Facility of Health  
School of Kinesiology and Health Science

**Course:** HH/AS/SC/KINE 3650 3.0 Functional Neuroanatomy  
**Course Webpage:** http://www.yorku.ca/mfallah/kine3650

**Term:** S2 2012

**Prerequisite:** HH/AS/SC/KINE 2031 3.0 Human Anatomy

**Course Instructors**

**Course Director:** Mazyar Fallah, PhD  
**Office Phone:** (416) 736-2100 x20555  
**Email:** mfallah@yorku.ca

**Teaching Assistant:**

**Office Hours:**

**Office Phone:**

**Email:**

**Email Etiquette:**

- For all email correspondence please use KINE 3650 in the subject header. Please sign all letters with your full name and/or your student number. Email correspondence will not be held with anonymous people.
- We will respond to email only if it can be answered in 10 words or less.
- For complex issues, please use email to arrange for a time where we can meet (preferably during office hours).
- **Email will not be answered on the weekends** but shortly afterwards.
- You may leave a voicemail in the case of extreme emergencies.

**Time and Location**

**Lecture:**  
Tues. 12:30pm – 3:30pm            ACE 004  
Thurs. 12:30pm – 3:30pm         ACE 004

**Expanded Course Description**

This course introduces the student to the anatomy of the brain. The course covers the various structures in the central nervous system and discusses clinical correlates for each structure. Motor, sensory, learning, and memory systems are covered, as are reflexes/balance and nourishment of the CNS.

The following is a sample of the structures covered:

- Spinal Cord
- Medulla
- Pons
- Midbrain
- Basal ganglia
- Cerebellum
- Cerebral cortex
- Hypothalamus
- Limbic system
- Cerebral vasculature
- Cerebral spinal fluid and the meninges

The course covers the material both textually and pictorially with clinical photographs and MRI images.

**Course Organization**

The content of the course will be delivered twice a week in lecture format. Students are strongly encouraged to read the relevant textbook chapters prior to the weekly lecture.

**Course Learning Objectives**

The student will both understand the function of and be able to recognize neuroanatomical structures. This course serves as an introduction to cognitive neuroscience and the workings of the central nervous system.

**Course Text / Readings**

The following text is the assigned book for the course:


**Tentative Class Schedule**

- Last date to enroll without permission of course instructor: June 29
- Last date to enroll with permission of course instructor: July 7
- Last date to drop courses without receiving a grade: July 20
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic(s)</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 26</td>
<td>Introduction Neurohistology</td>
<td>Chapter 1</td>
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<tr>
<td>June 26</td>
<td>Gross Topography</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>June 28</td>
<td>Spinal Cord</td>
<td>Chapters 3-4</td>
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<tr>
<td>June 28</td>
<td>Medulla</td>
<td>Chapters 5-6</td>
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<td>July 3</td>
<td>Pons</td>
<td>Chapters 7-8</td>
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<tr>
<td>July 3</td>
<td>Midbrain</td>
<td>Chapters 9-10</td>
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<td>July 5</td>
<td>Diencephalon</td>
<td>Chapters 11-12</td>
</tr>
<tr>
<td>July 5</td>
<td>Basal Ganglia</td>
<td>Chapters 13-14</td>
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<td><strong>July 10</strong></td>
<td><strong>CLASS TEST 1</strong></td>
<td><strong>Up through Midbrain (July 3)</strong></td>
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<td>July 12</td>
<td>Cerebellum</td>
<td>Chapters 15-16</td>
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<td>July 12</td>
<td>Cerebral Cortex: Cortical Areas</td>
<td>Chapters 17-18</td>
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<td>July 17</td>
<td>Hypothalamus</td>
<td>Chapters 19-20</td>
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<td>July 17</td>
<td>Limbic System</td>
<td>Chapters 21-22</td>
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<td>July 19</td>
<td>Special Senses</td>
<td>Chapters 23-24</td>
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<td>July 19</td>
<td>Cerebral Vasculature</td>
<td>Chapters 27-28</td>
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<td><strong>July 24</strong></td>
<td><strong>CLASS TEST 2</strong></td>
<td><strong>Including July 17</strong></td>
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<td>July 31</td>
<td>Cerebrospinal Fluid</td>
<td>Chapters 29-30</td>
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<td>July 31</td>
<td>Reticular Formation</td>
<td>Chapters 32-33</td>
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<td>Aug 2</td>
<td>Major Sensory and Motor Pathways</td>
<td>Chapter 31</td>
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<tr>
<td>Aug 2</td>
<td>Neurological Exam</td>
<td>Chapter 35</td>
</tr>
<tr>
<td><strong>TBA</strong></td>
<td><strong>Final Exam</strong></td>
<td><strong>Everything!</strong></td>
</tr>
</tbody>
</table>
Evaluation

Attendance: It is your responsibility to attend lectures. You will be tested on all materials that are covered in both lectures and the text. Some material in the lecture is not in the text.

