Syllabus (incl. tests, assignments, grading), CSC 191/291/21
Machines and Consciousness
(approx. lecture-by-lecture, with some slack)

1. Tue Feb. 2  Overview. Self-awareness (access consciousness) and phenomenal consciousness.  
   *Pinker, Could a computer ever be conscious?* (Corry & Alicia)

2. Thu Feb. 4  Robot self-awareness: propositions about itself in the head.  
   Knowledge representation and reasoning. *Printed notes.*


5. Tue Feb. 16 Language. McDermott, p.64-80. *Notes by instructor.*

6. Thu Feb. 18 Planning and decision making in robots. *Notes by instructor*

7. Tue Feb. 23 Continuation of above topics (spill-over).

8. Thu Feb. 25 A basic (self-aware) agent. *Vere and Bickmore ‘90*

9. Tue Mar. 2 Self-motivated agents in Gridworld. Free will? *D. Liu materials*

10. Thu Mar. 4 A glimpse of vision & robotics. McDermott, p.20-27, p.29-46, p.47-64;

11. Tue Mar. 9 The "easy" and "hard" problems of C. The Explanatory Gap. Defining C.  
    Philosophical zombies ("conceivability"/"absent qualia" argument).  
    *Blackmore ch.1.*

12. Thu Mar. 11 The brain and the role of C as the "publicity organ" of the brain.  
    Brain mechanisms in C. Sensory bias of C. Mental imagery and the inner voice.  


14. Thu Mar. 18 Split brains. Dreams and drugs. *Blackmore p.70-72 Ch.5 & ch.7 (to p.111).*

15. Tue Mar. 23 Robot phenomenal consciousness: "scannable" signal sites in the head?  
    The topology of sensory C. Could a robot feel pain, joy?  
    *Project teams (1-3 students per team), CSC 291 should be finalized* (with TA help,  
    if needed)

16. Thu Mar. 25 Decision making and free will. Libet's lagging will. Wegner & mistaken sense of agency  
    and nonagency. *Blackmore ch.6*

17. Thu Mar. 30  **BREAK DAY (NO CLASSES)**

17. Thu Apr. 1  Animal C. *Blackmore ch.8 (to p.124), Baars p.31-33;*

17. Tue Apr. 6  Affect and proto-affect. *Ortony, Norman & Revelle, ch. 7, Fellous & Arbib*
    **TEST 1 (OVERNIGHT TO WED APR 7, 11:59PM)**

18. Thu Apr. 8  Function & neural basis of emotions. *Rolls, ch. 5, Fellous & Arbib*

    **Project proposals due** (1 printed page, single-spaced)
20. Thu Apr. 15  Heated vs. dispassionate appraisals. Evolution of language and C. 
Arbib, ch. 12, Fellous & Arbib.

21. Tue Apr. 20  McDermott's "computational theory of C". McDermott, ch.3; 
see also summary p. 215.

22. Thu Apr. 22  McDermott's defense of his model of C. Zombies, color-deprived Mary, 
inverted spectra, Nagel's bat, Searle's Chinese Room, etc. McDermott, ch.4

23. Tue Apr. 27  Robots, people, and morality. McDermott, ch.6

24. Thu Apr. 29  TBD (overrun?)

25. Tue May 4  TBD (overrun? review?)

26. Thu May 6  Project presentations

Schedule of assignments

Tue Feb 9:  Lisp 1, due Thu Feb 25, 11:00am
Thu Feb 11:  Homework 1, due Thu Feb 18, 11:00am
Thu Feb 25:  Homework 2, due Thu Mar 4, 11:00am
Tue Mar 9:  Lisp 2, due Thu Mar 25, 11:00am
Thu Mar 11:  Homework 3, due Thu Mar 18, 11:00am
Tue Mar 23:  CSC 291 project teams (1-3 students per team) 
should be finalized (with TA help, if needed)

Thu Mar 25:  Homework 4, due Thu Apr. 8, 11:00am
Tue Apr 6:  TEST 1 (OVERNIGHT TO WED APR 7, 11:59PM)
Tue Apr 13:  Project proposals due (1 printed page, single-spaced).
Thu Apr 15:  Homework 5, due Thu Apr 22, 11:00am

Thu May 6:  CSC 291 PROJECT PRESENTATIONS; 
TEST 2 (NONCUMULATIVE, OVERNIGHT TO FRI MAY 7, 11:59PM)

Mon May 10:  Project report due

Grading

% weight 191/291
- 5 homework assignments (answer questions, write essays)  40 35
- 2 staged Lisp exercises (oriented towards "self-awareness")  26 16
- 2 tests (midterm & noncumulative final test)  34 24
- Gridworld project (teams of 1-3)  25