

Department of Psychology Psychology 477 (L01) – Sleep & Biological Rhythms Winter 2010 - Course Outline

Instructor: Michael Antle **Lecture Location:** Admin 253

Phone: 403-220-2574 **Lecture Days/Time:** MWF 12:00-12:50

Email: antlem@ucalgary.ca

Office: Admin 018

Office Hours: By appointment only

Course Description and Goals

Behaviours are temporally coordinated and occur in a rhythmic fashion. The most obvious rhythmic behaviour humans engage in is sleeping; we spend 1/3rd of our lives asleep. This course will survey the behavioural, physiological, and clinical aspects of sleep and rhythms.

The course will consist of lectures on Mondays and Wednesdays. Fridays will be reserved for either class presentations or class discussions.

Presentations (5 Fridays):

Each student will be given a scientific article ahead of time and will be asked to summarize the major points of the paper for the class. These presentations will be purely oral (i.e., no PowerPoint) and will be brief (~5 minutes including time for class discussion/questions). Depending on final class enrolment, students may not present every time.

Discussions (4 Fridays):

The whole class will read the same paper, and will participate in a general discussion led by the instructor.

Prerequisites

Psychology 312 - Experimental Design & Quantitative Methods Psych 375 – Brain and Behaviour (or consent of the Department)

Required Text

Dunlap JC, Loros JJ, DeCoursey PJ, Eds. (2004) Chronobiology: Biological Timekeeping. Sinauer

Associates, Inc.: Sunderland, MA. (ISBN: 087893149X)

Note: Students will only be responsible for certain specific subsets of each chapter.

Evaluation

Exam #1	In Class - Feb 12 th , 2010	20%
Exam #2	In Class - March 17 th , 2010	20%
Exam #3	During exam period	20%
Paper	Due in Class, April 16 th	30%

Exams will be short answer format.

The term paper topic must be approved by the instructor by the end of January. Topics should be related to sleep and/or circadian rhythms. The paper should be about 20 pages double-spaced, excluding references and title page, and should follow APA format. There will be a 10% penalty per day, including weekends, for assignments handed in late. E-mailed assignments will not be accepted.

Grading Scale

A+	96-100%	B+	80-84%	C+	67-71%	D+	54-58%
Α	90-95%	В	76-79%	С	63-66%	D	50-53%
A-	85-89%	B-	72-75%	C-	59-62%	F	0-49%

As stated in the University Calendar, it is at the instructor's discretion to round off either upward or downward to determine a final grade when the average of term work and final examinations is between two letter grades. To determine final letter grades, final percentage grades will be rounded up or down to the nearest whole percentage (e.g., 89.5% will be rounded up to 90% = A but 89.4% will be rounded down to 89% = A-).

Tentative Lecture Schedule

Date	Topic/Activity	Readings
M Jan 11	Sleep – course introduction and basics	
W Jan 13	Sleep – Terminology and methodology	Provided
F Jan 15	Sleep – Aging + lifespan	Provided
M Jan 18	Sleep – Evolution	Provided
W Jan 20	Sleep – Neural regulation 1	Provided
F Jan 22	Friday Sleep Discussions – Studying Sleep	
	Last day to drop a course with no W grade and tuition refund.	
M Jan 25	Sleep – Neural regulation 2	Provided
T Jan 26	Last day for registration/change of registration.	
W Jan 27	Sleep – Neural regulation 3	Provided
F Jan 29	Friday Sleep Presentations – Sleep disorders	
M Feb 1	Sleep – disorders – Insomnia	Provided
W Feb 3	Sleep – disorders – Narcolepsy	Provided
F Feb 5	Friday Sleep Discussions – Sleep aids	
M Feb 8	Sleep – disorders – Alzheimer's and aging	Provided
W Feb 10	Sleep – disorders – Depression and other psychiatric disorders	Provided
F Feb 12	Exam #1	
M Feb 15	Reading Days. No lectures.	
W Feb 17	Reading Days. No lectures.	
F Feb 19	Reading Days. No lectures.	
M Feb 22	Sleep – Learning – Evidence for	Provided
W Feb 24	Sleep – Learning – Evidence against	Provided
F Feb 26	Friday Sleep Discussions – Sleep and Learning	
M Mar 1	Circadian Rhythms – Basics	Chapter 1
W Mar 3	Circadian Rhythms – Properties 1	Chapter 2
F Mar 5	Friday Sleep Presentations – Daylight Saving Time	
M Mar 8	Circadian Rhythms – Properties 2	Chapter 2
W Mar 10	Circadian Rhythms – Organization	Chapter 5

