School of Kinesiology Faculty of Health Sciences Western University

KIN 2032b – Research Design in Human Movement Science January to April 2018

Instructor: Lindsay Nagamatsu, PhD Office Hours: By appointment

Location:Natural Sciences Centre, 1Phone:519-661-2111 ext 82659Lectures:Mon/Wed 8:30-9:20amEmail:lindsay.nagamatsu@uwo.caOffice:Somerville House 2360D

Teaching Assistants:

Joyla Furlano jfurlano@uwo.ca Jeffrey Brooks jbrook45@uwo.ca Andy Pettit apettit3@uwo.ca Megha Rao mrao8@uwo.ca Yoah Sui wsui3@uwo.ca

Calendar Description: An introduction to the basic aspects of reading, interpreting, evaluating, and presenting research in order to better understand the research process in physical activity. Measurement and data collection techniques from physical and social science areas of kinesiology will be examined using both quantitative and qualitative research designs employed in movement science.

Learning Objectives:

Upon completion of this course students will be able to:

- 1. Explain the essentials of the research process
- 2. Evaluate different types of research and related design issues
- 3. Interpret statistical analyses common to research studies
- 4. Appraise and reach valid conclusions based on data, methods, and logic
- 5. Collect and analyze data in a lab assignment

Anti-requisite(s)/Pre-requisite(s)/Co-requisite(s):

Anti-requisite: Health Sciences 2801A/B

Pre- or Co-requisite: Any 1.0 or 0.5 statistics course

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. Course material: All course information including grades, assignment outlines, deadlines, etc. are available via OWL. There is no textbook for this course. Power point slides from lectures will be posted on OWL. These will be provided so you don't have to worry about writing down every detail from the slides during class; however, the slides are not a substitution for coming to class – there will be details that you may not understand if you are not present in lecture. Therefore, it is recommended that you attend every lecture. If you are absent, you are encouraged to ask for notes from a peer.

Course Format:

Lecture: Monday & Wednesday 8:30 am – 9:20 am

Labs:	Sec 002	Mon	4:30 pm - 6:00 pm	North Campus Building Room 105
	Sec 003	Tue	7:00 pm - 8:30 pm	Health Science Building Room 14
	Sec 004	Wed	4:30 pm - 6:00 pm	Health Science Building Room 13
	Sec 005	Wed	7:00 pm - 8:30 pm	Health Science Building Room 13
	Sec 006	Thu	7:00 pm - 8:30 pm	Social Sciences Centre Room 1032
	Sec 007	Fri	8:30 am – 10:00 am	Health Science Building Room 16

<u>Top Hat:</u> We will be using the Top Hat (<u>www.tophat.com</u>) classroom response system in class. You will be able to submit answers to in-class questions using Apple or Android smartphones and tablets, laptops, or through text message.

You can visit the Top Hat Overview (https://success.tophat.com/s/article/Student-Top-Hat-Overview-and-Getting-Started-Guide) within the Top Hat Success Center which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

An email invitation will be sent to you by email, but if don't receive this email, you can register by simply visiting our course website: Unique Course URL: https://app.tophat.com/e/549543
Note: our Course Join Code is 549543

Top Hat will require a paid subscription, and a full breakdown of all subscription options available can be found here: www.tophat.com/pricing.

- \$26 for 4 months of unlimited access
- \$38 for 12 months of unlimited access
- \$75 for lifetime* access

Should you require assistance with Top Hat at any time, due to the fact that they require specific user information to troubleshoot these issues, please contact their Support Team directly by way of email (support@tophat.com), the in app support button, or by calling 1-888-663-5491.

Communication:

Office hours & appointments: If you have questions about course material or would like to discuss issues related to the course in more detail, you are always welcome to make an individual appointment with the instructor or TA's, or talk to us before/after class (subject to availability).

EMAIL POLICY

Who to contact for your concerns or questions: If you have a question, please <u>first consult this</u> <u>syllabus and the course website</u>; there is a good chance your question can be answered through these resources, especially regarding course logistics or content (e.g., deadlines, assignments, course materials). If you cannot find an answer to your question on the syllabus or course website, you may contact the instructor or TA's.

