

School of Kinesiology
Faculty of Health Sciences
Western University

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

Instructor:	Lindsay Nagamatsu, PhD	Office Hours:	By appointment
Location:	Natural Sciences Centre, 1	Phone:	519-661-2111 ext 82659
Lectures:	Mon/Wed 8:30-9:20am	Email:	lindsay.nagamatsu@uwo.ca
		Office:	Somerville House 2360D

Teaching Assistants:

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Calendar Description: #"\$%\$&'()*+&%(\$&("&,-"/0%+ "/01-+&0"(2"-/)%\$34"%\$&-'1'-&%\$34"
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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

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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 TAÖs, 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 first consult this syllabus and the course website; there is a good chance your question can be answered through these resources, especially regarding course logistics ~~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 TAÖs.

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 before or after class or make an appointment ~~and~~ will be happy to discuss it with you. ifoc 33.516 0 T.60

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 must attend during this course. Please ensure that you are enrolled in a lab time that you are able to commit to. Attending a different lab session will NOT be permitted under any circumstances. Lab assignments must be completed during your scheduled lab time independently 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 one week prior to the lab. Failure to complete the data collection portion will result in a 50% reduction in your mark for that lab.

*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 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

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 a 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

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Tentative Schedule:

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