

Psychology 4000A - The Psychology of Sleep
Summer 2016
Tuesdays and Thursdays, 9:00 am to 11:50 pm in AH 117

Instructor Mrs. Miranda Lucas
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Course Description

Every human has to sleep, have you ever wondered why? Or what the body does while resting? This course is an exploration from a multidisciplinary perspective of the study of sleep. The course will begin with a foundation in the biological regulation of sleep, including the neurobiology in humans and other animals, which will lead to questions such as, how can I improve my sleep quality? In what ways can sleep help with memory consolidation? The later part of the course will shift to more abnormal elements of sleep including sleep disorders, lifestyle habits that interact with sleep quality.

The course will be seminar style where original research papers will serve as the topic of discussion each class. The instructor will lead the first two classes to give students a good foundation in the physiology and fundamentals of sleep in humans and other animals. Subsequently, each paper will be led by two students, who will lead the discussion on the readings. In addition to class discussions, students will complete three written critiques (three pages double spaced) on three papers of their choosing. Those critiques will be peer reviewed in a double-blind system by both the instructor and their peers. Finally, students will complete a research proposal on any topic of their choosing and, in preparation for their final paper, students will deliver a 7 minute presentation explaining their research to the class. There will be a written (long answer style) midterm and final exam on the readings completed in class.

This course is specifically designed to get students comfortable with: reading and writing about research, speaking about original research with their peers and, delivering information to the class as a presentation or discussion format.

Pre-requisites

Psyc 2030, Neuro 2600 and fourth year standing or permission from the department

Course Format

Each class will cover the content of three to four sources from the primary literature on sleep research. With the exception of the first week, students are expected to come to each class having read the articles assigned and participate in a meaningful discussion. The first week of readings will be presented by the instructor, and all subsequent weeks will be facilitated by the students.

Email: My primary method of communicating with you will be via your U of L email and Moodle. [<https://moodle.uleth.ca>] This will be how additional readings and assignments will be distributed. Check your U of L email account on a regular basis, or have that account forwarded to your preferred email provider. If you do not check this email account on a regular basis you

may miss important notices and course content. You may also occasionally receive emails from the account “Memorandum, Department” regarding Extra Credit Participation.

Required Readings

There will be a reading list assigned to you on the first day of class. All readings will be pulled from various journals and book chapters.

Course Grade Assessment

Class Participation	20%
Written Critiques	10%
Seminar Presentation	10%
Midterm Exam	20%
Final Exam	20%
Term Paper	20%

Class Participation: You are expected to both attend and come prepared to each class, meaning that you have read the assigned readings and are prepared to engage in a thoughtful discussion about them with your classmates. This mark will be based on your attendance and active participation in each class.

Written Critiques: Students will choose three papers, on three separate dates, that they will write a three page (double spaced) critique on. A good critique is one that briefly summarizes the article, discusses its strengths and weaknesses, and ends by adding some other relevant thoughts or literature that would further the discussion on the topic. In addition to writing these three critiques, students will also evaluate three critiques written by other students in the course. The critiques of other students will be anonymous, and the individuals evaluating the critique will give the student a mark out of ten. Each critique will be evaluated by three individuals, including the instructor. All three evaluations will contribute to the overall score of the critique written. The individuals evaluating the critiques will also be evaluated by the instructor for being both thorough and fair.

Seminar Presentations: There will be two types of seminar presentations that will contribute to this grade: two presentations of the primary literature assigned as in class material and one outlining the student’s term paper.

For the in class assigned reading material, students will present a paper of their choice (chosen during the second class) in groups of two. The two students will go through what the research paper covers at a high level, in a way that assumes everyone else in the room has already read the paper, and then lead the class in a discussion of the topics covered in the paper. Each paper will be discussed for one hour, unless otherwise designated. Students are invited to use as much or little visual, audio and/or technological aides as they choose.

The second component of this grade will be based on a presentation that outlines the student’s independent research in the area of sleep. These presentations will be 7 minutes in length, with one minute for questions. See the description of the term paper assignment for more detail.

Midterm Exam: This exam will be long answer format and will be in class.

Final Exam: This exam will be long answer format, will be Tuesday June 21 at 9 am, in our usual classroom. It will cover all the material not covered after the midterm exam.

Term Paper: In addition to readings assigned in class, students are encouraged to follow their curiosity and write a term paper on a topic that intersects with sleep research. The topic could explore an area covered in class but do so in more depth, or cover a topic that we did not look at in class. Students are encouraged to discuss their ideas with the instructor to make sure that the topic is both suitable and feasible. The paper should be ten pages (double spaced) in length and cite at least five primary sources that were not used in class. You may submit a draft of your paper as many times as you like *before* June 10th for feedback and direction. Papers received on or after June 10th will not receive feedback before the deadline (June 17th). To make sure that students are on tract, they will submit a statement of intent and three sources that would be used to expand on the topic. This statement of intent will be worth 5% of the term paper.