Email inquiries to instructor: The instructor will only provide 1-sentence responses via email. If you have a question that cannot be answered in a single sentence or less, please see me right before or after class or make an appointment and I will be happy to discuss it with you. Emails requiring responses longer than 1-sentence will not be answered by the instructor. For all email responses, please permit 24 hours before a response can be expected (i.e., you are unlikely to receive a response the night before an exam/assignment). Emails will rarely be answered over the weekend.

Course Evaluation Summary:

1. Participation – in class	5%
2. Participation – out of class	5%
3. Assignments	17%
4. Labs	18%
5. Midterm Exam	20%
6. Final exam	35%

- 1. Participation in class (5%): You are required to sign up for a Top Hat account (see above), and are expected to attend class and respond to in-class questions. Your participation marks will be calculated based on percentage of Top Hat questions responded to during lecture: $\geq 80\% = 5$ points; 60-79% = 4 points; 40-59% = 3 points; 20-39% = 2 points; 1-19% = 1 point; <1% = 0 points. This will account for any technology-related issues (unable to login, forgot phone at home/ran out of battery, etc.).
- 2. *Participation out of class (5%)*: You will be assigned questions on Top Hat to answer outside of class. These questions will be marked as a combination of participation only (i.e., you receive the mark if you answer) and correctness of response (i.e., you only receive the mark if you answer correctly).

- 3. Assignments (17%): There are a total of 3 assignments to be completed during this course. The assignments will require you to write a **one page maximum** response. Detailed assignments will be posted on OWL one week prior to the due date. All assignments must be completed independently. Assignments must be submitted via OWL before the deadline. The first two assignments will be worth 5% each, and the third assignment will be worth 7%.
- 4. *Labs (18%)*: There are a total of 3 labs that you <u>must attend</u> during this course. Please ensure that you are enrolled in a lab time that you are able to commit to; <u>attending a different lab session will **NOT** be permitted under any circumstances. Lab assignments must be completed during your scheduled lab time <u>independently</u> and submitted prior to leaving. You will have to complete a "data collection" component of the lab **PRIOR** to the lab date; detailed instructions will be posted on OWL <u>one week</u> prior to the lab. Failure to complete the data collection portion will result in a 50% reduction in your mark for that lab.</u>
- *Deadline dates for assignments and labs: Students will receive a grade of zero on any assignment or lab submitted after the due date without appropriate documentation. There will be no exceptions.
- 4. Midterm Exam (20%): The midterm exam will occur during our regular scheduled class time and may include: multiple choice, fill-in-the-blank, and short answer questions. The midterm is set for February 28th in class.
- 5. Final Exam (35%): The final exam will be cumulative, although the focus will be on material covered during the second half of the course. The format may include: multiple choice, fill-in-the-blank, and short answer questions. The time and date of the final exam is scheduled by the University. Thus, do not make travel plans until the date of the exam is announced. For those who miss the final exam, a make-up final exam will likely be given.
- *Students who miss the midterm or final exams must present a medical certificate to the course leader within 7 days.

Course/University Policies

- 1. Lateness/Absences: Assignments are due at the beginning of class on the assigned due date and will not be accepted late, except under medical or other compassionate circumstances. Electronic submission of assignments will not be accepted (unless otherwise specified) under any circumstances. Submitting a late assignment without appropriate documentation will result in a zero (0) grade. A missed mid-term examination without appropriate documentation will result in a zero (0) grade. The course policy is not to allow make-ups for scheduled midterms, presentations or final exams, nor to assign a grade of Incomplete without acceptable and verifiable medical (or equivalent compassionate) reasons. Acceptable reasons might include hospital stays, serious illness, family emergencies (like serious accidents or illness, death) or similar circumstances.
- 2. **Written documentation**: Students who require academic accommodation should provide notification and documentation in advance of due dates, examinations, etc. stating specific

reasons and dates. Students must follow up with their professors and their Academic Counselling office in a timely manner. Documentation for any request for accommodation shall be submitted directly, as soon as possible, to the Kinesiology Undergraduate Office **not** to the instructor, with a request for relief specifying the nature of the accommodation being requested. This documentation should be obtained at the time of the initial consultation with the physician or walk-in clinic. An "Accommodation Consideration Request Form" found online or in the Kinesiology Undergraduate Office" for **ALL** such accommodation requests must be submitted into the Kinesiology Undergraduate office. These 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. See https://studentservices.uwo.ca/secure/index.cfm for specific policy and forms relating to accommodation.

