

University of Detroit Mercy
College of Engineering and Science
Department of Mathematics, Computer Science and Software Engineering

CSSE-5480 01 Artificial Intelligence
Winter 2017

DESCRIPTION OF COURSE: Intelligent agents, solving problems by searching, informed search methods, game playing, logical reasoning, first-order logic, knowledge bases, inference in first-order logic, learning from observations, learning in neural and belief networks, practical natural language processing, expert systems, intelligent tutoring systems, and case-based reasoning.

PREREQUISITES BY TOPIC: Discrete mathematics and data structures.

REQUIRED TEXT: Artificial Intelligence: A Modern Approach, 3/E, Stuart Russell and Peter Norvig, Prentice Hall, ISBN-13: 9780136042594, 2010.

RECOMMENDED TEXTS: Artificial Intelligence: Structures and Strategies for Complex Problem Solving, 6/E, George F. Luger, Addison-Wesley, ISBN: 9780321545893, 2009.

INSTRUCTOR: Dr. Shadi Bani Taan – (313) 993-1060
Email: banitash@udmercy.edu.

OFFICE HOURS: Monday & Wednesday 01:00 pm-02:00 pm or by appointment.

LECTURE: MW 3:30 pm-4:45 pm, Room E222.

COURSE OBJECTIVE: This course will allow students to know what artificial intelligence (AI) is and to know what kinds of things AI is capable of doing. Also it will allow them to have the knowledge and skills to become more expert in AI theory and technology.

COURSE OUTCOMES: Upon completion of the course, students will be able to*:

1. Know general knowledge of the topic of AI. (a, b, j)
2. Know and apply knowledge representation and reasoning methods based on first-order logic. (a, b, j)
3. Understand both uninformed and informed search. (a, b, j)
4. Understand heuristic search. (a, b, j)
5. Gain working knowledge of Prolog programming language. (a, b, c, d, l, j)
6. Learn some machine learning techniques. (a, b, c, j)

**Letters refer to Computer Science Program Outcomes*

GRADING:

Participation	10%
Project	40%
Assignments	20%
Term Paper	10%
Final Exam	20%

EXAM SCHEDULE: Saturday April 29, 2:00PM-3:50PM.
(TENTITATIVE)

GRADING SCALE:

93-100% A	87-89% B+	77-79% C+	69-67% D+
90-92% A-	83-86% B	73-76% C	60-66% D
	80-82% B-	70-72% C-	0-59% F

IMPORTANT DATES:

Jan 15	Last Day to Add a Class
Jan 15	Last Day to Drop a Class without a "W"
Jan 16	MLK Holiday (UNIV CLOSED)
Feb 28	Mid-term Grades are due
Mar 6-11	Spring Break
Mar 13	Advising for Fall begins
Mar 20	Registration for Fall begins
Mar 26	Honors Convocation
Mar 30	Last Day to Withdraw from Class
Apr 14-16	Easter Recess (UNIV CLOSED)
Apr 25-29	Final Exam Week
Apr 29	Official End of Term II/Winter
May 1	Final grades due
May 13	Baccalaureate/Commencement

LATE ASSIGNMENTS:

Due dates will be provided for each assignment when it is posted. Late assignments will be accepted with a penalty of 10% per day late. No extensions will be given due to illness, school activities, etc. since there is plenty of time to complete assignments before the due date. Extensions will be considered in the case of serious family emergencies, extended illness, or other lengthy absence only, and must be requested prior to the due date.

ACADEMIC INTEGRITY:

Students are expected to conform to a high standard of honesty and integrity in this course. Copying the work of someone else and other forms of cheating are strictly prohibited. Permitting or tolerating such behavior is also prohibited. The minimum penalty for any offense is a 0 on that assignment. The culprits may be subject to additional sanctions, up to and including expulsion from school for serious offenses, as prescribed by the University Catalog and the Engineering and Science Student Handbook.

Disability Support Services and Accommodations:

If you need an accommodation because of a disability, have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please contact:

Emilie Wetherington, Director
Disability Support Services.
McNichols Campus Library, Room 328
Email: gallegem@udmercy.edu
Phone: 313-993-1158

It is very important for students to be proactive with regard to requesting their disability accommodations every semester. Students are encouraged to have open communication with their professors. However, it is never a requirement for students to disclose their disabilities to anyone except the Director of Disability Support Services, and only if they wish to request accommodations. You must be registered with Disability Support Services and your faculty must receive official notification from the DSS office before they can make arrangements for your accommodations.