Final Grade:

The final grade for the course* will be based on the following items weighted as indicated:

- Class Test 1: 25%
- Class Test 2: 25%
- Final Examination: 50%

There will be two class tests and one final examination. Questions will be drawn from weekly lecture material and the relevant textbook chapters, with the greatest focus on content presented in class and overlapping with the readings. The format of the questions will be multiple choice, fill in the blank, matching, short answer, label the diagrams, and essays. The class tests will not be cumulative. The final examination will cover material from the entire course.

An unofficial list of grades will be posted on the course website as soon as they become available. Please check the course website rather than persistently contacting the teaching team to find out if they are available.

* Final course grades may be adjusted to conform to Program or Faculty grades distribution profiles.

Grading: The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 90, B+ = 75 to 79, etc.) (For a full description, see the York University Undergraduate Calendar: [http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug04_5_acadinfo.pdf](http://calendars.registrar.yorku.ca/pdfs/ug2004cal/calug04_5_acadinfo.pdf))

An appeal against a grade assigned to an exam must be made in writing to the course director/instructor. The result of an appeal may cause the grade to increase, decrease or remain the same.

Missed Tests: Only students with a legitimate reason for missing a class test, which is confirmed by official documentation*, may request accommodation from the Course Instructor. Written documentation should be submitted to the Course Director at the next meeting of the class. In the event that a class test is missed, the percentage allocated to the missed exam will be added to the final exam. If a student misses an exam with no legitimate excuse, the student will receive a grade of zero for the missed test. Further extensions or accommodation will require students to submit a formal petition to the Faculty.

In the case of a sudden emergency, contact me as soon as possible. If you cannot reach me, a message can be left on my office voice-mail, which records the date and time of your call.

*Official Documentation.
Documented must be provided by a registered clinical psychologist, psychiatrist, or medical doctor indicating that you were indeed unable to attend on the specific date of the examination because of your specific problem. Notes from counselors or alternative healing providers are not acceptable. NOTE THAT ONLY THE ATTENDING PHYSICIAN’S FORM IS ACCEPTABLE – no other written note or letter will be accepted. This form may be downloaded from:
IMPORTANT COURSE INFORMATION FOR STUDENTS

Please refrain from talking to others or making audible comments during class lectures or while another student is responding. If it is necessary to make noise, please leave the room first. Please place your cell phone and other electronic equipment in silent mode.

All participants in the course, teaching staff and students, will conduct themselves in a thoughtful and sensitive manner. Correct scientific terminology will be the lingua franca in the classroom.

This is an undergraduate course, not the culmination of a clinical neurology degree. Even though we will discuss many issues involving the relationship between the brain and behavior, you will not be in a position to "diagnose" the problems of another person (including yourself). If the material in this course does evoke uneasiness for you, perhaps because you or a family member has gone through a related experience, please feel free to contact the course director confidentially via phone or e-mail or access the resources of the Counselling and Development Centre (145 Behavioural Sciences Building; 416-736-5297).

Cheating is unacceptable on this course and any student who participates in this activity can expect to be referred to the appropriate disciplinary authority for their first offence. If you are unclear what does and does not constitute cheating please refer to the Academic Integrity web site (http://www.yorku.ca/academicintegrity) and read the section ‘For Students’. If you have not completed the Academic Integrity Tutorial which is hosted there, then I would urge you to do so.

All students are expected to familiarize themselves with the following information, available on the Senate Committee on Curriculum & Academic Standards webpage (see Reports, Initiatives, Documents): http://www.yorku.ca/secretariat/senate_cte_main_pages/ccas.htm

- York’s Academic Honesty Policy and Procedures/Academic Integrity Website
- Ethics Review Process for research involving human participants
- Course requirement accommodation for students with disabilities, including physical, medical, systemic, learning and psychiatric disabilities
- Student Conduct Standards
- Religious Observance Accommodation