CIS 435+535_FA20 | Computer Networks and System Security Fall 2020

Instructor: Prof. Yun E. WANG

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Synchronous Meeting Times (Zoom)

• Monday & Wednesday | 01:30PM – 02:45PM

Office Hours (Zoom)

• Tuesday & Thursday 3: 00 PM ~ 4:00 PM & by appointments

• Please specify "CIS435/535 | Class-ID: #" in the subject field using email

Course Prerequisites

• CS 220 or equivalent; or consent of instructor.

Required Textbook

• "Computer Security: A Hands-on Approach" by Wenliang Du. Publisher: CreateSpace Independent Publishing Platform (2017). ISBN-10: 154836794X | ISBN-13: 978-1548367947.

Course Objective

The objective of this course is to introduce principles, concepts, and fundamentals of computer networks and systems, information technology infrastructure security, computer network authentication, authorization, access control, confidentiality, and data integrity. Topics of computer network security policy and management, data encryptions, protection against internal and external attacks, security evaluation and management will also be covered. Cross-listed with CIS 535.

Grading

	Weight:
Assignments	20%
Quizzes	15%
In-class Exercise	15%
Midterm	20%
Final Exam (Comprehensive)	30%

 $F < 60 \le D < 70 \le C < 80 \le B < 90 \le A$

Class Policies

- 1. **Warning!** From experience teaching courses involving practical labs and programming, the majority of students fail because they treat it like any other course. Procrastinating and crunching before a deadline will result in heartache and a lower grade. A solid work ethic in this course will be rewarded!
- 2. **Attendance:** In order to acquire mastery of the **course**, students are required to *consistently* engage with the material inside and outside of class.
 - You are excused from class attendance only in cases of severe medical or family hardship and documented evidence is required.
 - Any dates on which you will not be able to attend class must be discussed with the instructor at least three days in advance.
 - Please arrive to class *on time* and do not leave early, unless arrangements have been made with the instructor; Being late or leaving early without permission will be counted as an *absence*.
 - Attendance will be taken using a variety of methods including Student Success Collaborative SSC (https://bradley.campus.eab.com), Sakai Attendance, ICEs, quizzes, and signing an attendance form.
 - You are permitted 2 unexcused absences without penalty. Beyond 2 unexcused absences, each unexcused absence will result in a 4% penalty to the overall course grade. You will receive an automatic F if you accrue 12 or more total unexcused absences (12 absences equal missing 40% total classes).
- 3. **Communication:** Please communicate with me via email (with the following code). We are in an age of informality where emails are typed like text messages (abbreviations, lack of capitalization, no greeting, etc.). Courtesy, professionalism, and respect is much appreciated. Emails to any instructor should adhere to a few simple rules:
 - 1) Please send email from your **Bradley email account**.
 - 2) Include your course section (CIS435/535 | Class-ID: #) in the subject field.
 - 3) Please sign your first and last name.
 - 4) Please include an applicable subject in the subject line (e.g., Project X)
 - 5) Please send your email to me and your peer classmates with courtesy, professionalism, and respect.
 - 6) Please send your email to me with appropriate addressing (Dr. Wang @ ywang2@fsmail.bradley.edu).
 - 7) If you are asking a question about a program or debugging, please see me in my (virtual) office.
 - o I will need to see your source code and how you program.
 - O You need to show me previous workable version and the current version with problem with newly added code, and show me your efforts in trouble-shooting.
 - o Debugging is part of a programming assignment.

I reserve the right to **not** respond to any inquiry regarding an assignment on the day it is due unless I deem the question merits attention. It is the students' responsibility to begin and complete an assignment in a timely manner.

Other notes

• I tend to grade rapidly. ICEs, quizzes, and exams should be graded and returned within a week. Programs may take a bit more time.

- I reserve the right to answer email within 24 hours; however, during the week it should be much more rapid.
- I reserve the weekend for my family and therefore I reserve the right to not check email from Friday noon until Monday morning at 8am.

