

CSCI 462

Artificial Intelligence

Contents

1	Overview	2
1.1	Catalog Description	2
1.2	Prerequisites	2
1.3	Detailed Description	2
2	Course Administration	2
2.1	The People	2
2.2	Class Meetings	2
2.3	Textbooks	3
3	Online Resources	3
3.1	CSCI 462 Web Page: cs.slu.edu/~goldwasser/462	3
3.2	Electronic Assignment Submission	3
3.3	Email with Instructor	3
4	Graded Work	4
4.1	Assignments (60%)	4
4.2	Exams (40%)	4
4.3	Course Grades	4
4.4	Academic Integrity	4
4.5	Late Policies	5
5	Additional Information	6
5.1	Students with Disabilities or Special Needs	6
5.2	Tutoring Resources at SLU	6
5.3	Computing Resources at SLU	7

1 Overview

1.1 Catalog Description

“Technologies of knowledge representation, including neural networks and object-attribute-value triples; methods of inference, pattern matching techniques; inexact reasoning and fuzzy logic techniques; introduction to expert systems; advanced search techniques; individual AI projects.”

1.2 Prerequisites

The official prerequisite is Data Structures (CSCI 180) or the equivalent.

1.3 Detailed Description

under construction...

2 Course Administration

2.1 The People

Instructor: Dr. Michael Goldwasser
Email: goldwamh@slu.edu
Web: <http://cs.slu.edu/~goldwasser/>
Office: Ritter Hall 6
Phone: (314) 977-7039

Office hours: Tuesdays 10:00–11:00am
Wednesdays 1:00–2:00pm
Fridays 10:00–11:00am
or by appointment

Please make sure to take advantage of office hours, as they offer a wonderful opportunity for individual attention.

2.2 Class Meetings

The material will be presented in three weekly lectures with class participation. Attendance is expected, as these meetings will offer learning opportunities that cannot be re-created purely from readings. That said, for those who miss a lecture, information on the lecture topic can often be found on the course schedule web page.

Time: Mon/Tue/Wed/Fri, 12:00–1:50pm
Place: Ritter Hall 121

2.3 Textbooks

The required textbook for this class is

Title: *Artificial Intelligence: A Modern Approach*
Authors: Stuart Russell and Peter Norvig
Publisher: Prentice Hall
Website: aima.cs.berkeley.edu

A third edition of this book was just released. I recommend the new edition, but you are welcome to use the second edition (2003) if you wish.

	Third Edition (2009)	Second Edition (2003)
ISBN-10:	0136042597	0137903952
ISBN-13:	978-0136042594	978-0137903955

3 Online Resources

3.1 CSCI 462 Web Page: cs.slu.edu/~goldwasser/462

With the exception of the first day's printed handout, most of the information for this course will be distributed only by means of the course web page. This web site will contain all assignments, a schedule of lectures, detailed lecture notes and links to many other sources of information.

The web page contains some information (e.g. solutions, submitted assignments, individual grades) which is more sensitive and therefore which will be available to students in the class only after they have identified themselves properly. To gain access to these parts of the web page, a student must first complete an online questionnaire, creating a unique identity and password.

3.2 Electronic Assignment Submission

All assignments for this course must be submitted electronically! The submission procedure will be done through the course web page, and allows students to submit from any computer connected to the Internet. Each student in this class will be selecting a unique username/password combination solely for use in identifying the student when using the course web page.

3.3 Email with Instructor

Face-to-face contact in class and in office hours is most desirable. Yet email is a convenient form of communication as well. I try to respond to email promptly, including at least once each evening when possible.

If your question involves your progress on a current programming assignment, my response will be more informative if you can point out the specific problem you have

encountered, and if I am able to see all of your source code. Therefore I strongly suggest that you either attach all relevant files to the email or submit preliminary versions of such files through our online system.

4 Graded Work

4.1 Assignments (60%)

There will be a series of project-based assignments for the course. On certain assignments, you will be required to work individually; on others you will be allowed to work in pairs. Please respect the policy on Academic Integrity as given in Section 4.4. The assignments will be submitted electronically and generally due at 11:59pm on the assigned due date.

4.2 Exams (40%)

- **Midterm Exam (15%)**, Friday, 5 Mar 2010, 9:00–9:50 a.m
- **Final Exam (25%)**, Friday, 7 May 2010, 12:00–1:50pm

4.3 Course Grades

Letter grades will be based on each students overall percentage of awarded points according to the following formula.

