Four great mysteries

Humans face four great mysteries about the universe

1) Why is there something instead of nothing?
   - This is the domain of physics
   - Most of us are not going to understand the ideas

2) How did life form?
   - This question is addressed at the boundary between chemistry and biology

3) Why is there so much diversity of life?
   - This is the domain of biology
   - Evolution and natural selection answer this question

4) What is the basis of human intelligence and consciousness?
   - Cognitive psychology and neuroscience
   - Far from a complete answer
   - Lots of issues to discuss

Topics

- Discuss a sample of issues in cognitive psychology / cognitive neuroscience
- Try to relate cognitive psychology to stories you may have heard in the popular press
- Identify how the topics can help you to be a better person
Topics

- For example
  - What’s the deal with left and right brains?
  - Why does everyone love Prozac?
  - Why telephone operators seem rude.
  - Why there is a gate at the first floor stairway in the Psychology building.
  - What to do if you are drunk while studying for an exam.
  - What is the plural of walkman?

Textbook

- There is no textbook
- Lecture notes are used instead
- If you want a book, borrow from a past class
- There are optional readings in the syllabus
  - Not for every subject

Lecture notes

- Downloadable from the class web page
  - Adobe Acrobat (pdf) format
  - Reduced form (6 to a page)

Lecture vodcast

- Vodcast of the lectures will be provided
- To me, these are a poor substitute for attending lecture
- Links will be posted on the class web page as the vodcasts become available
  - Often takes a few days
  - Sound may not be very good

Course web page

- Syllabus on the web
    - updates to the syllabus
    - links to labs
    - Study guides for the exams
    - Links to optional readings
    - Grades will be posted after the first exam
- This course does not use Blackboard

Course outline

- Neuroscience -- EXAM (17%)
- Perception, Attention & Memory -- EXAM (17%)
- Memory & Mental representation -- Exam (17%)
- Language -- Exam (17%)
- Reasoning
- Cumulative Final (17%)
Exams
- Mix of multiple choice and short answer
  - Students are often surprised at how much detail is expected in the short answer questions
- Detailed study guides will be provided at least one week in advance of an exam
- Beware the scheduling of the final exam!
  - The exam is during the final exam week
  - There are few excuses for changing the date

CogLab
- Homework
- You participate in classic experiments
- Total lab grade contributes to 15% of your class grade.
- Grade is based solely on completing the experiment, not on the quality of the data

CogLab
- Labs are listed on the syllabus
- They must be completed by 6:00 am at the date indicated in the syllabus
  - else you get no credit
  - Better to do it the night before
- Since I wrote CogLab, you get access to the experiments for free
  - (a $50 value!)
- See handout for instructions on getting started
- Registration code is on a label on the instructions
- First lab is due at 6:00 am on Wednesday!

Grading
- Straight scale
  - 98% - 100%  A+
  - 93% - 97%  A
  - 90% - 92%  A-
  - 88% - 89%  B+
  - 83% - 87%  B
  - 80% - 82%  B-
  - 78% - 79%  C+
  - 73% - 77%  C
  - 70% - 72%  C-
  - 68% - 69%  D+
  - 63% - 67%  D
  - 60% - 62%  D-
  - 0% - 59%  F
- No rounding up: 82.99 is a B-

Grading
- Last semester’s grades (Fall 2015)

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Frequency

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Instructor office hours
- Monday, Wednesday, Friday, 2:00 - 3:00 pm
  - Or by appointment
  - Psych 3186
  - Email: gfrancis@purdue.edu

Teaching assistant
- Grade exams
- Keep track of grades
- Have office hours
- May provide out-of-class study sessions for exams

Teaching assistant
- Amber Hunnewell
- Office: Peirce Hall, Room 264
- Office hours:
  - Monday and Wednesday 10:30-11:30 am
  - Thursday 12-p pm
- Email:ahunnewe@purdue.edu

Attitude
- During lectures: turn off cell phones, don’t read newspapers, don’t play games
- Questions are always welcome. I can adjust my lecturing pace accordingly
- Print out the lectures and bring them to class. Take notes during class. Not everything is on the slides.
- Everything we talk about in class is important
- This class is an introductory class, but that does not mean it is easy
  - It’s like Introduction to Physics or Introduction to Chemistry
  - Almost every other subtopic in psychology depends on the ideas in cognitive psychology
  - Everything is at least 10,000 times more complicated than what we discuss
- If you don’t find a topic interesting, just wait a week

Next time
- Cognitive neuroscience
- The brain
- The modularity hypothesis
- CogLab on Brain asymmetry due!
- What’s the deal with left and right brains?