Presentation I		01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Feb 10	Student Research Presentation II		01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Feb 17	Student Research Presentation III	Thesis Draft Due – for students who want TA feedback	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Feb 19-25	No Class – Reading Break		
Mar 3	Student Research Presentation IV	<i>Only if needed</i>	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Mar 10	Student Research Time/TA Drop-in	TA drop in – please check D2L for group room assignment	01503, 01504, 01506, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A
Mar 17	Student Free Time	Thesis Due	
Mar 24	Tips for Oral Defense		Theatre 4
Mar 31	Thesis Oral Examinations	12:30-5:20pm	01503, 01504, 01506, 01508, 01509A, 01509 1461B, 1462B, 1463A, 1463B, 1464A, 1464B G732, G737, G743
		5:00-6:30pm	HRIC Atrium/Hippocrates Mall

* Room locations are posted on the course D2L site. Please check these regularly as they are subject to change.

** Preceptor group assignments are posted on the course D2L site. **Attendance to all small group sessions is mandatory** (Research Exchange, Research Presentation, and one-on-one Progress report meetings)