

## **ARTI/CSCI-4540/6540: Symbolic Programming**

(prereq: CSCI-1302 or POD; pre/coreq: CSCI/PHIL-4550/6550)

### **Description (Theme: Problem Solving Using AI Techniques)**

This course provides an introduction to programming in LISP and PROLOG, with emphasis on artificial intelligence techniques. Other languages used for artificial intelligence work will be presented more briefly (time permitting).

Instructor: Don Potter

Office: GSRC-113 (enter through 111), Phone: 542-0361, Hours: \_\_TBD\_\_

Notes: Send an email if I'm not in. If 111 is locked, ring the doorbell and wait a few seconds.

### **Texts:**

- 1) *PROLOG Programming in Depth*, (1996 edition) by Covington, Nute, and Vellino  
Coverage: Chapters 1-9, (maybe parts of 10-12).  
Get it here: <http://www.cs.uga.edu/~potter/SymProg/PPID-2013.pdf>
- 2) Lisp text: <http://www.cs.uga.edu/~potter/ArtIntell/6540lisptexts.htm>  
Don't purchase anything yet.

### **References:**

- Sterling & Shapiro, *The Art of PROLOG Programming*, MIT Press, 1986.
- Norvig, *Artificial Intelligence Programming*, Morgan Kaufmann, 1992.
- Texts by Bratko; Clocksin & Mellish; Steele; Winston; Wilensky; and Current literature.
- LISP Notes (see Dr. Covington's notes; there's a link).
- AI on the Web: <http://www.cs.berkeley.edu/~russell/ai.html>

### **Free Software:**

SWI Prolog (<http://www.swi-prolog.org/>), and Common Lisp (Allegro, GNU, etc.) (see my web page)

### **Grading:**

Assignments	45%	(Late assignments NOT accepted)
Exams	30%	(around Sept 17 <sup>th</sup> & Oct 29 <sup>th</sup> )
Final Exam	25%	(Dec. 10th: at noon - tentative)

### **Policies:**

- All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work. Be sure you are familiar with the departmental policy as well; see attached or visit: <http://www.cs.uga.edu/~potter/ArtIntell/AcademicHonesty.htm>.
- No make-up exams are given.
- Attendance is required. A portion (at most 10%) of the assignments grade percentage is allocated to class participation.

NOTE: The course syllabus is a general plan for the course; deviations announced in class by the instructor may be necessary.

## **Computer Science Departmental Policy Statement: Academic Honesty**

The Computer Science Department recognizes honesty and integrity as necessary to the academic function of the University. Therefore all students are reminded that the CS faculty requires compliance with the conduct regulations found in the University of Georgia Student Handbook. Academic honesty means that any work you submit is your own work.

Common forms of academic dishonesty against which students should guard are:

1. Copying from another student's test paper or laboratory report, or allowing another student to copy from you;
2. Fabricating data (computer, statistical) for an assignment;
3. Helping another student to write a laboratory report or computer software code that the student will present as his own work, or accepting such help and presenting the work as your own;
4. Turning in material from a public source such as a book or the Internet as your own work.

Three steps to help prevent academic dishonesty are:

1. Familiarize yourself with the regulations.
2. If you have any doubt about what constitutes academic dishonesty, ask your instructor or a staff member at the Office of Judicial Programs.
3. Refuse to assist students who want to cheat.

All faculty, staff and students are encouraged to report all suspected cases of academic dishonesty. All cases of suspected academic dishonesty (cheating) will be referred to the Office of Judicial Programs. Penalties imposed by the Office of Judicial Programs may include a failing grade in the course and a notation on the student's transcript. Repeated violations are punishable by expulsion from the University. For further information please refer to the UGA Code of Conduct, available at the URL below.

[http://www.conduct.uga.edu/code\\_of\\_conduct/codeofconduct.pdf](http://www.conduct.uga.edu/code_of_conduct/codeofconduct.pdf)