



SYLLABUS  
College of Computing and Software Engineering

Department of Information Technology

IT-7303: Data Privacy and Digital Identity

Spring 2022

# Course Information

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Class meeting time: *Online*

# Instructor

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**Name**: Dr. Seyedamin Pouriyeh

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

**Office Location**: Atrium J-391

**Office Phone**: (470) 578-6109

**Office Hours**: Mondays and Wednesdays from 2:00PM to 3:30PM or by appointment.

**Course Communication**:

* Email is the best way to reach the instructor. Please email me directly from your KSU email address.  (e.g. [yourlogin@students.kennesaw.edu](mailto:yourlogin@students.kennesaw.edu))
* Use D2L Discussion Forums and D2L Chat to interact with your classmates

# 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**: IT6823.

**Credit Hours:** 3

**Required Texts**: None.

**Course Description:**

This course will provide an overview of fundamental concepts of privacy and digital identity through the data protection IT to maintain them. The course will navigate the complex landscape of privacy requirements and provide better privacy understanding to enable an IT privacy strategy to protect data for the firm and its stakeholders. Topics include but not limited to privacy definition, privacy measurement, classical privacy preserving technologies, the privacy evaluation, and advanced privacy techniques such as differential privacy and federated learning etc. The up-to-date development of privacy laws and regulations for data and digital identity protection and privacy for collaborating learning would also be included.

**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:

* Describe privacy and data protection related issues necessary for effective control of data.
* Evaluate anonymity mechanisms for anonymous communication and database privacy.
* Apply secure multiparty computation to preserve privacy and fidelity of digital identity in different application domains.
* Analyze strategy, protection mechanisms, and countermeasures to overcome privacy threats for digital identity and data analysis technologies.

# 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

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| --- | --- |
| **Grading Item** | **Weight** |
| Assignment (5) | 30% |
| Midterm exam | 15% |
| Final exam | 25% |
| Research Project | 30% |
| **Total** | **100%** |

## **Grading Scale:**

90% - 100% A

80% - 89% B

70% - 79% C

60% - 69% D

0% - 59% F

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

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# Grading Items Turnaround Time

* The grades for the quizzes and exams will be available 96 business hours after the due date
* The grades for labs/assignments/projects will be available in less than 1 week after the due date

# Assignments & Exam Policy *[Below are recommended policies, feel free to make adjustments as needed]*

* 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 less or equal than 48 hours late is subject to 20% penalty. Any assignment that is more than 48 hours 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).

**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.
* On every Monday, you will be provided with the following materials:
  + An overview of our contents, materials, and goals for this week (this is where you start from: all homework, quizzes, assignments will also be announced in this study guide);
  + Assigned reading from textbooks and/or provided material;
  + PowerPoint slides;
  + Homework assignments, or lab, or quiz;
  + A brief video lecture to walk you through the PPT slides;
* During each week, you should:
  + Read the assigned sections of the textbook and/or provided materials;
  + Digest the PowerPoint slides;
  + Take online quiz if assigned;
  + Finish homework assignments and submit it 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.

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| **Weeks** | **Date** | **Topic** | **Assignment** |
| Week 1 |  | Terms, concepts and structure of global data privacy and digital identity |  |
| Week 2 |  | Laws, regulations and standards for global data privacy and digital identity |  |
| Week 3 |  | Anonymity and anonymous communication, Term Project Overview |  |
| Week 4 |  | Database privacy |  |
| Week 5 |  | Secure Multiparty Computation |  |
| Week 6 |  | Secure Multiparty Computation | Assignment #1: Secure computation |
| Week 7 |  | Privacy-preserving technology | Term project initial report |
| Week 8 |  | Privacy-preserving technology | Assignment #2: Privacy-preserving practice |
| Week 9 |  | Homomorphic Encryption Technique |  |
| Week 10 |  | Collaborative Learning | Midterm exam |
| Week 11 |  | Privacy issues of collaborative learning | Assignment #3: Collaborative learning |
| Week 12 |  | Managing digital identity | Term project progress report |
| Week 13 |  | Managing digital identity | Assignment #4: Digital identity management |
| Week 14 |  | Digital Surveillance and Privacy |  |
| Week 15 |  | Digital Surveillance and Privacy | Assignment #5: Digital surveillance |
| Week 16 |  | Review | Final Project Due  Final exam |
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**Important Dates:**

* Add/Drop ends: Jan 15 11:45pm
* Last Day to Withdraw Without Academic Penalty: Mar 15 11:45 p.m.
* Last Day to Withdraw for the Term With a WF: Apr 26.
* Last Day of Class: May 3.

**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 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 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](https://www.kennesaw.edu/coronavirus/).

**Face Coverings**

Based on guidance from the University System of Georgia (USG), all vaccinated and unvaccinated individuals are encouraged to wear a face covering while inside campus facilities. Unvaccinated individuals are also strongly encouraged to continue to socially distance while inside campus facilities, when possible.

# 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)