

**PSYCHOLOGY 304/901 BRAIN AND BEHAVIOR**

**INSTRUCTOR:**

Ariane Coury, Ph.D.  
Room 2402, Kenny Bldg.  
Department of Psychology  
Telephone: 604 822-2024                      Office Hours: by appointment  
Website: <http://www.psych.ubc.ca/~acoury>

*If there are important announcements and changes, I will post them on the website therefore I recommend that you check the website on a regular basis.*

*THE BEST WAY TO COMMUNICATE WITH ME IS VIA PHONE. PLEASE DO NOT EMAIL ME UNLESS THERE IS AN EMERGENCY ABOUT MISSED EXAMS OR EXAM CONFLICTS. I PREFER TO ANSWER QUESTIONS ON COURSE CONTENT IN CLASS/PHONE OR IN PERSON.*

**TEACHING ASSISTANT:**

Janine Moseley  
Room: 1904, Kenny Bldg.  
Telephone: 604 822-5801                      Office Hours: by appointment  
Email: [janine@psych.ubc.ca](mailto:janine@psych.ubc.ca)

**PREREQUISITES:**

Psychology 100 and Psychology 200 level or permission from instructor

**TEXTBOOK:**

*Biological Psychology* by Rosenzweig, Breedlove & Watson (5th edition, 2007)

*You will be responsible for reading the materials in the text in the order shown on the schedule. The text contains much material that will not be covered directly in the lectures. You are, however, still responsible for that material. On the other hand, there is much material that will be covered in the lectures that will not appear in the readings. Every text is, by necessity, always several years out of date in its coverage, and somewhat limited in its scope, hence the lectures will cover material which the text does not, or can not, include. In any event, you will generally find that if you have done the reading BEFORE the lectures, the material given in class will be clearer and more easily retained.*

*Further information about academic regulations, course withdrawal dates and credits can be found in the University Calendar. You are encouraged to read this material. If you run into trouble and need information about studying, preparing for exams, note taking or time management, free workshops and advice are available from the Student Resources Centre, which can be reached through the School and College Liaison Office at 822-4319.*

### **CLASS SCHEDULE:**

Mon: 5:00-7:20 p.m.

Location: Biological Sciences 2449

### **EXAMINATIONS:**

Examinations will cover material from lectures, handouts, and the textbook from the time of the last exam. **Tentative dates** and duration of exams are as follows:

Exam 1	90 minutes	October 22, 2007
Exam 2	90 minutes	TBA
Exam 3	90 minutes	February 25, 2008
Exam 4	90 minutes	TBA

Exams will be composed of multiple choice questions, short essays and definitions.

**There is no make-up exam. An oral examination might be given instead. A no-show to an exam without a valid medical certificate will lead to a ZERO. Any claim should be written before discussion with Instructor or Teaching Assistant.**

**IMPORTANT NOTE:** Some material covered in the assigned readings will not be presented in the lectures. For examination purposes, you are responsible for knowing this material at the level of detail covered in the readings.

### **GRADES:**

Grades will be based on the weighted average of exam marks. Each exam will be worth 25%. (i.e. Exam 1, Exam 2, Exam 3, Exam 4). Unofficial grades will be posted on the website.

**Faculties, departments and schools reserve the right to scale grades in order to maintain equity among sections and conformity to university, faculty, department or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department or school. Grades are not official until they appear on a student's academic record.**

### **PSYCHOLOGY DEPARTMENT'S POLICY ON GRADE DISTRIBUTIONS AND SCALING:**

In order to reduce grade inflation and maintain equity across multiple course sections, all psychology courses are required to comply with departmental norms regarding grade distributions. According to departmental norms, the mean grade in a 300-level class is 70 for a good class, 68 for an average class, and 66 for -a weak class, with a standard deviation of 13). The corresponding figures for 100- and 200-level Psychology courses are 67, 65, and 63, with a standard deviation of 14. **Scaling** is likely to be used in order to comply with these norms; grades may be scaled up or down as necessary by the professor or department.