- 3. **Grades**: Where possible assignment objectives and rubrics will be posted on OWL. Should you have a concern regarding the grade you received for an assignment or feel that it is unfair in any way, you must wait 24 hours from the receipt of the assignment to approach the instructor or TA. In doing so, please make an appointment and prepare in writing, with evidence, why you feel your grade is inappropriate. Please be aware that in requesting a grade reassessment, your grade could go up/down/or stay the same. Note that calculations errors (which do occur!) should be brought to my attention immediately. **15% of course grades will be posted by the last day to drop a course.**
- 4. **Scholastic offences:** They are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/handbook/appeals/scholastic discipline undergrad.pdf.
- A) Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar). All required 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 for such checking 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 (http://www.turnitin.com)
- B) 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.
- 5. **Formatting:** APA style is the approved style of writing for all assignments produced for this course. Please refer to Western University Library webpage for information on citation style and format or consult the APA publication manual: Publication manual of the American Psychological Association (6th ed.). (2009). Washington, DC: American Psychological Association.

- 6. According to the **Examination Conflict policy**, "A student who is scheduled to write more than two examinations in any 24-hour period may request alternative arrangements through the office of their Academic Counsellor." *This policy does NOT apply to mid-term examinations. There will be no make-up for the mid-term exam. Students who miss this exam with a valid reason will have the final re-weighted accordingly.
- 7. Classroom Behaviour: Class will begin promptly at the time specified at the top of page one of this syllabus. In the event that you must arrive late, please enter the classroom with a minimal disturbance to the class. I reserve the right to lock the classroom door and deny entrance if lateness becomes a common occurrence. Excessive talking during class time is disruptive, disrespectful, and will not be tolerated. Students engaging in such behaviour may be asked to leave the room. Cellular phones, pagers, and text-messaging devices are disruptive when they ring in class. If you must bring these with you, please place them on silent mode or turn them off during class. Failure to do so may result in your being asked to leave.
- 8. Laptops for the **purpose of typing lecture notes** are permitted in class, but please be respectful to your fellow students and turn the sound off. If I receive complaints from other students regarding noise or other disruptive behaviour (e.g., watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom laptop privileges will be revoked. Use of electronic devices during exams is <u>not permitted.</u>
- 9. Audio and/or videotaping of lectures is not permitted unless approval has been sought from the instructor in advance.

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

http://www.uwo.ca/univsec/board/code.pdf

ENGLISH PROFICIENCY FOR THE ASSIGNMENT OF GRADES

Visit the website http://www.uwo.ca/univsec/handbook/exam/english.pdf

SUPPORT SERVICES

There are various support services around campus and these include, but are not limited to:

- 1. Student Development Centre -- http://www.sdc.uwo.ca/ssd/
- 2. Student Health -- http://www.shs.uwo.ca/student/studenthealthservices.html
- 3. Registrar's Office -- http://www.registrar.uwo.ca/
- 4. Ombuds Office -- http://www.uwo.ca/ombuds/

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

Tentative Schedule:

Important Dates	
January 26	Assignment 1 due @5pm on OWL
February 5 – 9	Lab 1
February 16	Assignment 2 due @5pm on OWL
February 19 – 23	NO CLASS – Reading week
February 28	MIDTERM EXAM
March 12 – 16	Lab 2
April 2 – 6	Lab 3
April 11	Assignment 3 due @5pm on OWL
April 14 – 30	FINAL EXAM PERIOD

List of Topics:

- Scientific method
- Literature search
- Designing an experiment: independent variables, dependent variables
- Ethical issues in research
- Introduction to statistics
- Measurement: validity, reliability, error, bias
- Designs: correlation, longitudinal, prospective, cross-sectional, case-study, observational, cohort, randomized controlled trial, qualitative, between- vs. within-group

^{*}Note that this schedule is subject to change. Please check the course website for the most up to date information.