



**KENNESAW STATE
UNIVERSITY**

SYLLABUS

COLLEGE OF COMPUTING AND SOFTWARE ENGINEERING
DEPARTMENT OF INFORMATION TECHNOLOGY
IT 4863: WEB AND MOBILE APPLICATION SECURITY
FALL 2023 SECTION W01 (ONLINE)

Course Information

Class meeting time: There is no scheduled class meeting.

Modality and Location: Online

Instructor

Name: Ms. Jamie Jamison

E-mail: jjamiso9@kennesaw.edu

Office Location: Marietta campus, Norton Hall R2-206

Office Hours: 12:30pm-2:30pm Wednesdays, Virtual office hours by appointment 11am-2pm Mon, Tue, (Teams, Zoom, or phone)

Course Communication:

- Email is the best way to reach the instructor. Use Outlook email if possible. Instructor's KSU email (xxxx@kennesaw.edu) should only be used when you don't have access to D2L site.
- Students' emails will be replied WITHIN 24 hours during the weekday. Weekend and holidays don't apply.
- When email the instructor using accounts other than D2L email, put the course number in the subject line. Emails without proper subject line will not be replied.
- Avoid using personal email. Sensitive information (such as your grades) can ONLY be sent to D2L email or KSU email account.

Course Description

Prerequisites/Corequisites: C or better in IT 3203

Credit Hours: 3-0-3

Required Texts: No textbook is required. Learning material will be provided in D2L course website

Course Description:

This course introduces web and mobile application security issues, hands-on practices to explore security vulnerabilities, best practices to defend against vulnerabilities in web and mobile

Technology Requirements

- This class uses D2L as hosting site. Run a system check to ensure your computer work with D2L. Check out UITS D2L training: <http://uits.kennesaw.edu/support/d2ltraining.php> .
- Internet Connection. A high-speed Internet connection such as DSL or cable Internet access is highly recommended. You may also use computer labs on campus to complete the coursework.
- A web camera is required for a student to take quizzes/exams.

I will provide all instructions assuming that you have Windows computer. We will use open source software, VM Player and Virtual Box. All this is available for Linux/Unix/MAC.

You must have

- 2 GHz or faster processor
- minimum 8GB RAM
- free disk space minimum 60GB
- administrative rights to your PC
- owner's permission to install course software if you are not the owner of the system.

About the Course

People learn through interactions, to facilitate interactive learning this course will use Discussions feature of D2L. Discussions will take place in an **asynchronous** manner.

There are 7 content modules in this course. Week starts Monday 12:00am and ends **on Sunday at 11:59pm**. All module assignments are due by **11:59 pm on Sunday**, unless otherwise stated.

Student Learning Outcomes

Students who complete this course successfully will be able to:

- Describe common web and mobile security vulnerabilities
- Exploit web and mobile vulnerabilities with hands-on tools
- Defend against common web and mobile vulnerabilities

Preparation of work for this course

You have to run all the code examples from each module before you attempt to complete assigned lab. All assignments must be submitted through D2L before the corresponding deadline. No assignments will be accepted via email.

Each module contains:

1. Assigned reading and additional reading for students who want to read further on the week's topic
2. Online content.
3. Assigned hands-on exercises.
4. Discussion topic OR quiz.
5. Apply your knowledge section.

For each content module you should:

1. Read the on-line content and the assigned sections from the text.
2. Post questions, corrections, or comments about the content in the discussion area designated for the module.
3. Do assigned homework/quiz/lab - due by **11:59 PM on Sunday**.

Throughout the course, you should log in regularly to check for announcements and email. The course Calendar posted on D2L contains all important dates. Any changes of dates will be publicized by post in discussion area and/or email.

Course Requirements and Assignment

The course schedule is tentative and is subject to change. Please use D2L course calendar as accurate due dates.

Week	Start Date	Topics	Due item	Due Date
1	8/14/2023	Module 1: Introduction to web server		
2	8/21/2023	Module 1: Web server security	A1	8/27
3	8/28/2023	Module 2: OWASP Top10, Injection attack	A2, D1	9/3
4	9/4/2023	NO CLASS - LABOR DAY HOLIDAY		
		Module 2: Scanning web, discovering vulnerabilities	A3	9/10
5	9/11/2023	Module 3: Web phishing, Web Single Sign on	A4, Q1	9/17
6	9/18/2023	Module 3: Web session security	A5, Q2	9/24
7	9/25/2023	Module 4: Web tracking, Term project introduction		
8	10/2/2023	Module 4: Anonymity on Web and TOR communication	A6	10/8
9	10/9/2023	Module 5: Mobile app security overview	A7,D2	10/15
10	10/16/2023	Module 5: Mobile App input and output data sanitization	A8	10/22
11	10/23/2023	Module 6: Mobile device security, content provider leakage	Q3	10/29
12	10/30/2023	Module 6: IPC security, intent spoofing and eavesdropping, Android UI attack and mitigation	A9	11/5
13	11/6/2023	Module 7: Android Malware, Static analysis, DroidPatrol	A10, D3	11/12
14	11/13/2023	Module 7: Dynamic analysis, MobiSF	A11&12	11/26
15	11/20/2023	NO CLASS - THANKSGIVING		
16	11/27	Review	Project research paper	12/4/2023

A=Assignment, D=Discussion, Q=Quiz

Evaluation and Grading Policies

Weight Distribution

Grading Item	Points
Assignments (12)	60%
Discussion (3)	10%
Quizzes (3)	10%
Research paper	20%
Total	100%

Grading Scale:

- 90% - 100% A
- 80% - 89% B
- 70% - 79% C
- 60% - 69% D
- 0% - 59% F

Grades rounding is at my discretion and largely depends on participation in the course. Do not miss getting work turned in. Zeroes are very damaging to a course grade point average.

