

School of Kinesiology  
Faculty of Health Sciences  
Western University

SENIOR RESEARCH PROJECT  
Kin 4443 (  
Fall, 2016 - Winter, 2017

Course Manager: J.M. Kowalchuk  
Office Hours: by appointment

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Course Description:

Independent research project in Kinesiology, involving experimental design, presentation of proposal, collection and analysis of data, presentation of results and final written report as a scientific paper.

- scientific information in the form of seminar presentations and research reports, respectively.
2. perform the experimental procedures and operate the scientific equipment relevant to the research project.
  3. search for, critically review and synthesize information from published literature
  4. understand and explain, in more detail, the specific physiological, metabolic and/or biomechanical system(s) relevant to the research area
  5. organize and communicate research findings via oral presentations and written reports

**Prerequisites:**

- enrolment is limited to Honours BSc Kinesiology students (Honours BA students are eligible to enrol with permission from the potential research supervisor)
- permission of a Kinesiology-approved research supervisor & Director of the School
- preference will be given to students with an academic average 80% and above
- minimum of 10 hr per week throughout the academic year

**Course Format:**

Research based course working in the laboratory of a Kinesiology-approved supervisor. 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 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.

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### General course information:

1. Presentation length - 10-15min with 5-10 min for questions
2. Student presentations - may take place over 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 complete early- to mid-November in the 1<sup>st</sup> term, and before the final day of classes in the 2<sup>nd</sup> term (usually mid- to late-March or early April)
4. Abstract deadline - TBD approximately 1 week before 2<sup>nd</sup> term presentations in March
5. Final research report - TBD approximately 1 week after 2<sup>nd</sup> term presentations (on or before final day of classes in April)

### Abstract and Final Research Paper:

- Abstract: Copies of the project abstracts should be submitted to the Kin 4443 course coordinator approximately one week before the 2<sup>nd</sup> term presentations (usually held in late March or early April). The supervisor and other faculty supervisors will mark and provide feedback on the abstract. A revised abstract will be submitted within a week and all abstracts will be sent out to all Kin 4443 students and supervisors prior to the final presentation. The format of the abstract will follow guide for "preparing an abstract" used by the American College of Sports Medicine (to be discussed).

- Final Research Paper: The final research report should be submitted to the Kin 4443 course coordinator at the end of the 2<sup>nd</sup> term (date TBD but usually 1-2 weeks after the 2<sup>nd</sup> term presentation and on or before the final day of classes). Depending on the number of students enrolled in the course, the final research paper will be marked by the faculty supervisor and one (or more) of the other course supervisors. Students will submit one copy of the final research report to the Kin undergraduate office. Students will be informed as to whether to submit a paper copy or an e-copy of the final research report to the course coordinator.

-- The final research paper should be written in "manuscript style" and include the following sections: Abstract, Introduction, Methods, Results, Discussion, References - i.e., as if you were submitting your research for publication to a journal commonly used by your supervisor (e.g., American Journal of Physiology; Applied Physiology, Nutrition and Metabolism; European Journal of Applied Physiology; Journal of Applied Physiology; Journal of Biomechanics; Journal of Physiology; Medicine and Science in Sports and Exercise).

-- The final research paper should be formatted as follows (details subject to change each year):

- length not to exceed 15 pages (this limit does not include title page, figures, tables, and references)
- typed, double-spaced
- margins (top, bottom, sides) should be 2.54 cm
- Arial or Times New Roman font, with 12 pt font size
- 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