

Kinesiology 4RR6 Senior Thesis Course

Course Outline

Class Time: Friday 10:30, IWC E201

Course Coordinator: Adrienne Tearle

Teaching Assistant: Sara King-Dowling

Course Administrator: Doris Burns, IWC 219c
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Preamble

This course offers an opportunity for students in Kinesiology to both participate in, and contribute to the research of the faculty. As a two-term course, students have an opportunity to conduct original research by developing research skills under the supervision of a faculty member. Upon successful completion of the course, students should demonstrate general proficiency in carrying out independent research; specifically, the students should demonstrate the ability to:

- formulate a research question suitable for study
- design and conduct a project to answer research question
- interpret and present results in a thesis

This course is strongly recommended for students contemplating graduate work in Kinesiology, or who are interested in pursuing a career in research. This course takes place over the Fall and Winter terms. Ideally, the data collection phase of the project should be completed by the end of February so that the month of March and April may be devoted to analysis, writing and editing.

Students are required to present and defend their research proposal at the end of term 1 and their findings at the year-end **Kinesiology Undergraduate Symposium (KUS)**.

Eligibility of Students

This course is only available to students who have a Cumulative Average (CA) of 8.5 or higher and are registered in Level IV Kinesiology. *Concurrent registration in KIN 3RP3 is not permitted.*

Supervisor Selection

Students wishing to take the Thesis Course must have the support of a supervisor. The supervisor must be a full-time or Associate member of the Kinesiology department. In securing a supervisor, students should meet with the professor toward the end of third year to discuss their research interests and for the potential of linking their research interests with his/her research program. Once a supervisor is confirmed, a confirmation form must be submitted to the Dept. of Kinesiology, Undergraduate office, IWC 219c by **March 31, 2017**. The form is available online at:

<http://www.science.mcmaster.ca/kinesiology/undergraduate-studies/forms.html>

Expectations and Evaluation

The entire Thesis Course is evaluated on the basis of five components (see timeline sheet for deadlines). The supervisor is responsible for all grading components except where indicated otherwise. Evaluation components include:

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| 1. Oral Presentation of Research Proposal | - | 10% (graded by coordinator and TA) |
| 2. Research Proposal Document | - | 30% |
| - to include introduction, literature review, research objectives, methods | | |
| 3. Oral Presentation of Thesis | - | 20% (10% from supervisor, 10% from coordinator) |
| 4. Overall Performance Appraisal | - | 10% |
| 5. Final Written Document | - | 30% |

Roles and Responsibilities

Supervisor

Supervisors are expected to oversee all aspects of the thesis course. These include but are not limited to:

- (1) ensuring that all ethics requirements for the project have been met
- (2) assisting with thesis writing (introduction, literature review, methods, results, discussion)
- (3) assisting with research design (rationale, methodology, timeline for completion)
- (4) when applicable, ensuring the student has met the criteria to participate in laboratory activities (received supervisor- led safety training, has appropriate certification if required - such as CPR).

The supervisor and student will agree upon a meeting schedule to facilitate a successful thesis outcome and experience. The supervisor should provide regular feedback to the student on productivity, and degree of satisfaction of the student's progress. It is expected that supervisors are on campus for the duration of the thesis. If a supervisor is away from campus for extended periods of time, or away on research leave, he/she should not take on an undergraduate thesis student.

When a faculty member meets with a prospective student, they must clarify expectations regarding the amount of time they will need to devote to their projects. This component can be highly variable from researcher to researcher.

Student

Students should expect to devote ~ 10-12 hours per week on this course, with potentially more time during the data collection stage. The time commitment a student needs to allocate to this course will vary with the project, supervisor and student. It is the responsibility of the student to keep their supervisor apprised of their progress and any difficulties throughout the year. The student should consult with the supervisor on all aspects of the course including guidelines and requirements for all written work.

Students are responsible for ensuring that all safety courses outlined on this website https://www.science.mcmaster.ca/kinesiology/images/Mandatory_Safety_Training_Notice%202012-13.pdf have been fulfilled and submitted prior to the commencement of laboratory work.

Course Coordinator

The course coordinator will:

- (1) deliver introductory class(s) at the beginning of each term (these classes will address deadlines, ethics process, course requirements, oral presentation formats)
- (2) schedule oral presentations in each term
- (3) assess student presentations at the end of each term
- (4) collate individual grades submitted by supervisors and calculate a final grade for each student

The Course Coordinator will also liaise between the student and the supervisor in the unlikely event of difficulties arising between the two parties.

Kinesiology Undergraduate Research Conference

Each year, the University of Toronto hosts a national conference for undergraduate students engaged in research. This conference provides an excellent opportunity for students to meet other fourth year students from other universities and to assess potential laboratories for graduate work. All McMaster Kinesiology thesis students are highly encouraged to take part in this national undergraduate student conference. Specific details and dates will be confirmed.

Statement on Academic Dishonesty

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results, or could result, in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: "Grade of F assigned for academic dishonesty"), and/or suspension or expulsion from the university. It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at <http://www.mcmaster.ca/academicintegrity>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one's own or for which other credit has been obtained.
2. Improper collaboration in group/lab work.
3. Copying or using unauthorized aids in tests and examinations

University Policy on Course Modification

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

KINESIOLOGY 4RR6 - TIMELINES AND RESPONSIBILITIES

Course Component	RESPONSIBILITIES			Grade Allocation	
	Date	Student	Supervisor		
Ethics, WHIMIS (and any other training)	Early September	Ask supervisor which training is required and submit all documentation to Course Coordinator	Ensure project has ethics approval and students attend the appropriate lab safety training.	N/A	
Start literature review and data collection	September	Get familiarized with your methods of data collection and start reading/compiling relevant literature pertaining to topic	Ensure student knows expectations and provide guidance for starting literature review.	N/A	
Oral Presentation of Proposal	2nd week in November	Prepare a 10min powerpoint presentation of your research proposal	Assist with preparation, attend your student's presentation, and provide relevant feedback.	10%	Graded by course coordinator and TA
Research Proposal Document	2nd week in December	Submit an Introduction, properly referenced Literature Review and Methods chapter to your supervisor	Grade the document, communicate deficiencies to the student and provide appropriate feedback for rectifying the problem(s).	30%	
Oral Thesis Presentation	2nd week in April	Prepare a 12min powerpoint presentation of your research	Assist with preparation and attend your student's presentation	20%	10% - supervisor 10% - course coordinator and TA
Performance Evaluation	3rd week in April		Provide an assessment of overall performance of your student in thesis course	10%	
Final written document	3rd week in April	Submit final copy of entire thesis to supervisor	Assign grade on written thesis, taking into account how well student has responded to prior feedback.	30%	