School of Kinesiology Faculty of Health Sciences Western University

KIN 9466A-004 - Special Topic: Interpreting and Communicating Science Fall 2022

Instructor:	Dr Jim Dickey			
Location:	TH 4175	Office Hours: by appointment		
		Phone: 519-661-2111		
Lectures:	Fridays 9:00AM –	x87834 (email preferred)		
	12:00PM	Email: jdickey@uwo.ca		
	AHB 1B08			

NOTE: All course information including grades, assignment outlines, deadlines, etc. will be available via OWL. Peer review will be enabled using EduFlow¹

Course Description:

This graduate course focuses on aspects of scientific literacy related to consumption of knowledge rather than production of knowledge. It integrates content, context, collaboration, and communication in a unique fashion. The material will focus on best practices in various aspects of science communication (abstract, lay summary, manuscript, pamphlet, poster and 3MT Talk (Three Minute (non)Thesis talk and presentation). The course will also specifically focus on interpretation and amalgamation aspects of science including levels of evidence, and evidence-based development of guidelines. The course will also review various statistical tests from the perspective of knowledge consumers, evaluating assumptions and interpretation. Additional topics, time permitting, will include the scientific publication process and peer review.

Learning Objectives:

The students are expected to complete background reading and engage in classroom discussions related to the course topics. Class meetings will regularly include lectures, discussions and well as writing and reviewing exercises. The capstone course experiences include a group project distilling information about a statistical test, and individual work producing a pamphlet concerning best practices in an area of Kinesiology that is of particular interest to you, and preparation and delivery of a 3MT Talk (Three Minute (non)Thesis talk) in an area of Kinesiology that is of particular interest to you.

Upon completion of this course students will be able to:

- 1. **Identify and delineate** different forms of scientific communication (Knowledge)
- 2. Identify and delineate different statistical tests (Knowledge)

- 3. **Formulate guidelines** based on best practices in an area of Kinesiology (Synthesis)
- 4. **Compare and contrast** different theoretical approaches to identify best available evidence (Analysis)
- 5. **Develop** scientific communication skills, including various forms of written and oral presentation (Application)
- 6. **Critically reflect** upon their own communications relative to the topics discussed in class. (Reflection)

Required Course Material:

All required readings and lecture notes will be posted on OWL.

Course Evaluation Summary:

1.	Writing and peer review exercises	20%	
	(not weekly, but regularly mostly impromptu writing)		
	Peer Review via OWL Assignments		
2.	One-page high-level summary of a statistical test*	20%	
3.	3MT presentation (practice and final presentations)	20%	
	(Nov 17 th and Dec 1st respectively)		
4.	Class participation (via interaction during synchronous lectures	10%	
	and via self-reflections following lectures)		
5.	Final Exam	30%	

*one or more, depending on the number of students in the class

Additional Details about Course Evaluation:

- The Writing and Peer Review grade will be assigned based on the quality of the writing, and the scores from peer review
- The grade for the 3MT presentation will be determined through instructor and peer review of the practice and final presentations.
- Part of the grade for class participation will be assigned based on the willingness to contribute to class discussions in a meaningful way, and the quantity and quality of class participation. The remainder of the grade for class participation will be assigned based on formal written self-reflections submitted following specific lectures.
- The final exam will be a timed open book exam evaluating your understanding of the course material and your ability to apply the course concepts.

• 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. Appropriate documentation for assignments worth less than 10% should be submitted to the Undergraduate office. 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**: Whenever possible, 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 appropriate *Academic Counselling Office* of the student's Faculty/School of registration 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. 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 <u>https://studentservices.uwo.ca/secure/index.cfm</u> 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.

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.p <u>df</u>.

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 might 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** (*as recommended by the course instructor*): example- 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." <u>*This policy does</u> <u>NOT apply to mid-term examinations</u>. There will be no make-up for the mid-term exam. Students who miss this exam with a valid reason will have the final reweighted 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.

9. **Audio and/or videotaping of lectures** is not permitted unless approval has been sought from the instructor in advance.

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. Please be respectful to your fellow students and turn the sound off. If the professor receives complaints from other students regarding noise or other disruptive behavior (e.g. watching videos on YouTube.com, updating your Facebook status, playing Solitaire), your classroom privileges will be revoked. 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.

All of the remote learning sessions for this course will be recorded. The data

captured during these recordings may include your image, voice recordings, chat logs and personal identifiers (name displayed on the screen). The recordings will be used for educational purposes related to this course, including evaluations. The recordings may be disclosed to other individuals under special circumstances. Please contact the instructor if you have any concerns related to session recordings.

Participants in this course are not permitted to record the sessions, except where recording is an approved accommodation, or the participant has the prior written permission of the instructor.

10. Online Etiquette: Some components of this course will involve online interactions. To ensure the best experience for both you and your classmates, please honour the following rules of etiquette:

- please "arrive" to class on time
- please use your computer and/or laptop if possible (as opposed to a cell phone or tablet)
- ensure that you are in a private location to protect the confidentiality of discussions in the event that a class discussion deals with sensitive or personal material
- to minimize background noise, kindly mute your microphone for the entire class until you are invited to speak, unless directed otherwise
- In order to give us optimum bandwidth and web quality, please turn off your video camera for the entire class unless you are invited to speak
- please be prepared to turn your video camera off at the instructor's request if the internet connection becomes unstable
- unless invited by your instructor, do not share your screen in the meeting

The course instructor will act as moderator for the class and will deal with any questions from participants. To participate please consider the following:

• if you wish to speak, use the "raise hand" function and wait for the instructor to acknowledge you before beginning your comment or question

• remember to unmute your microphone and turn on your video camera before speaking

• self-identify when speaking.

• remember to mute your mic and turn off your video camera after speaking (unless directed otherwise)

General considerations of "netiquette":

• Keep in mind the different cultural and linguistic backgrounds of the students in the course.

• Be courteous toward the instructor, your colleagues, and authors whose work you are discussing.

- Be respectful of the diversity of viewpoints that you will encounter in the class and in your readings. The exchange of diverse ideas and opinions is part of the scholarly environment. "Flaming" is never appropriate.
- Be professional and scholarly in all online postings. Cite the ideas of others appropriately.

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.

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 PROFICENCY 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 -- <u>http://www.uwo.ca/ombuds/</u>