Western University  
Faculty of Health Sciences  
School of Kinesiology

KIN 4490E - Senior Research Project  
Fall 2024

<table>
<thead>
<tr>
<th>Instructor:</th>
<th>Dr. Jamie Melling</th>
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<tbody>
<tr>
<td>Office:</td>
<td>TH 4184</td>
</tr>
<tr>
<td>Email:</td>
<td><a href="mailto:jmelling@uwo.ca">jmelling@uwo.ca</a></td>
</tr>
<tr>
<td>Phone:</td>
<td>519-661-2111 ext. 87879</td>
</tr>
<tr>
<td>Office Hrs:</td>
<td>By Appointment</td>
</tr>
<tr>
<td>Lectures:</td>
<td>N/A</td>
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<tr>
<td>Fall 2024</td>
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<tr>
<td>Instruction Mode:</td>
<td>In person</td>
</tr>
<tr>
<td>TAs: None</td>
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NOTE: All course information including grades, assignment outlines, deadlines, etc. are available via OWL Brightspace. Download the Brightspace Pulse App to stay up-to-date on course communication and enable your notification settings within “Communications” in the top toolbar. Check the website regularly for course announcements.

Calendar Course Description (including prerequisites/anti-requisites):
Independent research project in Kinesiology involving presentation of proposal, collection and analysis of data, presentation of results, and final written report as a scholarly paper.

Antirequisite(s): Kinesiology 4443E, Kinesiology 4444E.

Prerequisite(s): Restricted to students registered in the fourth year of the Honours Specialization Kinesiology; permission of the School of Kinesiology.

You are responsible for ensuring that you have successfully completed all course prerequisites, and that you have not taken an anti-requisite course.

Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

NOTE: If you wish to enroll in this course without the stated pre-requisite(s), you must obtain written approval from the course instructor. The approval should then be forwarded to your academic counsellor.

My Course Description

Independent research project in Kinesiology involving presentation of proposal, collection and analysis of data, presentation of results, and final written report as a scholarly paper.
Course Summary

1. The goal of this course is to provide a student with the opportunity to conduct a research project under the supervision of a Kinesiology faculty member. Projects may cover a variety of designs and topics including, but not limited to, program design, experimental design, historical reviews, analysis of current sport/physical activity/health topics, health promotion, and empirical research involving human subjects.

2. While the form and format of the project is to be determined by the supervisor and the student, empirical research should include the development of the research question(s), the design of the study, completion of ethics and development of the human participants (where necessary), participant recruitment and data collection, analysis and completion of the final report.

3. KIN 4490E is not an opportunity to gain credit for volunteer work in a research/teaching lab.

4. KIN 4490E project must be supervised by a Kinesiology faculty member. The following Faculty members are eligible to accept students (Note: Faculty members may choose not to accept students in any given year):

   Socio-cultural area:
   Dr. H. Prapavessis    Dr. Adam Ali
   Dr. A. Doherty        Dr. D. Howe    Dr. A. Schneider
   Dr. L. Misener        Dr. E. Pila    Dr. J Thornton
   Dr. C Silva           Dr. M Ross

   Bioscience area:
   Dr. J. Garland        Dr. M. Mottola    Dr. G. Belfry
   Dr. M. Heath          Dr. L. Nagamatsu  Dr. T. Jenkyn
   Dr. C. Rice           Dr. A. Christie   Dr. P. Lemon
   Dr. K. Shoemaker      Dr. J. Dickey     Dr. J. Melling
   Dr. M. Mitchell       Dr. D Keir        Dr. D Pamukoff
   Dr. D Humphreys

5. Projects are restricted to Kinesiology students who are in their fourth year of study.

6. Before a student can be registered in KIN 4490E, a contract must be completed and signed by: a. the student, b. the supervising faculty member, and c. the Director of Kinesiology.

7. Students cannot receive remuneration for work completed as part of the KIN 4490E experience. 8. In the case where human participants are involved, Western Research Ethics specifies that ethics approval must be obtained prior to any data collection, as outlined in the University Policy statement at http://www.rcr.ethics.gc.ca/eng/policy-politique/framework-cadre/.
Course Procedures

1. Students must contact an appropriate Kinesiology faculty member to discuss their proposal, faculty expectations, completion date, and evaluation. Preference will be given to students with an academic average 80% and above.

2. Once a verbal arrangement has been made, a KIN 4490E contract should then be signed by the supervising faculty member and the student and submitted to Wendy Hacon by email (wmandigo@uwo.ca). Faculty members are encouraged NOT to participate in KIN 4490E projects until the contract has been signed.

