

# Syllabus

Course title and number	CSCE 631
Term (e.g., Fall 200X)	Spring 2013
Meeting times and location	Monday, Wednesday & Fridays 15:00 -15:50, HRBB 126

## Course Description and Prerequisites

Fundamental concepts and techniques of intelligent multi-agent systems: the course will balance Engineering and Science aspects of this distributed paradigm. It will address how to build software agents, how cooperation and communication is usefully employed, and how we can understand and model collectives that result from multiple of these agents.

Prerequisite: CSCE 420 (Artificial Intelligence) - or an equivalent AI course as an undergrad.

## Instructor Information

Name	Dr. Dylan Shell
Telephone number	979-843-2369
Email address	dshell@cse.tamu.edu
Office hours	Wed 16:00-17:00 (except when there is a dept. seminar), <u>and</u> by appointment.
Office location	HRBB 333b

## Learning Outcomes or Course Objectives

- *List and understand the basic techniques for creating intelligent agents.*
- *Create a successful multi-agent implementation illustrating the operation of one of these methods.*
- *Determine the fit of the paradigm given a particular problem.*
- *Be able to evaluate such multi-agent systems.*

This will be measured by the final project.

## **Textbook and/or Resource Material**

*Wooldridge, M. (2009). An Introduction to Multiagent Systems. Second Edition. Wiley.*

## **Grading Policies**

Grades will be based on:

25.00% Class discussion and participation

35.00% Presentation of supplementary research/review

40.00% Final project

The grading scale is:

A 90-100

B 80-89

C 70-79

D 60-69

F 59 or below

## **Course Topics, Calendar of Activities, Major Assignment Dates**

Syllabus topics and readings are subject to change, exact dates depend on class progress. They will be posted on the course website.

The sequential categorization of topics will progress as follows:

1. Introduction and Definitions (Chapters 1-2)
2. Building agent systems (Chapters 3-5)
3. Communication, cooperation, etc. (Chapters 6-10)
4. Decision-making and modeling (Chapters 11-17)

Between these topics, we have class lead discussion of additional topics including: Learning, Alife, Robotics.

## **Americans with Disabilities Act (ADA)**

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, in Cain Hall, Room B118, or call 845-1637. For additional information visit <http://disability.tamu.edu>

## **Academic Integrity**

For additional information please visit:

<http://www.tamu.edu/aggiehonor>

*"An Aggie does not lie, cheat, or steal, or tolerate those who do."*

## **Policy on Missed Work**

Material missed due to recognized absences (illness with doctor's excuse, death in the family) can be made up for full credit. Late material is accepted solely at the discretion of the instructor.