- Student percentage above 90% will result in a grade of A or better.
- Student percentage above 87% will result in a grade of A- or better.
- Student percentage above 83% will result in a grade of B+ or better.
- Student percentage above 80% will result in a grade of B or better.
- Student percentage above 77% will result in a grade of B- or better.
- Student percentage above 73% will result in a grade of C+ or better.
- Student percentage above 70% will result in a grade of C or better.
- Student percentage above 67% will result in a grade of C- or better.
- Student percentage above 60% will result in a grade of D or better.
- Student percentage below 60% will result in a grade of F.

Any modification to this scale at the end of the year will be *in favor of the students*. That is we may later decide to award an A to a student who is slightly below the above cutoff, but we certainly will not deny an A from someone who is above the cutoff.

4.4 Academic Integrity

Students are expected to have read and abide by the University statement on Academic Integrity available on page 58 of the Saint Louis University's Undergraduate

Catalog. A more detailed policy statement is given by The College of Arts & Science (http://www.slu.edu/colleges/AS/academic_honesty.html) which apply to this course as well.

In addition to those general statements, we wish to discuss our policy in the context of this course. When it comes to learning and understanding the **general course material**, you may certainly use other reference materials and you may have discussions with other students in this class or other people from outside of this class. This openness pertains to material from the text, practice problems, general syntax and use of the Python language or other computing tools.

However, when it comes to **work which is submitted for this course**, you are not to use or to search for any direct or indirect assistance from unauthorized sources, including but not limited to:

- other students in this class
- past students, whether from this school or other schools
- other acquaintances
- other texts or books
- online information other than that referenced by course materials

Acceptable sources of information include consultations with the instructor, teaching assistants, or members of organized tutoring centers on campus, as well as any materials explicitly authorized in an assignment. Even in these cases, if you receive significant help you should make sure to document both the source of the help as well as the extent.

On certain assignments, we will explicitly allow students to work together. In this case, conversations between partners is both permissible and required. Furthermore, all students are expected to contribute significantly to the development of the submitted work. It is unethical to allow a partner to “sign on” to a submission if that partner did not significantly contribute to the work.

Any violations of these policies will be dealt with seriously. Penalties will apply as well to a student who is aiding another student. Any such violations will result in a minimum penalty of a zero on the given assignment which cannot be dropped, and severe or repeated violations will result in an immediate failing grade in the course. Furthermore all incidents will be reported in writing to the Department and/or the Dean, as per the College procedure.

4.5 Late Policies

All exams must be taken promptly at the required time. Requests for rescheduling an exam will only be considered if the request is made prior to the start of the exam, or else in an “emergency” situation with appropriate documentation.

For assignments, we wish to allow students to continue to work comfortably beyond the official deadline when a little more time will result in more progress, while at the

same time discourage students from falling significantly behind pace and jeopardizing their success on future assignments. Our solution is the following exponentially decaying late formula (some have suggested that we should offer extra credit to anyone who fully understands this formula).

We will consider an assignment submission “complete” when any part of the assignment is last submitted or modified. Any assignment which is not complete promptly by its due date and time will be assessed a penalty based on the formula $S = R \cdot e^{-h/173}$, where S is the grade given, R is the grade the work would have received had it been turned in on time, and h is the amount of time (in hours or fractions thereof) that the work was late. Examples:

- work turned in 1 hour late receives over 99.6% of its original credit
- work turned in 5 hours late receives over 97% credit
- work turned in one full day late receives less than 88%
- work turned in two full days late receives less than 76%
- work turned in five days late receives less than 50%

The above policies will be waived only in an “emergency” situation with appropriate documentation.

5 Additional Information

5.1 Students with Disabilities or Special Needs

In accordance with the Americans with Disabilities Act, reasonable accommodations may be made to assist a student with a documented disability.

Any student who feels that he/she may need academic accommodations in order to meet the requirements of this course, as outlined in the syllabus, due to presence of a disability should contact the Office of Diversity and Affirmative Action. Please telephone the office at 314-977-8885, or visit DuBourg Hall Room 36. Confidentiality will be observed in all inquiries.

5.2 Tutoring Resources at SLU

Our department employees many junior/senior computer science majors to help out in our department labs. Those students are also available to provide assistance with course materials at such times.

Our department web page maintains a current list of the available times and locations at cs.slu.edu/undergrad-cs/lab-hours.

As stated in the Academic Integrity policy of Section 4.4, these workers are an acceptable resource for help, yet you should still document both the source of the help as well as the extent, if significant.

5.3 Computing Resources at SLU

Our department runs a computer server named `turing` that serves as the primary computing environment for this course. If you do not already have an account on this machine, please let us know and we will create a new one. For further documentation regarding use of `turing`'s facilities, see cs.slu.edu/computing-resources.

Please note: you are not explicitly required to use `turing` as your computing platform, it is simply the only platform what we will officially support. If you wish to use another platform that offers you sufficient support for completing your assignments, please feel free to do so.