F Mar 12	Friday Rhythms Presentations — Classic papers identifying the SCN as the	
M Mar 15	Circadian Rhythms – Mammalian organization	Chapter 5 + 6
W Mar 17	Exam #2	
F Mar 19	Circadian Rhythms – Molecular 1	Chapter 7
M Mar 22	Circadian Rhythms – Molecular 2	Chapter 7
W Mar 24	"Friday" Rhythms Presentations – Genetics papers	
F Mar 26	Circadian Rhythms – Human 1	Chapter 9 + 10
M Mar 29	Circadian Rhythms – Human 2	Chapter 9 + 10
W Mar 31	"Friday" Rhythms Discussions – Human circadian	
F Apr 2	Good Friday. No lectures. University closed.	
M Apr 5	Circadian Rhythms – Feeding	Provided
W Apr 7	Circadian Rhythms – Exercise / non-photic	Provided
F Apr 9	Friday Rhythms Presentations – Non-photic	
M Apr 12	Circannual Rhythms 1	Chapter 4
W Apr 14	Circannual Rhythms 2	Chapter 4
R Apr 15	Last day to participate in research and allocate research credits	
F Apr 16	BSD. Winter Session Lectures end. Last day to withdraw.	
Apr 19-29	Final exam (scheduled by the Registrar)	

Reappraisal of Grades

A student who feels that a piece of graded term work (e.g., term paper, essay, test) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within 15 days of being notified about the mark or of the item's return to the class. If not satisfied, the student shall immediately take the matter to the Head of the department offering the course, who will arrange for a reassessment of the work within the next 15 days. The reappraisal of term work may cause the grade to be raised, lowered, or to remain the same. If the student is not satisfied with the decision and wishes to appeal, the student shall address a letter of appeal to the Dean of the faculty offering the course within 15 days of the unfavourable decision. In the letter, the student must clearly and fully state the decision being appealed, the grounds for appeal, and the remedies being sought, along with any special circumstances that warrant an appeal of the reappraisal. The student should include as much written documentation as possible.

Plagiarism and Other Academic Misconduct

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. Consequently, plagiarism or cheating on any assignment is regarded as an extremely serious academic offense. Plagiarism involves submitting or presenting work in a course as if it were the student's own work done expressly for that particular course when, in fact, it is not. Students should examine sections of the University Calendar that present a Statement of Intellectual honesty and definitions and penalties associated with Plagiarism/Cheating/Other Academic Misconduct.

Academic Accommodation

It is the student's responsibility to request academic accommodations. If you are a student with a documented disability who may require academic accommodation and have not registered with the Disability Resource Centre, please contact their office at 403-220-8237. Students who have not registered with the Disability Resource Centre are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than 14 days after the start of this course.

Absence From A Test/Exam

Makeup tests/exams are NOT an option without an official University medical excuse (see the University Calendar). A completed Physician/Counselor Statement will be required to confirm absence from a test/exam for health reasons; the student will be required to pay any cost associated with this Statement. Students who miss a test/exam have 48 hours to contact the instructor and to schedule a makeup test/exam. Students who do not schedule a makeup test/exam with the instructor within this 48-hour period forfeit the right to a makeup test/exam. At the instructor's discretion, a makeup test/exam may differ significantly (in form and/or content) from a regularly scheduled test/exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup test/exam must be written within 2 weeks of the missed test/exam.

Course Credits for Research Participation (Max 2% of final grade)

Students in most psychology courses are eligible to participate in Departmentally approved research and earn credits toward their final grades. A maximum of two (2) credits (2%) per course, including this course, may be applied to the student's final grade. Students earn 0.5% (0.5 credits) for each full 30 minutes of participation. The demand for timeslots may exceed the supply in a given term. Thus, students are not guaranteed that there will be enough studies available to them to meet their credit requirements. Students should seek studies early in the term and should frequently check for open timeslots. Students can create an account and participate in Departmentally approved research studies at http://ucalgary.sona-systems.com The last day to participate in studies and to assign or reassign earned credits to courses is April 15, 2010.

Evacuation Assembly Point

In case of an emergency evacuation during class, students must gather at the designated assembly point nearest to the classroom. The list of assembly points is found at http://www.ucalgary.ca/emergencyplan/assemblypoints

Please check this website and note the nearest assembly point for this course.

Student Organizations

Psychology students may wish to join the Psychology Undergraduate Students' Association (PSYCHS). They are located in Administration 170 and may be contacted at 403-220-5567.

Student Union VP Academic: Phone: 403-220-3911 <u>suvpaca@ucalgary.ca</u>

Student Union Faculty Rep.: Phone: 403-220-3913 <u>socialscirep@su.ucalgary.ca</u>

Important Dates

The last day to drop this course with no "W" notation and **still receive a tuition fee refund** is **Jan 22nd**, **2010**. Last day for registration/change of registration is **Jan 26th**, **2010**. The last day to withdraw from this course is **Apr 16th**, **2010**.