

Arizona State University
School of Computing, Informatics and Decision Systems Engineering

CSE 465 – Spring 2018

Instructor: Carlos Rubio-Medrano, Ph.D.

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Office Hours: Wednesdays 4:30pm–5:30pm, and by appointment

Meeting Times: Monday and Wednesday, 3:05pm – 4:20pm (CAVC 351).

Course TA: Natasha Mittal

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Office Hours: TBA

Course Description:

This course will provide students with a basic and comprehensive understanding of the problems of *information assurance* (IA) and the solutions to these problems, especially the security of information on computers and networks. This course will focus on the IA technology as well as IA policy, management, legal, and ethical aspects.

Prerequisites: CSE 310 or equivalent.

Recommended Textbook: All material for the course will be provided in lecture, however we will use an excellent textbook to supplement lecture.

Introduction to Computer Security.

Matt Bishop

ISBN: 0321247442

Course Communication:

All announcements and communications for the class will take place through the class Blackboard site.

In addition, students may use the class Blackboard's discussion forums to ask questions or clarifications, and the TA, Instructor, or other students can answer. Note that the advice in "How to Ask Questions the Smart Way" (<http://www.catb.org/~esr/faqs/smart-questions.html>) will increase the chances of getting your question answered. While I highly encourage students to help each other on the class forums, please do not go overboard and send your fellow student code (this will be considered cheating). It is better to point out their mistake or direct them to a resource that can help solve their problem, rather than giving them the answer. Note that sharing solutions or answers is expressly prohibited and will result in academic sanctions.

Also, please if at all possible use the class forums for communication to me or the TAs (unless the communication is private). This way, the entire class will benefit from your question. Note that if we deem it necessary and helpful, we will post to the class forums when replying to an inquiry that may be relevant to everybody (protecting the privacy of the original requester of course).

Course Topics

- Security Objectives
- Security Mechanisms
- Security Attacks and Threats
- Access Control
- Cryptography
- Authentication
- Network Security
- Web Security
- System Security
- IA Policy and Management
- Risk Assessment and Risk Management
- Assurance
- Privacy and Anonymity
- Legal and Ethical Issues

Assessment

Students will be evaluated on their performance on homework and exams.

Homework Assignments

There will be three–five homework assignments in the course, covering the material presented in the lectures.

Midterm Exam

There will be a midterm exam. The exam will cover the material discussed from the lectures and the assignments. No notes or outside material/devices will be allowed.

Final Exam

There will be a final exam that will cover all material presented throughout the course, with an emphasis on material from the second half of the class. No notes or outside material/devices will be allowed.

Grading

Area Weight % Homework 50

Midterm Exam 25

Final Exam 25

The preliminary thresholds for assigning a letter grade are the following:

Letter Grade	Threshold
A+	97
A	93
A-	90
B+	86
B	83
B-	80
C+	74
C	70

I reserve the right to curve the grades (by lowering the thresholds), depending on the circumstances.

Homework Due Dates and Exam Dates

Homework due dates and exam dates will be posted well in advance on the class website and announced in class.

For each day an assignment is late, a 20% deduction will be assessed. Exams will be given in class and are closed book, closed note, unless otherwise stated. Makeup exams are typically not given unless under extenuating circumstances. Laptops, phones, calculators, and other smart devices are not allowed during exams.

If an exam date conflicts with a religious holiday (in accordance with ACD 304-04) or other university sanctioned activities (in accordance with ACD 304-02) you should let me know at least two weeks before the exam date to schedule a makeup exam.

Special Accommodations

Students requesting disability accommodations should register with the Disability Resource Center (DRC) and present the instructor with appropriate documentation from the DRC.

Plagiarism and Cheating

Plagiarism or any form of cheating in assignments, projects, or exams is subject to serious academic penalty. You are allowed to use code snippets that you find online (StackOverflow or otherwise) provided that you provide, as part of a comment in your source code, the source of the code. The snippets should not constitute a significant part of your code. Using another students' code, past or present, even with a citation is a violation of the academic integrity policy.

There is a zero tolerance policy in this class: any violation of the academic integrity policy will result in a zero on the assignment and the violation will be reported to the Dean's office. Plagiarism is taken very seriously in this course.