Missed Exam Policy

With the exception of extreme extenuating circumstances (e.g., prolonged illness, accident, or bereavement), all students must write their exams within the designated period. Should you find yourself in an extreme situation, please contact Mrs. Lucas immediately so that I may assist you in understanding your options. Medical reasons must be supported by a physician's statement that you were either unable to attend university, or that your performance would be seriously affected by your condition on the day of the exam. Acceptable medical documentation must include the physician's name and contact information. Similar documentation is required for any non-medical reason (e.g., bereavement). Without documentation, a grade of zero (0%) will be recorded for any student who does not write the exam on the assigned day.

Grading Scheme

Letter grades will be assigned to final course percentages according to the following scale:

A+ ≥ 95	B+ 80 to < 85	C+ 67 to < 70	D+ 56 to < 61
A 90 to < 95	B 75 to < 80	C 64 to < 67	D 50 to < 56
A- 85 to < 90	B- 70 to < 75	C- 61 to < 64	F < 50

Extra Credit for Research Participation

Students have an opportunity to add up to 2% bonus points (“study credits”) to their overall grade in this course by participating in active research of Psychology Department faculty members. This participation allows you to gain personal experience in psychology research projects, provides an opportunity to witness what goes on in the psychology labs, and introduces you to senior undergraduate and graduate students conducting their own research projects.

Available studies will be listed and described on the Sona System at: <http://psychleth.sona-systems.com> on May 16, 2016. Your username and password will be sent to your U of L email account by the departmental Administrative Assistant. Each project usually requires one hour or

less of your time, but this will depend on the individual research project. In recognition of your time and the fact that you are learning about the discipline of psychology beyond what you acquire in the classroom setting, an extra credit of 1% to 2% per study in which you participate will be added to your course grade.

Note: that there is no guarantee that all students who wish to participate will be able to achieve the maximum extra credit. As these are bonus points, students who choose not to participate are not disadvantaged. If you are in two Psychology courses that allows credit, you may not sign up for the same study twice. Please use the login for each course so the system will put it into the correct class. Because research studies start at various points throughout the semester, additional projects that were not originally listed may show up, so be sure to check the system periodically. The last date to participate in research studies is June 20, 2016. If you experience problems with the Sona System, or have questions about participating in research projects, please contact Leanne Wehlage-Ellis at wehlage@uleth.ca.

Students with Special Needs

If you have a *documented* condition that prevents you from fully participating in this course, including evaluation procedures, it is your responsibility to contact the instructor regarding your individual situation. No accommodations will be given without official notification from the Accommodated Learning Centre (<http://www.uleth.ca/ross/accommodated-learning-centre/>).

Course Rules and Regulations

Students are responsible for familiarizing themselves with the Academic Regulations and Policies contained within the University of Lethbridge Academic Calendar (<https://www.uleth.ca/ross/sites/ross/files/imported/academic-calendar/2015-16/part04.pdf>). As per the University Calendar, Section 5.h.1.: "When a student disrupts instructional activities, the instructor may exclude the student immediately from instructional space and/or from future scheduled instructional meetings of that course pending further actions by the Dean."

To minimize forms of disruption, turn off your cell phone or any other noise-emitting device prior to the beginning of class. Avoid engaging in off-task Internet use (e.g., Facebook, YouTube, Texting) during lectures as it distracts you and others around you.

Everyone is entitled to their own opinion, but not their own facts. Given the nature of the course material, a diversity of viewpoints will inevitably exist in the classroom. Voicing well-reasoned disagreement with others' opinions is perfectly fine; being combative, intolerant, or disrespectful towards others is not (see the University Calendar Section 5.b.1). Open-mindedness is a prerequisite for learning.

Tips for success in PSYC 4000

Writing is a major component of how you will be evaluated in this course. I strongly suggest that you hand write your notes as it is how you will also be writing your exams. Research has shown that hand writing notes, over typing on a laptop, has stronger ties to memory consolidation success. I strongly urge you not to use your laptop in class whenever possible as it can be very distracting to both you and the students around you. A successful classroom will be one bustling with discussion, and that can be hindered when everyone is working on separate tasks on their

electronic devices. Be present and in the moment, interact with your peers, you might even make some friends. If you would like to have printed copies of the papers we will discuss in class, please ask your instructor to discuss the options available.

Course Timeline

Date	Topic
Tuesday, May 10	Intro to the course
	What is sleep? How do we measure it and what are the features of normal sleep in young adults
Thursday, May 12	Brain Function: Sleeping vs Awake
	Bodily changes that occur during sleep
	Homeostasis and circadian rhythms
	- Student's will choose papers to present -
Tuesday, May 17	Shift work, jet lag and chronotypes
	Age and sleep
	Self-report and sleep measure validity
Thursday, May 19	Sleep deprivation
Tuesday, May 24	Sensory stimuli during sleep
	Memory consolidation and sleep
	- Statement of research intent due -
Thursday, May 26	Sleep models in non-human animals
	The physical environment and sleep quality
Tuesday, May 31	- Midterm -
Thursday, June 2	Promoting good sleep
Tuesday, June 7	The neurobiology of sleep
	Narcolepsy and other disorders of excessive sleepiness
Thursday, June 9	- Student presentations -
Tuesday, June 14	Parasomnias
Thursday, June 16	Insomnia and treatment
Friday, June 17	- Term papers due -
Tuesday, June 21	- Final exam -