3. Once the Contract has been signed by the student, the supervising faculty member, and the Course Manager, the student will be registered by the Undergraduate office into Kin 4490E.

4. Students are advised to meet regularly with their supervisor during the term.

5. A minimum of 10 hr per week will be devoted to the research project throughout the academic year

6. Final grades should be submitted by the supervising faculty member to Course manager by no later than April 24th.

Learning Outcomes

This research project is intended to provide students with a research experience in Kinesiology. Following completion of this course, students will be able to:

1. Develop independent and/or collaborative research skills in a specific area of Kinesiology where the project includes literature review; experimental design; collection, analysis and interpretation of collected data; and oral and written communication of scientific information in the form of seminar presentations and research reports, respectively.

2. Critically review and synthesize scholarly literature in the area to identify knowledge gaps for further exploration.

3. Perform the experimental procedures and operate the scientific equipment relevant to the research project.

4. Understand and explain, in more detail, the specific theoretical positioning relevant to the research area.

5. Determine an appropriate approach for examining the research question identified in conjunction with supervisor.

6. Organize and communicate research findings via oral presentations and written report. Course Format Students (and faculty) will meet occasionally during the year for
both formal (e.g., preliminary research proposal; final presentation of project) and informal presentations and information sessions. Dates and times will be arranged as needed.

**Course Evaluation**

Students will be evaluated by their supervisor with respect to their performance in the research project/laboratory. This will include not only technical skills, but also their familiarity with the literature, and their contribution to the experimental design, analysis, and interpretation of the data. This evaluation will be done at the end of each of the fall and winter terms. An abstract and a final research paper will be evaluated by the immediate faculty supervisor and one other faculty member. Feedback will be given to students as soon as possible after presentations. Student participation in the discussion sessions, and in the question period after each student presentation is expected and required. All faculty will participate in the evaluation of student presentations. The presentations will be done with all students and faculty in attendance (dates and times will be arranged after consultation with students and faculty).

Details of the (suggested) evaluation are outlined below (subject to change each year):

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<tr>
<th>Activity</th>
<th>Weight</th>
<th>Evaluator(s)</th>
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<tbody>
<tr>
<td>Research/Lab performance (1st term)</td>
<td>15%</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Research proposal presentation (1st term; TBD)</td>
<td>5%</td>
<td>Course Manager</td>
</tr>
<tr>
<td>Research/Lab performance (2nd term)</td>
<td>15%</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Final presentation</td>
<td>20%</td>
<td>All faculty</td>
</tr>
<tr>
<td>Final research paper (due April TBD)</td>
<td>45%</td>
<td>Supervisor + other faculty</td>
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<tr>
<td>(2nd term; March TBD)</td>
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Notes:
1. A similar project cannot be completed as part of an independent study
2. A copy of the final report must be submitted to the Undergraduate office (emailed to wmandigo@uwo.ca)

**General course information**

1. Final presentation length - 10-15 min with 5-10 min for questions

2. Student presentations - may take place over two or more days depending on the number of students enrolled

3. Research Presentation dates and times - TBD - dependent on availability of students and faculty supervisors - but usually completed in early- to mid-November in the 1st term, and before the final day of classes in the 2nd term (usually in mid- to late-March or early April)

4. Final research report - TBD but approximately 1 week after 2nd term presentations (on or before final day of classes in April)

**Final Research Paper**
The final research report should be submitted to the Kin 4490E Course Manager at the end of the 2nd term (date TBD but usually 1-2 weeks after the 2nd term presentation and on or before the final day of classes). The final research paper will be marked by the faculty supervisor. Students will submit one copy of the final research report to the Kinesiology undergraduate office (wmandigo@uwo.ca). Students will be informed as to whether to submit a paper copy or an e-copy of the final research report to the Course Manager.

The final research paper should be written in “manuscript style” and include the following sections as if you were submitting your research for scholarly publication to a journal commonly used by your supervisor in the related field. (i.e. Abstract, Introduction, Methods, Results, Discussion, References).

Also, either at the beginning or the end of the paper, it is important that you provide a paragraph which defines/describes/details your role in this project, and the role of the other co-authors that you may include on your paper. In other words, what exactly you did do for this project and how did the other authors support your work in this thesis.

The final research paper should be formatted as follows:
1. Length 10 - 25 pages (this limit does not include title page, figures, tables, and references)
2. Typed, double-spaced
3. Margins (top, bottom, sides) should be 2.54 cm (1”)
4. Arial or Times New Roman font, with 12 point font size
5. Tables and figures can be appended at the end of the Results section or at the end of the manuscript - do not embed them into the body of the Results section. 6. References may conform to either APA or Chicago Style as per the convention of the journal of target submission.

