

# CS585 Computer Security

## Syllabus

Instructor: Feng Zhu  
Office: Technology Hall N346  
Email: fzhu@cs.uah.edu  
Phone: 824-6255  
Class: Technology Hall N308 Tuesday & Thursday 2:20-3:40PM  
Office Hour: Technology Hall N346 Monday 3:00-4:00, Thur. 3:40-4:40PM or by appointment

### Objective

The course will study the foundation in computer security. Policy (security policies, confidentiality policies, and Integrity policies). System design principles, identity in computer systems, and user security. Basic cryptography. Authentication, access control mechanisms, system assurance and auditing will be addressed. Vulnerability and risk analysis.

### Prerequisites

CS490 or CS470.

### Text Book

Required text book, "Computer Security", by Matt Bishop,

Other references, optional, "Security Engineering" (2nd Edition) by Ross Anderson

### Tentative Course Outline

- Part 1 Introduction
- Part 2 Foundations
- Part 3 Policy
- Part 4 Cryptography
- Part 5 Systems
- Part 6 Assurance
- Part 7 Special Topics
- Part 8 Practicum
- Usability and Psychology

Midterm Exam 1 Feb. 8  
Midterm Exam 2 Mar. 15  
Final Exam May 3 3:00-5:30PM

### Grading

- A 90-100
- B 80-89
- C 70-79
- D 60-69
- F <60

Midterm Exam 1.....20%  
Midterm Exam 2.....20%

Final Exam .....	30%
Quiz and attendance .....	5%
Presentation.....	10%
Project .....	15%

## Late Policy

Unexcused late work will be accepted with a late penalty of 50%. The students have one week for raising questions on grading after the return of a graded assignment.

## UAH COMPUTER SCIENCE DEPARTMENT POLICIES AND PROCEDURES

### 1. Responsibilities of the teacher

- Provide a detailed syllabus. This syllabus should list office hours, course objectives, textbooks, references, prerequisites, and grading policy/method of assessment.
- Come to class well prepared, on time, and make full use of the class time.
- Provide timely and adequate feedback on grades. Return graded material promptly.
- Conduct final exam at the time designated in the class schedule. Never post grades.
- Not assign **new** work (i.e. not listed on syllabus) that is due in last two weeks of classes.
- Avoid leaving the examination room without a proctor. Provide paper for exams.
- Make reasonable use of the assigned textbook.
- Check students have proper prerequisites. Instructor does not waive assigned prerequisites.
- **Report all incidences of academic misconduct to the Department and VP for Student Affairs**

### 2. Responsibilities of the student (see also, Student Handbook Article II)

- 1) Come to class with the proper prerequisites, well prepared, on time, and make full use of the class time.
- 2) Provide adequate notice of anticipated absences and take full responsibility for finding out about missed work, announcements, and assignments.
- 3) Submit assessment material on time and submit **only your own work**. (see integrity)
- 4) Do not allow other students to copy your work.
- 5) Read and understand the syllabus and follow announced policies.

### 3. Integrity

We expect CS instructors and students to conduct themselves in a professional manner. Students are subject to all the provisions in the UAH Code of Student Conduct, which is available free from the Office of Admissions and Records. Information on plagiarism and other forms of misconduct is presented in the **Student Handbook Article**

**III. Departments are obliged to report all student misconduct to the Office of Student Affairs.**

### 4. Complaint Procedure

If you have difficulties or complaints related to this course, your first action should be to discuss them with your instructor. If such a discussion would be uncomfortable for you or fails to resolve your difficulties, you should ask for a meeting with the Chair of the Computer Science Department in Technology Hall N-300, info@cs.uah.edu, telephone 824-6088. If you are still unsatisfied, you should discuss the matter with Dr. Debra Moriarity, Associate Dean of the College of Science, moriard@email.uah.edu. Dr. Moriarity's office is CS 207 Materials Science.

### 5. Students with disabilities

Your instructor would like to hear from anyone who has a disability that may require a modification of seating, testing, or other class procedures. Please see instructor after class or during office hours to discuss appropriate modifications. You should also contact Student Development Services in UC 113 (Ph. 824 6203) for further assistance.

### 6. Student computer account

Students enrolled in any CS course are entitled to an account on the departmental computer network. Use of such an account is subject to departmental and university policies. To apply for an account, and see the current policies, go to the departmental web site at <http://www.cs.uah.edu/account/>

## **7. Examination policy**

In response to past student complaints about problems during examinations, the Computer Science Department has developed the following guidelines for in-class examinations in all courses.

1. Come to the exam prepared to complete it without a break. If you think you will need a break, please inform the proctor before the exam if possible.
2. Do not communicate with other students. Talk only to the instructor.
3. Whenever you leave the exam room, turn in your exam.
4. Use only the paper provided by the instructor for all writing.
5. If assigned a specific seat, remain in that seat.
6. Unless specifically permitted by the instructor, use no books or other reference materials. Do not bring calculators, computers, pocket-organizers, cell phones, pagers, or other electronic devices to the exam.

## **Official UAH Statement on Plagiarism**

“UAH is committed to the fundamental values of preserving academic honesty as defined in the Student Handbook (7.III.A). The instructor reserves the right to utilize electronic means to help prevent plagiarism. Students agree that by taking this course all assignments are subject to submission for textual similarity review to Turnitin.com. Assignments submitted to Turnitin.com will be included as source documents in Turnitin.com's restricted access database solely for the purpose of detecting plagiarism in such documents. The terms that apply to the University's use of the Turnitin.com service, as well as additional information about the company, are described at [www.uah.edu/library/turnitin/](http://www.uah.edu/library/turnitin/).”

The following information is from <http://www.uah.edu/library/turnitin/about.htm>: “Turnitin.com allows the student or educator to upload a paper into the Turnitin.com database, where software will then use algorithms to create “digital fingerprints” that can identify similar patterns in text (“About Turnitin.com”). Then the paper is matched to billions of web pages, paper mill essays, and student papers submitted online. In an hour or less, Turnitin.com creates an “originality report” that highlights any passages from the paper that might not be authentic, and lists web sites and other resources with content that matches that in the paper (“About Turnitin.com”).

Students can use Turnitin.com to:

- Quickly track down sources used in their essays, minimizing the chance that they will forget to cite sources.
- Learn about the concept of plagiarism and its consequences for the student, course, and the academic community as a whole.
- Acquire tips on how to avoid both Internet and conventional plagiarism.
- Learn guidelines for proper citation.
- Gain strong research and writing skills.
- Clarify misunderstood concepts like fair use, public domain, and copyright laws.”

For more information please visit <http://www.uah.edu/library/turnitin/>.

*The students are urged to use turnitin.com before the submission of their papers. The instructor will use turnitin.com in the evaluation of the papers.*