C105 Brains & Minds, Robots & Computers
Fall 2013 Syllabus

**CLASS TIME AND PLACE**

Lecture:
Section 11662: Monday & Wednesday, 1:25 – 2:15 PM in room BH 003

Lab Sections:
Section 11663: Friday 9:05A – 9:55A
Section 11664: Friday 10:10A – 11:00A in room LH 030
Section 11672: Friday 11:15A – 12:05P

**INSTRUCTOR INFORMATION**

Instructor: Rick Hullinger
Office: PY A300B
Office Hours:
- Tuesday: 10:00 AM – 11:00 AM
- Wednesday: 2:30 PM – 3:30 PM in PY A300B
- Thursday: 12:00 PM – 2:00 PM in PY A300B
- Or by appointment
Office Telephone: 856-6854
Email Address: rahullin@indiana.edu

**LAB INSTRUCTOR INFORMATION**

Lab Instructor: Eran Agmon
Office: EG 836
Office Hours: Monday: 11:00 AM – 12:00 PM
- Or by appointment
Email Address: agmon.eren@gmail.com

**COURSE OVERVIEW**

This course will explore the main thrusts in cognitive science and robotics. The topics will include general questions about intelligence and artificial intelligence, as well as the mechanistic view of cognition. The second half of the semester will be spent comparing and contrasting the abilities of the human mind with the current capabilities of machines and robots. These comparisons should yield insights into the incredible abilities of the human mind as well as raise questions about what constitutes true intelligence. Hands-on experience in the laboratory section will allow students to get acquainted with both computer simulations of artificial agents and actual robots.

**READINGS**

Weekly readings will be assigned on Oncourse. It is important that you complete all of these readings before class so that you can understand the lecture and participate in our discussions. Many of the readings will be posted with one or two “reaction questions” to gauge your understanding to shape my presentation of the material. You are expected to answer these questions and send your responses to me via e-mail by midnight before class so that I can compile the answers and tailor the class accordingly. Your answers to these questions will determine your “class participation” grade.
LABS
Lab projects will be posted on Oncourse each week. The labs are designed to be completed during your lab section, but you may start work on them early and continue to work on them after your lab section if needed. Lab assignments will be submitted via Oncourse and must be turned in no later than 5 PM on the Monday following the lab section. Many lab assignments will have additional tasks that can be completed for extra credit.

Because there is limited seating and resources in the lab, it is critical that you attend the lab section to which you have been assigned.

EXAMS
There will be a mid-term exam on Wednesday, Oct. 9th, and a cumulative final exam during finals week. With the exception of the final exam, the course schedule is tentative and subject to change. However, I will do my best to make sure that the mid-term exam is on the date listed. Both exams will be closed book and closed note.

According to the Final Exam Schedule from the Office of the Registrar, the final exam for this course will be given on Friday, December 20th from 2:45 – 4:45 PM. The final exam will be a cumulative exam covering the full semester of material.

If you have a scheduling conflict or cannot take an exam at its appointed date and time, you must let me know as soon as possible. With the exception of extreme and unforeseen circumstances, contacting me the day of (or even worse, after) the exam will be considered an unexcused absence and will result in a 0 on the exam.

Grading
Your final grade is computed using the following formulas:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation (reaction question answers)</td>
<td>15%</td>
</tr>
<tr>
<td>Lab assignments &amp; projects</td>
<td>40%</td>
</tr>
<tr>
<td>Mid-term exam</td>
<td>20%</td>
</tr>
<tr>
<td>Final exam</td>
<td>25%</td>
</tr>
</tbody>
</table>

Grading Scale
A+: 97%-100%; A: 93%-96%; A-: 90%-92%;
B+: 87%-89%; B: 83%-86%; B-: 80%-82%;
C+: 77%-79%; C: 73%-76%; C-: 70%-72%;
D+: 67%-69%; D: 63%-66%; D-: 60%-62%;
F: Below 60%

RESPECT
In order for this class to work well, there must be a certain level of respect between you and me and between you and your fellow classmates. Please be smart with your in-class behavior. If you have to arrive late, enter quietly and sit in the back. If you believe that you may leave early, please sit in the back and slip out quietly. Please turn off your cell phones and do not text-message your friends while I’m teaching – your friends will all still be sleeping anyway. If you are being disruptive to me or to the class, I will ask you to leave.
FEEDBACK
Do not wait until the end of the semester course evaluations to let me know that I could be doing something better. Tell me as soon as possible so that I can make the class valuable and relevant as we go along.
If you have any feedback, good or bad, about the course or how it’s being taught, please feel free to send it to me anonymously using this link: http://www.indiana.edu/~rahteach/feedback.html

ACADEMIC HONESTY
This course is conducted under the University’s Ethics Code. Specifically, it is considered cheating if you obtain any kind of information about answers and solutions to the assignments in this course – exams and homework – from any non-intended source (including your peers) or conversely transfer such information to others. It is also considered cheating if you lie to me about an absence relating to a homework assignment or an exam. The punishment for academic dishonesty is failure of the course.

STATEMENT FOR STUDENTS WITH DISABILITIES
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact IU Disability Services for Students.

ANSWERS TO FREQUENTLY ASKED QUESTIONS
-- I do not take attendance. While I expect students to attend and participate in class, I understand that there will be times when you cannot make it. Realize, however, that what we cover in class is important and that you will still be held responsible for any materials we cover.
-- There is no curve and in general I do not round up.

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Copyright Richard A. Hullinger, 2013. All federal and state copyrights in my lectures and course materials are reserved by me. You are authorized to take notes in class for your own personal use and for no other purpose. You are not authorized to record my lectures or to make any commercial use of them whatsoever. You are not authorized to provide them to anyone else other than students currently enrolled in this course, without my prior written permission. In addition to legal sanctions for violations of copyright law, students found to have violated these prohibitions may be subject to University disciplinary action under the Code of Student Conduct. If I find that my course materials are being made available to others in violation of this policy, I reserve the right to limit or remove access to all slides, notes, and review materials.

DISCLAIMER
This syllabus is an outline of the course and its policies, which may be changed for reasonable purposes during the semester at the instructor’s discretion. You will be notified in class and / or via email if any changes are made to this syllabus, and an updated syllabus will be provided on Oncourse.