Course/University Policies

1. The website for Registrarial Services is http://www.registrar.uwo.ca.

In accordance with policy, the centrally administered e-mail account provided to students will be considered the individual’s official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner.

2. Academic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, in the Academic Calendar (westerncalendar.uwo.ca).

Plagiarism
Student work is expected to be original. Plagiarism is a serious academic offence and could lead to a zero on the assignment in question, a zero in this course, or your expulsion from the university. You are plagiarizing if you insert a phrase, sentence or paragraph taken directly from another author without acknowledging
that the work belongs to him/her. Similarly, you are plagiarizing if you paraphrase or summarize another author’s ideas without acknowledging that the ideas belong to someone else. All papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between Western University and Turnitin.com (www.turnitin.com).

Re-submission of Previously Graded Material
Without the explicit written permission of the instructor, you may not submit any academic work for which credit has been obtained previously, or for which credit is being sought, in another course or program of study in the University or elsewhere.

Use of Statistical Pattern Recognition on Multiple Choice Exams
Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

3. Use of Electronic Devices

During Exams: Unless you have medical accommodations that require you to do so, or explicit permission from the instructor of the course, you may not use any electronic devices during ANY tests, quizzes, midterms, examinations, or other in-class evaluations.

During Lectures and Tutorials: Although you are welcome to use a computer during lecture and tutorial periods, you are expected to use the computer for scholastic purposes only, and refrain from engaging in any activities that may distract other students from learning. From time to time, your professor may ask the class to turn off all computers, to facilitate learning or discussion of the material presented in a particular class. Unless explicitly noted otherwise, you may not make audio or video recordings of lectures – nor may you edit, re-use, distribute, or re-broadcast any of the material posted to the course website.

Personal Response Systems (“clickers”) may be used in some classes. For those classes in which we use this technology, it is your responsibility to ensure that the device is activated and functional. You must speak with the course instructor immediately, if you have any concerns about whether or not your clicker is malfunctioning. You must use only your own clicker. For all components of this course in which clicker records are used to compute a portion of the grade:
- The use of somebody else’s clicker in class constitutes a scholastic offence;
- The possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offense.
4. Academic Considerations and Absences from Lectures and Assessments

Religious Accommodation
When a course requirement conflicts with a religious holiday that requires an absence from the University or prohibits certain activities, students should request (in writing) any necessary academic considerations at least two weeks prior to the holiday to the academic counsellors in their Home Department. Additional information is provided in the Western Multicultural Calendar.

Academic Accommodation
Please contact the course instructor if you require lecture or printed material in an alternate format or if any other arrangements can make this course more accessible to you. Students with ongoing accommodation needs within this course are also encouraged to contact Accessible Education, which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The policy on Academic Accommodation for Students with Disabilities can be found here.

Academic Consideration
The University recognizes that a student’s ability to meet their academic responsibilities may, on occasion, be impaired by extenuating circumstances that are medical or compassionate in nature. These extenuating circumstances may be acute (short term), or it may be chronic (long term), or chronic with acute episodes. In all cases, students are advised to consult with the academic counsellors in their home units, at their earliest opportunity. Academic counsellors may refer students to Accessible Education for ongoing academic accommodations.

Most forms of academic consideration require documentation, and this documentation is to be submitted to academic counsellors within five (5) business days of their return to academic responsibilities. Any such documents will be retained in the student’s file, and will be held in confidence in accordance with the University’s Official Student Record Information Privacy Policy. Once the petition and supporting documents have been received and assessed, appropriate academic considerations shall be determined by academic counseling, in consultation with the student’s instructor(s). Academic considerations may include extension of deadlines, waiver of attendance requirements for classes/labs/tutorials, arranging Special Exams or Incompletes, re-weighting course requirements, or granting late withdrawals without academic penalty. Academic considerations shall be granted only where the documentation indicates that the onset, duration and severity of the illness are such that the student could not reasonably be expected to complete their academic responsibilities. (Note – it will not be sufficient to provide documentation indicating simply that the student “was seen for a medical reason” or “was ill.”).

Whenever possible, students who require academic considerations should provide notification and documentation in advance of due dates, examinations, etc. Under no circumstances are students expected to submit rationales for (or
documentation of) any absences, to course instructors. Students are, however, required to follow-up with course instructors, in a timely fashion, to identify the ways in which the academic consideration will be implemented.

