

IFT 520: Adv Info Systems Security (2024 Summer DYN)

 Edit

Syllabus



Course:

IFT 520

Advanced Information Systems Security

Credits & Prerequisites:

Credit Hours: 3

Prerequisites: degree- or non-degree-seeking graduate student

Semester & Session:

SPRING 2024

Meeting Times:

ONLINE

Instructor:

Michael Walsh

Email: mjwalsh7@asu.edu

Office Hours:

Email for appointment, state the course number in the subject line.

Section 1: Course Overview

Course Description

Course provides a practical guide to designing and implementing information privacy in information technology systems. Explains information security concepts and focus on the implementation of privacy controls, privacy management, and privacy monitoring and auditing. Course covers privacy engineering and privacy by design to meet standards concerning EU General Data Protection Regulation and the body of U.S. privacy laws and regulations.

Course Learning Outcomes

At the completion of this course, students will be able to:

- Demonstrate an understanding of the concept of privacy by design and how it differs from privacy engineering.
- Describe the difference between the roles of privacy versus security for system access and malware protection.
- Analyze approaches to database query restrictions.
- Analyze the security and privacy challenges of the cloud computing concepts.

- Describe the role of event monitoring with respect to privacy concerns.
- Demonstrate an understanding privacy laws and the relationship to ethical computing.

Course Material

Required

Stallings, W. (2020). *Information privacy engineering and privacy by design: Understanding privacy threats, technology, and regulations based on standards and best practices*, (1st ed.). Addison-Wesley.

ISBN-13: 9780135302156 (paperback) or ISBN-13: 9780137582341

Section 2: Course Policies

Student Success

To be successful:

- **READ THE TEXTBOOK!!!!** This textbook was selected because the topics covered all the key concepts.
- Read announcements
- Read and respond to course email messages as needed.
- Complete assignments by the due dates specified.
- Communicate regularly with your instructor and peers.
- Create a study and/or assignment schedule to stay on track.
- Attend all of the classroom sessions.
- Complete all pre-class preparation assignments and reading.
- Complete all post-class follow-up assignments and reading.
- Check your ASU email regularly.
- Log in to the course website multiple times a week.

Course Commitment

- Manage the required **Course Time Commitment** ([https://asuonline-dev.asu.edu/qm-template/CanvasQM/qm-policies.html?_ga=2.69627029.420627562.1623541663-492832597.1615397589&_gac=1.85082731.1623689476.CjwKCAjw_JuGBhBkEiwA1xmbRSZOFbuXA9jJ9CJhJPWGJX8sLaC-gUuwle-7Z7u3VRaI72Di_wO7xoCFOQQAvD_BwE\)](https://asuonline-dev.asu.edu/qm-template/CanvasQM/qm-policies.html?_ga=2.69627029.420627562.1623541663-492832597.1615397589&_gac=1.85082731.1623689476.CjwKCAjw_JuGBhBkEiwA1xmbRSZOFbuXA9jJ9CJhJPWGJX8sLaC-gUuwle-7Z7u3VRaI72Di_wO7xoCFOQQAvD_BwE))

Coursework includes all learning activities including reading, watching videos, studying, and completing assignments. Arizona Board of Regents requires 45 hours of coursework per credit for college-level courses: 3 credits is 135 hours.

| Course Length | Time on Coursework per Week for a 3-Credit Course | Total Time Requirement for a 3-Credit Course |
|---------------|---|--|
| 6 weeks | 22.5 hours | 135 hours |
| 7.5 weeks | 18 hours | 135 hours |
| 8 weeks | 17 hours | 135 hours |
| 15 weeks | 9 hours | 135 hours |



Recommended Medium

- All classes with online components require you have a computer or tablet with a modern Internet browser and consistent access to the internet. Please note that devices with small screens, such as Smartphones, often do not allow content to be viewed as intended. Therefore, small-screened devices are not usually suitable for review of content or online test taking.

- For technical support, use the Help icon in the black global navigation menu in your Canvas course or call the ASU Help Desk at **+1-(855) 278-5080 (tel:+1-(855)278-5080)**. Representatives are available to assist you 24 hours a day, 7 days a week.
- Assignments must be submitted in an appropriate format, Microsoft Word® (DOC or DOCX) or Portable Document Format (PDF).
- Access to diagramming and presentation software, whether locally on a system (e.g. Microsoft Visio® and PowerPoint®), or from a cloud-resident application (e.g. Prezi, PowToon, VoiceThread, LucidChart, etc.) will be necessary.

