Welcome to
MCB 314 / Neur 314
Introduction to Neurobiology

Prof. Mark Nelson, m-nelson@illinois.edu

Course website

Course website: http://www.life.illinois.edu/mcb/314/
Note: this is the only website, there is no Compass site for this course.

Some items are password protected:
User: mcb314
Pass: brainy

Lecture slides will posted on the web 24 hours in advance of each lecture; if you want a hardcopy, you’ll need to print your own copy.

MCB 314 / Neur 314

A multidisciplinary introduction to “How the Brain Works”
A course for the curious.

Course Overview

Multiple sclerosis
Epilepsy
Eating disorders
Parkinson’s disease
Pain regulation
Memory formation
Brain development
Aging and neurodegeneration
Sensory prosthetics
Spinal cord injury and repair

Alzheimer’s disease
Language processing
Phobias
Mental illness
Amnesia
Addiction
Attentional disorders
Romantic love
Tourette syndrome
Sleep and dreaming
Functional brain imaging
Course Overview

- **Foundations (~4 weeks)**
  - neurons & glia, neural signaling, neurotransmitters, structure of the human nervous system

- **Sensory Systems (~3 weeks)**
  - smell, taste, vision, hearing, balance, touch

- **Motor Systems (~3 weeks)**
  - reflexes, motor planning, action selection
  - spinal cord, motor cortex, basal ganglia, cerebellum

- **Cognitive Function (~4 weeks)**
  - attention, motivation, learning, memory, emotion, sex, sleep, language, mental illness

Exams

- **4 in-class exams**, 50 minutes, 150 points
  - **Exams I – IV**: multiple-choice, true-false, anatomical labeling, and graphical questions
  - **Exam V** covers the same material as **Exams I and II**
  - **Exam VI** covers the same material as **Exams III and IV**
- **2 optional make-up/improvement exams**, 50 min., 150 pts.
  - held back-to-back during the final exam period
  - **Exam V** covers the same material as **Exams I and II**
  - **Exam VI** covers the same material as **Exams III and IV**
- You may take either or both of the make-up exams, even if you took all 4 in-class exams
- No other make-ups/conflicts will be offered during the semester

There is no comprehensive final. The two optional make-up / improvement exams described above are offered during the scheduled final exam period.

Grading

- Your **final grade** is based on the sum of **4 exam scores** (150 points max per exam):

  | Top 2 scores from Exams I, II & V: | 300 pts |
  | Top 2 scores from Exams III, IV & VI: | 300 pts |
  | **Total (Max possible):** | 600 pts |

- Final grades are assigned using a fixed scale.

See table on the next slide for point cutoffs.
### Grading scale (out of 600 points)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Point Range</th>
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<tbody>
<tr>
<td>A+</td>
<td>top 5% of class</td>
</tr>
<tr>
<td>A</td>
<td>&gt;= 545</td>
</tr>
<tr>
<td>A-</td>
<td>525-544</td>
</tr>
<tr>
<td>B+</td>
<td>505-524</td>
</tr>
<tr>
<td>B</td>
<td>485-504</td>
</tr>
<tr>
<td>B-</td>
<td>465-484</td>
</tr>
<tr>
<td>C+</td>
<td>445-464</td>
</tr>
<tr>
<td>C</td>
<td>425-444</td>
</tr>
<tr>
<td>C-</td>
<td>405-424</td>
</tr>
<tr>
<td>D+</td>
<td>385-404</td>
</tr>
<tr>
<td>D</td>
<td>365-384</td>
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<tr>
<td>D-</td>
<td>345-364</td>
</tr>
<tr>
<td>F</td>
<td>&lt;= 344</td>
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### Exam Dates 2015

<table>
<thead>
<tr>
<th>Day/Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mon, 9/21</td>
<td>Exam I</td>
</tr>
<tr>
<td>Wed, 10/14</td>
<td>Exam II</td>
</tr>
<tr>
<td>Wed, 11/04</td>
<td>Exam III</td>
</tr>
<tr>
<td>Mon, 12/07</td>
<td>Exam IV</td>
</tr>
<tr>
<td>Thu, 12/17, 7:00p</td>
<td>Exam V (optional make-up / improvement)</td>
</tr>
<tr>
<td>Thu, 12/17, 8:00p</td>
<td>Exam VI (optional make-up / improvement)</td>
</tr>
</tbody>
</table>

No other make-ups/conflicts will be offered during the semester.

Plan accordingly... decide NOW whether or not the exam schedule presents a problem for you (particularly the makeup exams on 12/17).

If you want the flexibility to take Exams V and VI, do not schedule holiday travel before 12/18.

### Contact Info

#### Course Instructor

- **Prof. Mark Nelson**
  5251 Beckman Institute
  EMAIL: m-nelson@illinois.edu
  Office hours: Tue, 10:30-11:30a, 5251 Beckman
  (also by appt. -- send email)

#### Course TA

- **Georgiy Yudintsev**
  2514 Beckman Institute
  EMAIL: yudints1@illinois.edu
  Office hours: Fri 10:00a-12:00p, 2514 Beckman