

**Psychology 360*:
The Psychology of Sleep
Fall Term 2015**

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Lectures: Time: Wednesday, 2:30 - 4 pm
Room: Botterell Hall Room B148

Labs: Time: Wednesday, 8:30 -11:30 am
Room: Craine 420

Aims:

1. To introduce students to the characteristics and neurobiological mechanisms of sleep.
2. To review and demonstrate methods of measuring sleep.
3. To give students experience in the sleep laboratory, both as participants and as researchers.
4. To discuss the evolution and possible functions of sleep.
5. To assess factors that influence sleep quality.
6. To describe and understand the nature of sleep disorders and their treatments.

Text: The required readings for the course consist of review articles and book chapters selected to complement the topics covered in the lectures. They are available on the Psyc 360 web site.

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| Assessments: | Final exam: | 40% |
| | Labs (three projects): | 60% |

Labs: Three lab assignments (worth 15%, 20%, and 25%). Your lab instructors will provide details.

Final exam: The exam will consist of short-answer and essay-type questions. Material from lectures and the required readings will be examined.

Laboratory Projects:

1. Completion of sleep diary and written laboratory report: *"Factors influencing sleep quality in adults"*. (25%)
2. Overnight sleep EEG recordings and construction of a sleep hypnogram; done in groups of 2-3 students. (20%)
3. *Sleep Myths: Are current and popular conceptions about sleep more fact or fiction?* Independent research project to critically evaluate a common idea, hypothesis, or widely accepted notion regarding sleep. You will present the results of your research to the class. (15%)

Details regarding the laboratories will be provided in the lab manual for each project.

SCHEDULE OF TOPICS

| Date | Topic |
|---------------------|---|
| SECTION I: | INTRODUCTION TO SLEEP |
| Sep. 16 | Course introduction |
| Sep. 23 | History of sleep research and sleep medicine |
| Sep. 30 | Sleep physiology |
| SECTION II: | THE NEUROBIOLOGICAL BASIS OF SLEEP |
| Oct. 7 | Neurobiology of waking and slow wave sleep |
| Oct. 14 | The phenomenon of REM sleep I: Neurobiology |
| Oct. 21 | The phenomenon of REM sleep II: Dreaming |
| SECTION III: | FUNCTION OF SLEEP |
| Oct. 28 | Evolution and comparative aspects of sleep |
| Nov. 4 | Sleep and learning/memory |
| Nov. 11 | Sleep and synaptic plasticity |
| Nov. 18 | Sleep as homeostatic mechanism |
| SECTION IV: | SLEEP LOSS AND SLEEP DISORDERS |
| Nov. 25 | Sleep disorders and their treatments |
| Dec. 2 | Sleep quality and sleep loss: cognitive implications |
| Dec. | FINAL EXAM: DATE TO BE ANNOUNCED BY EXAMS OFFICE |

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Academic integrity is constituted by the five core fundamental values of honesty, trust, fairness, respect and responsibility (see http://www.academicintegrity.org/fundamental_values_project/index.php). These values are central to the building, nurturing and sustaining of an academic community in which all members of the community will thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University (see the Senate [Report on Principles and Priorities](#))

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity. Information on academic integrity is available in the Arts and Science Calendar (see [Academic Regulation 1](#)), on the Arts and Science website (see <http://www.queensu.ca/artsci/academics/academic-integrity>), and from the instructor of this course.

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery and falsification, and are antithetical to the development of an academic community at Queen's. Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.

Web-based academic resources: <http://www.asus.queensu.ca/acsfacts>

Academic integrity regulations: <http://www.queensu.ca/artsci/integrity/instructor/education.html>

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