Requisite Technical Ability

- To be successful in this course, you are expected to be proficient in the use of tools and systems needed for accessing the content and discussions. Introductory knowledge of business processes, programming, databases, business intelligence, networking, and information security are helpful, but not critical.

Campus Resources

These resources can be used by on-campus and online students. There are many valuable resources on campus to help you achieve success both personally and academically. A few of these are listed here which are available on all campuses. You are able to interact with these services remotely:

- Writing centers – <https://tutoring.asu.edu/writing-centers> [_ \(https://tutoring.asu.edu/writing-centers\)](https://tutoring.asu.edu/writing-centers)
- Tutoring, student success centers: <https://tutoring.asu.edu/tutoring> [_ \(https://tutoring.asu.edu/tutoring\)](https://tutoring.asu.edu/tutoring)
- Counseling / consultation: <https://eoss.asu.edu/counseling> [_ \(https://eoss.asu.edu/counseling\)](https://eoss.asu.edu/counseling)
- Career services: <https://eoss.asu.edu/cs> [_ \(https://eoss.asu.edu/cs\)](https://eoss.asu.edu/cs)

Grading Scale

| Grade | A+ | A | A- | B+ | B | B- | C+ | C | D | E |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| % Upper Limit | 100% | < 98% | < 93% | < 90% | < 88% | < 83% | < 80% | < 78% | < 70% | < 60% |
| % Lower Limit | 98% | 93% | 90% | 88% | 83% | 80% | 78% | 70% | 60% | |

Submitting Assignments

- All assignments, unless otherwise announced, MUST be submitted to the designated area of Canvas.
- Do not submit an assignment via email.
- Assignment due dates follow Arizona Standard time. Remember assignments are due 11:59, not midnight.
- Click the following link to access the [Time Converter \(http://www.thetimezoneconverter.com/\)](http://www.thetimezoneconverter.com/) to ensure you account for the difference in Time Zones. Note: Arizona does not observe daylight savings time.
- Grades reflect your performance on assignments and adherence to instructions and deadlines.

Required Format

- Standard written English is always used in the ASU classroom.
- All written work is to be submitted in the appropriate professional APA style and format. APA Version 6th edition or APA 7th edition can be used, as long as you are consistent within an assignment. APA information is located in Welcome Module
- Presentations should include both citations and references attributing ownership of content and graphics.
- Assignment attachments must be in Microsoft Word® (DOC or DOCX) or Portable Document Format (PDF). Use of Microsoft Word® and PowerPoint® are encouraged, though online utilities are recommended for presentations (Learner Lecture and Final Project).

Class Participation for On-campus or Online

- All students are expected to participate in class. When an absence is unavoidable, students should report the reason to the faculty member and assume the responsibility for any work they miss. Faculty members have no obligation to make special arrangements for students who have been absent unless the student has an Institutional Excuse as described below.
- Students are expected to be prepared every week, with all required materials read, questions developed, and with the intent to discuss the course content with their instructor and cohort.
- On-campus: Where applicable, students are expected to be seated and ready for class to begin at the time posted at the head of this document. Students who are late or leave early without prior approval or without accommodation will not earn that class participation points.

Email and Internet

- ASU email is an official means of communication among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly. <http://www.asu.edu/aad/manuals/ssm/ssm107-03.html> (<http://www.asu.edu/aad/manuals/ssm/ssm107-03.html>)

Project Materials

- There are no provisions by ASU to return course materials to students.
- Faculty may destroy any unclaimed student materials 90 days after the course has ended.

Grade Appeals

- Grade disputes must first be addressed by discussing the situation with the instructor. If the dispute is not resolved with the instructor, the student may appeal to the department chair per the University Policy for Student Appeal Procedures on Grades. <https://catalog.asu.edu/appeal> (<https://catalog.asu.edu/appeal>)

Incomplete

- A grade of Incomplete can be given only under extreme circumstances, where an unforeseen situation prevents the student from completing all required assignments by the end of the session. This is a decision made only by the faculty member. Students must ask for the incomplete.
- A grade of Incomplete requires a contract and work must be made up within 4 weeks after the course, in which the student was enrolled, or the "I" will revert to an "E" and the course must be repeated.

