



Department of Psychology

**Psychology 511.14 (L01) – Nervous System Development**

Winter Session 2007

---

<b>Instructor:</b>	<b>Richard Dyck</b>	<b>Lecture Location:</b>	A247B
<b>Phone:</b>	220-4206	<b>Lecture Days/Time:</b>	M
<b>Email:</b>	rdyck@ucalgary.ca		
<b>Office:</b>	Admin 028		
<b>Office Hours:</b>	By appointment		

---

**Course Description and Goals**

The function of the human brain is mediated by billions of cells and trillions of connections. In order to understand human brain function we need to understand how these processes arise and the ways in which they change throughout a lifetime. The goal of this course is to provide a contemporary overview of CNS development from biological, behavioural and clinical perspectives. The following topics will be covered:

Biology: Neural Development: Neuronal Birth and Migration, Differentiation, Axon Outgrowth and Guidance, Neuronal Survival, Refinement of Connections

Behaviour: Sensory, Motor and Cognitive Development; Genetic and Epigenetic Influences (Nature vs Nurture)

Developmental Disorders including, but not limited to: Autism, ADHD, Down's Syndrome, Dyslexia, Epilepsy, Fetal Alcohol Syndrome, Fragile X Syndrome, Parkinson's Disease, Retts Disorder, Schizophrenia, Spina bifida, William's Disorder

**Required Text**

The required text for the course is: Sanes, D.H., Reh, T.A., and Harris, W.A. (2006) Development of the Nervous System, 2<sup>nd</sup> edition, Academic Press. Other books, as well as original papers, will be made available from the instructor, as needed.

**Evaluation**

The final course grade will be based on: 1) The content and quality of oral presentations (60%), 2) Contribution to the discussion (10%; you are **expected** to ask many good questions of the presenters), and 3) Term Paper (30%; due at the end of term).

- A .Excellent presentations, frequent excellent contributions, excellent paper
- A Very good presentations, frequent very good contributions, very good paper
- B Good presentations, good contributions, good paper
- C Poor presentation, no or few contributions, satisfactory paper

Everyone is expected to read every chapter/paper. Presenters should prepare a 50 minute Powerpoint talk that describes the assigned chapter/paper. Some comment on the background,

techniques, significance, good points, failings, etc. are expected from the presenter AND from everyone else (after the presentation is completed).

Term papers are to be on a topic of interest to the student, within the limits of the course focus (nervous system development) and must be approved by the instructor.

Note that it is the student's responsibility to ask the instructor for feedback during the course.

### **Grading Scale**

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

### **Lecture Schedule**

To be determined.

### **Reappraisal of Grades**

A student who feels that a piece of graded term work (term paper, essay, test, etc.) has been unfairly graded, may have the work re-graded as follows. The student shall discuss the work with the instructor within fifteen 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 fifteen 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 fifteen 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 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 fourteen (14) days after the start of this course.

### **Absence From A Test**

Make-up exams are NOT an option without an official University medical excuse (see the University Calendar). You must contact the instructor before the scheduled examination or you will have forfeited any right to make up the exam. At the instructor's discretion, a make-up exam may differ significantly (in form and/or content) from a regularly scheduled exam. Except in extenuating circumstances (documented by an official University medical excuse), a makeup exam is written within two (2) weeks of the missed exam.

A completed Physician/Counselor Statement will be required to confirm absence from a test for health reasons. The student will be required to pay any cost associated with the Physician Counselor Statement.

### **Important Dates**

The last day to drop this course and **still receive a fee refund** is January 19, 2007. The last day to withdraw from this course is April 13, 2007.