4. Make-up Policy

- If you miss an exam, you will receive a score of ZERO for that exam unless you have arranged with the instructor at least one week in advance to take a make-up exam. Make-up exams will be given only when you provide acceptable reasons (e.g., severe illness, traffic accident) with documented evidence.
- No make-up presentation, as it's impossible for your fellow students to meet again specifically for
 your presentation. You might be allowed to reschedule your presentation at least one week in
 advance with your instructor only in cases of emergency (e.g., severe illness, traffic accident) with
 documented evidence.
- Since the lowest In-Class-Exercise (ICE) score will be dropped, no makeups will be provided for ICEs or Quizzes.
- 5. **ICE/ICP Grading:** If you are absent from class, leave class early (without permission), or you fail to have your previous In-class Exercise/Labs ready; you will receive a ZERO for the ICE. *ICEs will NOT be accepted via email unless requested by the instructor*. ICEs are generally graded in class.
- 6. **Quizzes/Exams:** Quizzes will be generally administered in class and will be allotted approximately 25 minutes. If a student leaves the class early after taking the quiz, the student will earn a zero on the quiz. Quiz content is per the instructor's discretion: quizzes may cover any material encountered in the course, but with a focus on recent content. There will be one midterm exam administered in addition to a cumulative final exam. The midterm will be held during the normal class period.
 - All quizzes/exams are closed book and closed notes if administrated in classroom.
 - If quizzes/exams are administrated **online**, independent work is required, looking up answers online or sharing answers will result in a "Zero" grade and will be reported according to the University **Academic Integrity Policy.**
- 7. **Assignments:** Assignments must be submitted prior to the deadline (11:55pm of the specified date) on Sakai. Assignments must be submitted electronically via Sakai and will not be accepted in any other format. Late assignments will **NOT** be accepted for grading, please plan accordingly. Only Late *programming* projects will be accepted for grading however with a penalty of 30% grade deduction per day, up to 3 days.
- 8. **Students with Special Needs:** Please address any special needs or special accommodations with me at the beginning of the semester. Those seeking accommodations based on documented disabilities should register with Student Access Services. The Office is located at 100 Heitz Hall and the phone number is (309) 677-3654. More information is also available at the Student Access Services website. (https://www.bradley.edu/offices/student/sas/)
- 9. **Citations:** If you consult with any source (other than the textbook or the instructor) to complete an assignment, you should credit that source with a citation. Sources that should be cited include friends, classmates, tutors, websites, and any books other than the textbook. A friend or tutor should never complete an assignment for you. You should never copy and paste large segments of code from a

website. It is sometimes acceptable to copy *small* segments of code from a website (3 lines or fewer), but the website should be cited.

- 10. **Academic Integrity:** Plagiarism and cheating are serious offenses and will result in "F" on the exam, paper, or project in question; and the student will also be reported to the Center for Residential Living and Leadership. If the assignment is the pair project, it will also result in failure in the course. For more information, refer to the academic catalog and student handbook. According to the student handbook:
 - "Cheating is officially defined as giving or attempting to give, obtaining or attempting to obtain, information relative to an examination or other work that the student is expected to do alone and not in collaboration with others..."
 - "A Zero, or whatever is the equivalent of the lowest failing grade possible, shall be assigned for that piece of work to any students cheating on a non-final examination or other piece of work."
 - "According to University Senate rules, all occasions of cheating and plagiarism must be reported to the Executive Director of the Center for Residential Living and Leadership..."

You may freely give and receive help with:

- the computer facilities,
- editors,
- debugging techniques,
- the meaning and proper use of the Java language,
- and general concepts covered in the class.

You should **NOT** allow any of the following actions.

- Discuss your design or implementation of the assignments with any classmate (other than a partner) until after they are graded,
- View another person's program, or allow someone (other than your partner) to view any part of your program before the assignment has been graded.
- Copying any part of another person's program or allowing your program to be copied is not permitted. A variety of methods will be used to detect copying.

Project Demonstration

- Students will be asked to 1) demonstrate projects, 2) explain logic, 3) answer questions about the implementation details, and 4) reproduce any part (randomly selected) of your submitted projects to **peer student(s) and grader(s)**. A list of questions will be asked during student's demonstrations.
- It not only helps evaluate students' projects, but also is quite effective in *identifying cheatings*. Students who simply copy others' implementation will be most likely unable to answer these questions and result in the consequences related to cheating and plagiarism.
- Failing to explain or reproduce any part of your submitted assignments/projects is considered as "Plagiarism and cheating" and will be reported to the University Center for Residential Living and Leadership. (you should be able to explain and reproduce your homework if you have done it by YOURSELF).