



SYLLABUS
College of Computing and Software Engineering

Department of Information Technology

IT 7333: Enterprise Cloud and Wireless Security

Fall 2021

# Course Information

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**Section 01**: Class will meet every Monday 5:00-6:15pm in J-109.

**Section W01**: This course is delivered fully online asynchronously. There are no class meetings.

# Instructor

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**Name**: Dr. Liang Zhao

**E-mail**: lzhao10@kennesaw.edu

**Office Location**: J-392

**Office Phone**: 470-578-4902

**Office Hours**: Monday 3pm – 5pm. Virtual (MS teams Tuesday and Thursday 2pm – 3:30pm) and by Email. Video appointments can be scheduled via Email.

**Course Communication**:

# Email is the best way to reach the instructor. Use D2L email if possible. Instructor’s KSU email (lzhao10@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

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**Prerequisites/Corequisites**: IT6823.

**Credit Hours:** 3

**Required Texts**: None.

**Course Description:**

This course is an advanced study and analysis of the concepts, methodologies and technologies in securing enterprise cloud and wireless networks. Topics include but not limited to wireless network protocols, wireless LAN security tools, cloud computing infrastructure, evolutions of cloud, confidentiality and integrity of cloud, and current trends in cloud and wireless security. Students are required to research and implement solutions to secure enterprise cloud and wireless systems.

**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.

# Student Learning Outcomes

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By the end of this course, a student should be able to:

* Explain enterprise cloud and wireless network threats and vulnerabilities along with current security solutions.
* Describe the differences between wireless security and wired security
* Apply security tools to assess and protect enterprise cloud and wireless systems
* Conduct research in advanced topics in enterprise cloud systems and wireless networks

# Course Requirements and Assignment

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* All assignments will be posted on D2L: <https://kennesaw.view.usg.edu>
* All assignments must be submitted through D2L by the deadline;
* Please double-check your submission; whatever you submit by deadline will be graded;

# Evaluation and Grading Policies

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# Weight Distribution

| **Grading Item** | **Weight**  |
| --- | --- |
| Discussions | 30% |
| Assignments | 20% |
| Quizzes | 30% |
| Final Project | 20% |
| **Total**  | **100%** |

## **Grading Scale:**

90% - 100% A

80% - 89% B

70% - 79% C

60% - 69% D

0% - 59% E

Grades will be rounded up if they are > or = .5 or above, for example, an 89.6 is an A, but 79.2 is a C.

# Course Policies

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# Course Attendance Policy

* For on campus/hybrid section, students are expected to come to each class on time. 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 and exams will be available within a week after the due date.
* The grades for labs/assignments/projects will be available within 10 days after the due date.
* If you think there is an error, please make a re-grading request by e-mail within one week of grade posting. A request for reassessment will not be granted if more than two weeks have passed since the grade in question was posted. Check your grades in D2L regularly.

# Assignments & Exam Policy

* All assignments **MUST** be submitted through D2L (<https://kennesaw.view.usg.edu/> ) course website by the deadline specified in course calendar. Email submission will **NOT** be accepted. Any assignment that is less or equal than 24 hours late is subject to 10% penalty. Any assignment that is more than 24 hours late will **NOT** be accepted.
* All quizzes and exams MUST be completed on D2L website by the deadline specified in course calendar. The quizzes exams can’t be opened/submitted after the deadline.
* If you must miss an exam due to illness, you must e-mail or call the instructor before the scheduled time. Failure to notify the instructor prior to the scheduled time will produce an automatic zero for the exam. NO makeup test except for emergencies with proof (e.g. doctor’s slip).

**No “extra credit”** work will be given to improve one’s grade. Copies of your class work and test will be kept for record.

# Assignment Submission Guidelines

All work turned in for this class must meet the style and submission guidelines <http://ksuweb.kennesaw.edu/~speltsve/files/style_and_submission_guide_d2l.pdf> Work that does not meet the submission criteria will not be graded. Scoring rubric will be provided for each assignment.

# Discussions

People learn through interactions, to facilitate interactive learning this course will use the Discussions feature in D2L. Discussions will take place in an **asynchronous** manner. Discussions are not graded in this course.

**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 you 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 24 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.

# Course Schedule

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

| **Weeks** | **Date** | **Topic** | **Assignment** |
| --- | --- | --- | --- |
| Week 1 | *8/16-8/22* | Course Orientation | Introduction discussionSyllabus quiz |
| Week 2 | *8/23-8/29* | LM1 - The Evolution of Wireless Network | Discussion 1 |
| Week 3 | *8/30-9/5* | LM2 - Information Security Essentials | Assignment 1 |
| Week 4 | *9/6-9/12* | LM3 - WLAN Overview | Quiz 1 |
| Week 5 | *9/13-9/19* | LM4 - WLAN Threats & Vulnerabilities | Discussion 2 |
| Week 6 | *9/20-9/26* | LM5 - WLAN Security |  |
| Week 7 | *9/27-10/3* | LM5 - WLAN Security | Quiz 2 |
| Week 8 | *10/4-10/10* | LM6 - WLAN Security Tools | Discussion 3 |
| Week 9 | *10/11-10/17* | LM7 - Mobile Network Security Threats & Vulnerabilities | Assignment 2 |
| Week 10 | *10/18-10/24* | LM8 - Wireless Security Auditing & Risk Analysis | Quiz 3,Discussion 4 |
| Week 11 | *10/25-10/31* | LM9 – Evolution of cloud | Discussion 5 |
| Week 12 | *11/1-11/7* | LM10- Confidentiality and Integrity of Cloud | Quiz 4,Discussion 6 |
| Week 13 | *11/8-11/14* | LM11 – Cloud Threats & Vulnerabilities | Quiz 5 |
| Week 14 | *11/15-11/21* | LM12 – Cloud security | Discussion 7,Assignment 3 |
| Week 15 | *11/22-11/28* | Holiday |  |
| Week 16 | *11/29-12/5* | Prepare for the final project | Quiz 6 |
|  |  |  | Final Project due on 12/6 |

**Important dates:**

* Add/Drop ends: Aug 20 11:45pm
* Last Day to Withdraw Without Academic Penalty: Oct 21 11:45 p.m.
* Last Day to Withdraw for the Term With a WF: Nov 29.
* Last Day of Class: Dec 6.

**Institutional Policies**

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* [Federal, BOR, & KSU Course Syllabus Policies](https://cia.kennesaw.edu/instructional-resources/syllabus-policy.php)
* [Academic Integrity Statement](http://scai.kennesaw.edu/codes.php)
	+ 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**

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**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 ill, please stay home and contact your health professional.  In that case, please email the instructor to say you are missing class due to illness. Signs of 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](https://coronavirus.kennesaw.edu/).

# Student Resources

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This link contains information on help and resources available to students: [KSU Student Resources for Course Syllabus](https://curriculum.kennesaw.edu/resources/ksu_student_resources_for_course_syllabus.php)