SYLLABUS

CSCI 380 /PHIL 364 - last update 1/10/08

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Class times: The lectures for this course will be from 3:30 until 4:45 on Tuesday and Thursday afternoons in O'Connell 254.

Accounts: You will access much of the course content via WebCT VISTA. Access to WebCT VISTA is via the University web portal. You will also be required to post the products of your group project (paper, presentation and test questions) on WebCT, where you will find a page listing team project products that will allow you to access the server.

Text: A packet of readings is available at Sir Speedy Printing, 730 Main Street. The packet is required. Please note that Sir Speedy does not take checks. A text is also available at the bookstore: **Blondie24: Playing at the Edge of AI**, by David Fogel, Morgan Kaufmann Publishers, 2001, ISBN: 1558607838.

Grading: Less than half (200 points out of 460) of your grade will be based on your performance on two tests. Each of these tests will be "cumulative" and will cover all of the materials you have had in lecture to that point in the course. Questions will be both essay and T/F. The remaining portion of your grade will be based on your project performance, which you will earn based on your group's scores on the project presentation, paper, and examination questions, amended according to your personal contribution, and on your completion of several written exercises/quizzes. Because your project performance is important, your score will be determined by combining student and faculty evaluations of your personal contribution within the group with student and faculty evaluations of the project. All students will be expected to assess (1) the contribution that others in the group made toward the project, (2) various projects, and (3) the class as a whole. The points earned by the

team project will be distributed among team members according to their rated contribution. **Students who do not complete the assessments will not receive credit for the project**.

Week 1 essay, a one page summary of where you think AI is and will be soon.	20
Project write-up, presentation, test questions, assessment of team members, etc	200
Written exercises(1)/quizzes(2)	60
Attendance of student presentations, 4 pts. each for 10 presentations	40
Each of three assessment surveys/quizzes, 10 points each	30
Test 1	100
Test 2 (Final)	100
Total	550

Roughly 55 percent of the class can expect to receive A's and B's. The remaining grades will be C's, D's, and F's. We grade using "the curve", which means that you will not necessarily need to score 90% or higher to earn an A. In fact, your position within the class is the best indicator of the grade you will receive. If you are in the 47th position in a class of 50, it is likely that you will earn an F. Conversely, if you are in the 4th position in the same class, you may well earn an A.

Tests: There will be two exams during the semester. Each of these will be "comprehensive" with regard to the materials presented in the course up to that point, including the presentations of student projects, and will be part essay, part T/F.

Week 1 essay: During your first week in the class, you will write an essay about **"What you think 'artificial intelligence' is, and whether you think scientists will some day create an artificial mind."** You should include information about why you think this will or will not happen.

Projects: You will be provided with a list of 10 project topics and be invited to sign up for your first, second and third choice for project topics. You will be assigned to a team according to your listed preferences for topics. Each team will research the assigned project topic, and will prepare (1) a research paper (with references, not just a "bibliography"), a presentation (in PowerPoint), and a set of at least 8 T/F questions that test for knowledge of the topic the team presented. Each presentation, including class discussion, will take a full class session. To receive full credit for your project and presentation, your group MUST post all required materials to the team web site on WebCT VISTA no later than the night before the presentation (Dr. Fisk will help you post the materials if you need help), and you must respond to the online questionnaire regarding the contribution that others in the group made toward the project. As noted above, you will also be required to

respond to the surveys about the various teams' presentations and the class as a whole.

Trust: We expect students to conform to the campus policies on Academic Honesty. These policies are defined at the following sites:

http://www.csuchico.edu/rs/pdf/Plagiarism_Tutorial.pdf
http://www.csuchico.edu/lins/Oasis/Ch4/IA1b.html
http://www.csuchico.edu/prs/EMs/EM04/em04_36.htm

SCHEDULE

Date	Topic	Lead	Reading	Due
1/29	Intro.: The Machine that Changed the World.	L/M		
1/31	What is intelligence? Measurement., models, & info. theory	L		**Essay 1**
2/5	More on information theory and intelligence	L	Blondie 24: pp. xiii-36	
2/7	The Mind/Body Problem	M	Packet: pp. 1-9	
2/12	The Mind/Body Problem (cont.)	M	Packet: pp. 10-19	
2/14	The Mind/Body Problem (cont.)	M	Packet: p. 20-31	
2/19	The Mind/Body Problem (cont.)	M		
2/21	Turing machines & basic computation	L	Blondie 24: pp 37-68	
2/26	More on computation: programming	L		
2/28	Intelligence & Perception (active vs. passive)	L	Blondie 24: pp 68-83	
3/4	Video: Mind Over Matter	M	Packet: pp. 32-40	
3/6	Video: Dennett on Consciousness	M		
3/11	Problems of pattern recognition& perception	L	Blondie 24: pp. 85-112	
3/13	**Test!!!**	L/M		**Test 1**
3/18	***** Spring Break *****			
3/20	***** Spring Break *****			
3/25	**AI: Expert Systems (Project 1; L)**	(L)	Blondie 24: pp. 112-159	
3/27	**AI: Symbolic Learning Systems, especially CYC (Project-2; L)**	(L)	Blondie 24: pp. 163-231	
4/1	The Qualia problem	M	Packet: pp. 41-45	
4/3	**The Chinese Room (Project 3; M)**	(M)	Packet: pp. 46-51	
4/8	**Misunderstanding human intelligence (Project 4; M)**	(M)	Packet: pp. 61-69	
4/10	**What it's like to be a bat (Project 5; M)**	(M)	Packet: pp. 52-60	
4/15	Consciousness	M		
4/17	Real bug detectors & the PDP approach	L	Blondie 24: pp. 233-303	
4/22	**Training Perceptrons & their limitations (Project 6; L)**	(L)		
4/24	**Genetic algorithms in AI (Project 7; L)**	(L)	Blondie 24: pp. 303-319	
4/29	Determinism and free will	M	Packet: pp. 70-75	
5/1	**Soft determinism (Project 8; M)**	(M)		
5/6	**Hard determinism (Project 9; M)**	(M)	Packet: pp. 76-81	
5/8	Quantum mechanics, determinism & intelligence	L		
5/13	**Strong AI Vs. Weak AI & the future (project 10; L)**	(L)	Blondie 24: pp. 303-319	
5/15	Maxwell's Demon: Relating information to the physical world	L		
5/22	Thursday: 2:00-3:50:**COMPREHENSIVE FINAL**			**Final**