Important dates:

- Drop-Add ends: August 18 @ 11:45pm
- Last Day to Withdraw Without Academic Penalty: October 10 @ 11:45pm
- Last Day of Class: Dec 4th

Course Policies

Course Attendance Policy

- For on campus/hybrid section, students are expected to come to each class on time and stay during the whole class period.
- For both campus/hybrid and online section, students' attendance is also measured by how often a student login in D2L course website, participation of online discussion, as well as on-time completion of homework.

Grading Items Turnaround Time

- The grades for the quizzes will be available when the period to take the quiz closes. (Quizzes are auto-graded.)
- Grades for exams will be available within ten days after the due date.
- The grades for labs/assignments/projects will be available within one week after the due date.

Assignments Policy

- All assignments are due at 11:59 pm on Sunday unless otherwise noted in D2L. All assignments should be submitted in the D2L Dropbox. DO NOT email submissions directly to the instructor.
- Submissions after the deadline less than or equal to 24 late are subject to a 10% penalty.

Any submission that is less or equal than 48 hours late is subject to 20% penalty. Submissions that are more than 48 hours late will NOT be accepted. After that date/time passes, only assignments with formal documentation of illness or emergency will be accepted. Documentation can be submitted up to 7 days from ORIGINAL due date, after that time the grade will remain a zero

Student Responsibility

For this class, you are expected to spend seven to eight hours each week on coursework:

- Check KSU email regularly;
- Login D2L course website frequently to access the course material (at least every other day);
- Follow the weekly study guide in the learning module;
- Study the assigned material such as virtual lectures, textbook chapters and the PowerPoint slides;
- Complete assigned quiz/assignment/discussion/project on time.

Tips for Effective Online Learning

For an online class, students can really enjoy the benefits of learning at your own pace and at the place of your choice. Below are some tips for effective online learning.

- *Check D2L course website frequently.* It's recommended that students should login D2L course site **AT LEAST** every other day. Always be aware of current status of the course. Take advantage of the posted learning material such as recorded lectures.
- *Work with the instructor closely.* If you have any question, contact the instructor immediately. You can either email or text me and your message is guaranteed to be replied within 12 hours.
- *Start your work early.* If you can start a task early, don't start late. Assuming you spend the same amount of time completing the task, starting later will be much more stressful than starting early. Never start until the last minute! You'll have no turnaround time if you need help or something happens.
- *Keep up with the work.* Don't fall behind. If you do, contact the instructor immediately for what you need to do. The instructor may also contact you if he is concerned. Respond to the instructor's inquiry promptly.

Class Communication Rules

In any classroom setting there are communication rules in place that encourage students to respect others and their opinions. In an online environment, the do's and don'ts of online communication are referred to as **Netiquette**. As a student in my course you should:

- Be sensitive and reflective to what others are saying.
- **Avoid typing in all capitals** because it is difficult to read and is considered the electronic version of 'shouting'.
- Don't flame - These are outbursts of extreme emotion or opinion.
- Think before you hit the post (enter/reply) button. You can't take it back! Don't use offensive language.
- Use clear subject lines.
- Don't use abbreviations or acronyms unless the entire class knows them. Be forgiving. Anyone can make a mistake.
- Keep the dialog collegial and professional, humor is difficult to convey in an online environment.
- **Always assume good intent and respond accordingly.** If you are unsure of or

annoyed by a message, wait 24 hours before responding.

Institutional Policies

- [Federal, BOR, & KSU Course Syllabus Policies](#)
- [Academic Integrity Statement](#)

- Examples of violation of academic integrity: 1) copy from others or from Internet; 2) allow others to copy your work; 3) use other's help or help other in completing the quizzes or exams.
- The first violation of academic integrity, the student will immediately receive 0 for the associated grading item. For the 2nd violation, the student will receive a fail grade for this course.

KSU Statements on Course Delivery and COVID-19

Course Delivery

KSU may shift the method of course delivery at any time during the semester in compliance with University System of Georgia health and safety guidelines. In this case, alternate teaching modalities that may be adopted include hyflex, hybrid, synchronous online, or asynchronous online instruction.

COVID-19 illness

If you are feeling ill, please stay home and contact your health professional. In addition, please email your instructor to say you are missing class due to illness. Signs of COVID-19 illness include, but are not limited to, the following:

- Cough
- Fever of 100.4 or higher
- Runny nose or new sinus congestion
- Shortness of breath or difficulty breathing
- Chills
- Sore Throat
- New loss of taste and/or smell

COVID-19 vaccines are a critical tool in "Protecting the Nest." If you have not already, you are strongly encouraged to get vaccinated immediately to advance the health and safety of our campus community. As an enrolled KSU student, you are eligible to receive the vaccine on campus. Please call (470) 578-6644 to schedule your vaccination appointment or you may walk into one of our student health clinics.

For more information regarding COVID-19 (including testing, vaccines, extended illness procedures and accommodations), see KSU's official [Covid-19 website](#).

Masks

While masks are no longer mandated on campus, you are strongly encouraged to wear a mask when in class if you have not received a COVID-19 vaccination.

Student Resources

This link contains information on help and resources available to students: [KSU Student Resources for Course Syllabus](#)