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, 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 scholarly report.

3. KIN 4444 is not an opportunity to gain credit for volunteer work in a research/teaching lab.

4. KIN 4444 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):

   Dr. Karen Danylchuk  Dr. Michael Heine  Dr. Alan Salmoni
   Dr. Alison Doherty   Dr. Laura Misener  Dr. Angela Schneider
   Dr. Janice Forsyth   Dr. Don Morrow    Dr. Kevin Wamsley
   Dr. Craig Hall       Dr. Harry Prapavessis

5. Projects are restricted to Kinesiology students who are in their fourth year of study (BSc students should register in Kin 4443).

6. Before a student can be registered in KIN 4444, a contract must be completed and signed by:

   a. the student,
   b. the supervising faculty member, and
   c. the Course Manager
7. Students cannot receive remuneration for work completed as part of the KIN 4444 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/](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 4444 contract should then be signed by the supervising faculty member and the student, and forwarded to the Course Manager. (Faculty members are encouraged NOT to participate in KIN 4444 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 advising office into Kin 4444.

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

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

5. 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 research project. 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. 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 in 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):

<table>
<thead>
<tr>
<th>Activity</th>
<th>Weight</th>
<th>Evaluator(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research 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 performance (2nd term)</td>
<td>15%</td>
<td>Supervisor</td>
</tr>
<tr>
<td>Final presentation (2nd term; March TBD)</td>
<td>15%</td>
<td>All faculty</td>
</tr>
<tr>
<td>Final research paper (due April TBD)</td>
<td>50%</td>
<td>Supervisor + other faculty</td>
</tr>
</tbody>
</table>

Note: 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

General course information:
1. Final presentation length - 10-15 min with 5-10 min for questions
2. Student presentations - may take place over 2 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 (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 4444 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.
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).

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

1. Length not to exceed 35 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
4. Arial or Times New Roman font, with 12 pt 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.