### **PSYCHOLOGY DEPARTMENT'S POSITION ON ACADEMIC MISCONDUCT:**

Cheating, plagiarism, and other forms of academic misconduct are very serious concerns of the University, and the Department of Psychology has taken steps to alleviate them. In the first place, the Department has implemented software that, can reliably detect cheating on multiple-choice exams by analyzing the patterns of students' responses. In addition, the Department subscribes to *TurnItIn*--a service designed to detect and deter plagiarism. All materials (term papers, lab reports, etc.) that students submit for grading will be scanned and compared to over 5 billion pages of content located on the Internet or in TurnItIn's own proprietary databases. The results of these comparisons are compiled into customized "Originality Reports" containing several, sensitive measures of plagiarism; instructors receive copies of these reports for every student in their class.

In all cases of suspected academic misconduct, the parties involved will be pursued to the fullest extent dictated by the guidelines of the University. Strong evidence of cheating or plagiarism may result in a zero credit for the work in question. According to the University Act (section 61), the President of UBC has the right to impose harsher penalties including (but not limited to) a failing grade for the course, suspension from the University, cancellation of scholarships, or a notation added to a student's transcript. All graded work in this course, unless otherwise specified, is to be original work done independently by individuals. Do **not** use Google/Yahoo/MSN Search/etc. to find articles for assignments in this course. **Do** use any of the indexes and databases listed under Indexes and Databases, Subject Resources, OneSearch or Metasearch on the Library's website at <http://www.library.ubc.ca>. (Not sure which index to use? Click HELP on the library homepage at [www.library.ubc.ca](http://www.library.ubc.ca) or try Subject Resources.)

If you have any questions as to whether or not what you are doing is even a borderline case of academic misconduct, please consult your instructor. For details on pertinent University policies and procedures, please see Chapter 5 in the UBC Calendar (<http://students.ubc.ca/calendar>).

**TENTATIVE LECTURE TOPICS:**

**FIRST TERM**

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|--|--------------------------|
| 1. Introduction to Course – Historical concepts        | Chapters 1, 6            |
| 2. Biological Psychology: A Division of Neuroscience   |                          |
| 3. Evolution of Brain and Behavior                     |                          |
| 4. Anatomy of the Nervous System                       | Chapter 2                |
| 5. Cytology of the Nervous System                      |                          |
| 6. Neural Conduction and Synaptic Transmission         | Chapter 3                |
| 7. The Neurotransmitters                               | Chapter 4 (pp. 88-100)   |
| 8. Methods of Studying the Nervous System              | Chapter 11 (pp. 342-352) |
| 9. Animal Models of Human Neuropsychological Disorders | Chapter 7 (pp. 206-214)  |
| 10. Human Neuropsychological Disorders                 |                          |

**EXAM 1 October 22, 2007**

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|--|-------------------------|
| 11. Schizophrenia  | Chapter 16              |
| 12. Depression   |                         |
| 13. The Somatosensory System Control. Pain and Analgesia | Chapter 8               |
| 14. The Auditory System                                  | Chapter 9 (pp. 267-270) |
| 15. The Chemical Senses: Taste and Smell                 | Chapter 9 (pp. 270-283) |

**EXAM 2 TBA**

**LECTURE TOPICS: (cont'd)**

**SECOND TERM**

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|--|---------------|
| 19. The Neuroendocrine System and Sexual Differentiation | Chapter 5, 12 |
| 20. Sex Hormones in Puberty and Adulthood                |               |
| 21. Research on Hormone & Behavior                       |               |
| 22. Homeostasis: Active Regulation of Internal States    | Chapter 13    |
| 23. Biological Rhythm and Sleep                          | Chapter 14    |

**EXAM 3 February 25, 2008**

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|---|------------------------|
| 24. Memory and Amnesia                        | Chapters 17, 18        |
| 25. Learning in Simple Systems                |                        |
| 26. Neural Grafting                           |                        |
| 27. Principles of Drug Action, Addiction      | Chapter 4 (pp. 97-117) |
| 28. Pleasure: Reward Circuits in the Brain    |                        |
| 29. Language                                  | Chapter 19             |
| 30. Higher Functions and Brain Lateralization |                        |

**EXAM 4 TBA**