Examples of academic integrity violations include (but are not limited to):

- Sharing code with a fellow student (even if it's only a few lines).
- Collaborating on code with a fellow student, unless explicitly allowed. □ Submitting another student's code as your own. □ Submitting a prior student's code as your own.

Posting your assignment code online is expressly forbidden, and will be considered a violation of the academic integrity policy. Note that this includes working out of a public Github repo.

The Student Academic Integrity Policy of Arizona State University requires each student to act with honesty and integrity and to respect the rights of others in carrying out all academic assignments (see:

http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm) There are a number of actions that constitute a violation of the policy. These actions **include, but are not limited to:**

- practicing any form of academic deceit;
- referring to materials or sources or employing devices (e.g., audio recorders, crib sheets, calculators, solution manuals, or commercial research services) not specifically authorized by the instructor for use during tests, quizzes, homework, and class activities;
- acting as a substitute for another person in any academic evaluation or using a substitute in any academic evaluation;
- possessing, buying, selling, or otherwise obtaining or using, without appropriate authorization, a copy of any materials intended to be used for academic evaluation in advance of its administration;

- depending on the aid of others to the extent that the work is not representative of the student's abilities, knowing or having good reason to believe that this aid is not authorized by the instructor;
- providing inappropriate aid to another person, knowing or having good reason to believe the aid is not authorized by the instructor;
- submitting the ideas or work of another person or persons without customary and proper acknowledgment of sources (i.e., engaging in plagiarism);
- permitting one's own ideas or work to be submitted by another person without the instructor's authorization; or
- attempting to influence or change any academic evaluation or record for reasons having no relevance to class achievement.

University policy allows for cheating sanctions ranging from zero credit for an assignment to expulsion (without expectation of readmission) from the University. **Any student who is found to have violated the University's Academic Integrity Policy in this course, no matter how minor the violation, will at a minimum receive an E in the course.**

Professional and Ethical Behavior:

Students in this class are expected to treat others fairly, with respect and courtesy, regardless of such factors as race, religion, sexual orientation, gender, disability, age, or national origin. In this class, you are expected to contribute to the overall campus climate such that others feel welcome, are respected, and are able to develop to their full potential. This will allow each person to contribute to the success of the class as a whole. ASU and the College of Engineering are committed to maintaining a productive, enjoyable and diverse campus environment.

Students are expected to effectively communicate ideas. Inappropriate language (written and oral) does not effectively communicate your ideas to an audience. Inappropriate language includes not only profanity, but also words that are demeaning to a person or group (racially, sexually, ethnically, etc.).

You are expected to participate in the various classroom activities, including:

- coming to each class on time and staying until dismissed;
- following instructions given by the instructor, including actively working on whatever assignment has been given;
- not consuming any food or drink while in the ASU classrooms, and not bringing any open containers of food or drink into the classrooms; and
- avoiding disruptive side conversations.

You are expected to make appropriate use of ASU facilities and property, including:

- leaving a clean work space – tables, floors and chairs; all trash picked up and disposed of;
treating walls, furniture and floors properly –putting feet on tables and chairs, etc., not writing upon or disfiguring furniture; and
- leaving computers as you would furniture – clean and ready to use, without any remaining software, links, screen savers or settings that will offend or impede the efforts of subsequent users.

These are consistent with university-wide behavioral expectations described in the various codes of conduct and policies administered through ASU Office of Student Life - Student Judicial Affairs: (<http://www.asu.edu/studentlife/judicial/index.html>)

Adapted from Prof. Burrow's document.

Title IX

Title IX is a federal law that provides that no person be excluded on the basis of sex from participation in, be denied benefits of, or be subjected to discrimination under any education program or activity. Both Title IX and university policy make clear that sexual violence and harassment based on sex is prohibited. An individual who believes they have been subjected to sexual violence or harassed on the basis of sex can seek support, including counseling and academic support, from the university. If you or someone you know has been harassed on the basis of sex or sexually assaulted, you can find information and resources at <https://sexualviolenceprevention.asu.edu/faqs>.

As a mandated reporter, I am obligated to report any information I become aware of regarding alleged acts of sexual discrimination, including sexual violence and dating violence. ASU Counseling Services, <https://eoss.asu.edu/counseling>, is available if you wish discuss any concerns confidentially and privately.

Syllabus Update

Information in the syllabus, may be subject to change with reasonable advance notice.

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