**Examination Conflicts**
A student completing tests or examinations with flexible submission times (e.g., where one or more evaluation is a take-home assessment) cannot request alternative arrangements unless a conflict cannot be avoided by rescheduling writing the exam to a different time within the window specified by the instructor. This applies to direct conflicts as well as “heavy load” conflicts (e.g., three exams within a 23-hour period). The student should discuss any concerns about a potential conflict and/or request academic considerations with their academic counselling unit prior to the deadline to drop a course without academic penalty

In the case of online tests and examinations, use of a “Conflict Room,” wherein student can write two proctored exams concurrently, will be interpreted as arrangements for continuous proctoring.

5. **Contingency Plan for an In-Person Class Pivoting to 100% Online Learning**
In the event of a situation that requires this course to pivot to online content delivery, all remaining course content will be delivered entirely online, either synchronously (i.e., at the times indicated in the timetable) or asynchronously (e.g., posted on OWL for students to view at their convenience). The grading scheme will not change. Any remaining assessments will also be conducted online as determined by the course instructor

Note that disruptive behaviour of any type during online classes, including inappropriate use of the chat function, is unacceptable. Students found guilty of Zoom-bombing a class or of other serious online offenses may be subject to disciplinary measures under the Code of Student Conduct.

6. **Online Proctoring**
Tests and examinations in this course may be conducted using a remote proctoring service. By taking this course, you are consenting to the use of this software and acknowledge that you will be required to provide personal information (including some biometric data) and the session will be recorded. Completion of this course will require you to have a reliable internet connection and a device that meets the technical requirements for this service. More information about this remote proctoring service, including technical requirements, is available on Western’s Remote Proctoring website at: https://remoteproctoring.uwo.ca.

7. **Grades**
Where possible assignment objectives and rubrics will be posted on OWL. Generally, students can expect some form of feedback on their performance in a course before the drop date.

- November 13th, 2024 (for first term half-courses)
- November 30th, 2024 (for full-year courses)
- March 7th, 2025 (for second term half-courses)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Score Range</th>
<th>Comment</th>
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<tbody>
<tr>
<td>A+</td>
<td>90-100</td>
<td>One could scarcely expect better from a student at this level</td>
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A 80-89 Superior work that is clearly above average
B 70-79 Good work, meeting all requirements and eminently satisfactory
C 60-69 Competent work, meeting requirements
D 50-59 Fair work, minimally acceptable.
F below 50 Fail

Rounding of Grades (for example, bumping a 79 to 80%):
This is a practice some students request. The final grade documented is the grade that you have achieved. There is no rounding to the next grade level, or ‘giving away’ of marks. Please don’t ask me to do this for you; the response will be “please review the course outline where this is presented”.

Appealing a Grade Within this Course
You have the right to appeal any grade within this course. The grounds for a grade appeal may be one or more of: medical or compassionate circumstances, extenuating circumstances beyond the student’s control, bias, inaccuracy, or unfairness. All grounds advanced in a request for relief must be supported by a clear and detailed explanation of the reasons for the request together with all supporting documentation.

Appeals generally proceed in this order:
1. Course instructor (informal consultation)
2. Department Chair (submission of written request)
3. The Dean of the Faculty (submission of written request)

In the case of perceived procedural unfairness, steps 2 and 3 are carried out within the Department and Faculty offering the course. In the case of extenuating medical or compassionate circumstances that impact on a grade, steps 2 and 3 are carried out within a student’s Home Department and Faculty.

A request for relief against a mark or grade must be initiated with the instructor as soon as possible after the mark is issued. In the event that the instructor is not available to the student, or fails to act, or if the matter is not resolved satisfactorily with the instructor, a written request for relief must be submitted to the Chair of the Department within three weeks of the date that the mark was issued. In the case of a final grade in a course, the written request for relief must be submitted to the Chair of the department by January 31st (for first-term half courses) or June 30th (for second-term half courses or full-year courses)

8. Support Services
Health and Wellness:
Information regarding health and wellness-related services available to students may be found at http://www.health.uwo.ca/

Students who are in emotional/mental distress should refer to Mental Health@Western (http://www.health.uwo.ca/) for a complete list of options about how to obtain help.

There are various support services around campus and these include, but are not limited to:
Student Development Centre -- http://www.sdc.uwo.ca/ssd/
Ombudsperson Office -- http://www.uwo.ca/ombuds/
9. **Student Code of Conduct**
The purpose of the Code of Student Conduct is to define the general standard of conduct expected of students registered at Western University, provide examples of behaviour that constitutes a breach of this standard of conduct, provide examples of sanctions that may be imposed and set out the disciplinary procedures that the University will follow. For more information, visit [https://www.uwo.ca/univsec/pdf/board/code.pdf](https://www.uwo.ca/univsec/pdf/board/code.pdf)