Late Assignments

- **No assignments are accepted after the due date**
- Technological issues are not considered valid grounds for late assignment submission. In the event of an Arizona State Canvas server outage, students will email assignments to the instructor and when systems are restored, submit those assignments according to syllabus instructions.
- Unless an Incomplete grade has been granted, learner assignments submitted after the last day of class will not be accepted.
- Accommodations will be made for religious observances provided that students notify the instructor at the beginning of the semester concerning those dates. Students who expect to miss class due to officially university-sanctioned activities should inform the instructor early in the semester. Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences. The preceding policies are based on [ACD 304-04](https://www.asu.edu/aad/manuals/acd/acd304-04.html) (<https://www.asu.edu/aad/manuals/acd/acd304-04.html>), "Accommodation for Religious Practices" and [ACD 304-02](https://www.asu.edu/aad/manuals/acd/acd304-02.html) (<https://www.asu.edu/aad/manuals/acd/acd304-02.html>), "Missed Classes Due to University-Sanctioned Activities."

Content Management

- Any information in this syllabus (other than grading and absence policies) may be subject to change with reasonable advance notice.
- **Students may not share outside the class, including uploading, selling or distributing course content or notes taken during the conduct of the course.**
- **Any recording of class sessions by students is prohibited.**
- The contents of this course, including lectures and other instructional materials, are copyrighted materials.
- Notes based on these materials may not be sold or commercialized without the express permission of the instructor. Based on [ACD 304-06](https://www.asu.edu/aad/manuals/acd/acd304-06.html) (<https://www.asu.edu/aad/manuals/acd/acd304-06.html>).

Absence & Make-Up Policies

- Accommodations will be made for religious observances provided that students notify the instructor at the beginning of the semester concerning those dates.
- Students who expect to miss class due to officially university-sanctioned activities should inform the instructor early in the semester.
- Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences.
 - excused absences related to religious observances/practices that are in accord with [ACD 304-04](https://www.asu.edu/aad/manuals/acd/acd304-04.html) (<https://www.asu.edu/aad/manuals/acd/acd304-04.html>), "Accommodation for Religious Practices"

- excused absences related to university-sanctioned events/activities that are in accord with [ACD 304-02](https://www.asu.edu/aad/manuals/acd/acd304-02.html) (<https://www.asu.edu/aad/manuals/acd/acd304-02.html>), “Missed Classes Due to University-Sanctioned Activities”
- Excused absences related to missed class due to military line-of-duty activities that are in accord with [ACD 304-11](https://www.asu.edu/aad/manuals/acd/acd304-11.html) (<https://www.asu.edu/aad/manuals/acd/acd304-11.html>), “Missed Class Due to Military Line-of-Duty Activities,” and SSM 201-18, “Accommodating Active Duty Military”.

Section 3: Class Schedule

Overview

- It is recommended that you use the Calendar in Canvas.

Grading Scheme

| Assignments | Points |
|----------------|--------|
| Weekly Paper | 700 |
| Chapter Quiz | 425 |
| Research Paper | 155 |
| Exams | 240 |
| Total | 1520 |

Assignment Descriptions

Weekly Paper

- Essay paper to answer questions from the textbook.
- You are required to respond during the specified time period.

Chapter Quiz

- Quiz consisting of multiple-choice and true/false questions and closed book. It will cover material from the module's material.
- You are required to respond during the specified time period.

Research Paper on Security Topic

- Research paper will provide an opportunity for students to engage with the content using a real-world example.

Exams

- Midterm is closed book exam consisting of multiple-choice and true/false questions, conducted online through Canvas.
- Final Exam is closed book and is conducted on-campus on April 29

Section 4: University Policies

Classroom Behavior

Cell phones and pagers must be turned off during class to avoid causing distractions. The use of recording devices is not permitted during class. Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students. See [SSM 104-02](https://www.asu.edu/aad/manuals/ssm/ssm104-02.html) (<https://www.asu.edu/aad/manuals/ssm/ssm104-02.html>), “Handling Disruptive, Threatening, or Violent Individuals on Campus.”

Academic Integrity & Copyright Laws

One of the core topics of this course is academic integrity. You will be discussing it further throughout the course. ASU expects and requires all its students to act with honesty and integrity, and respect the rights of others in carrying out all academic assignments. Fulton Schools of Engineering takes academic integrity VERY seriously. The Fulton Honor Code will be discussed during a future class.

Students in this class must adhere to ASU's academic integrity policy, which can be found at [\(https://provost.asu.edu/academic-integrity/policy\)](https://provost.asu.edu/academic-integrity/policy). Students are responsible for reviewing this policy and understanding each of the areas in which academic dishonesty can occur. In addition, all engineering students are expected to adhere to both the ASU Academic Integrity **Honor Code** (<https://provost.asu.edu/academic-integrity/honor-code>) and the Fulton Schools of Engineering **Honor Code** (<https://engineering.asu.edu/ira-a-fulton-schools-of-engineering-honor-code/>). All academic integrity violations will be reported to the Fulton Schools of Engineering Academic Integrity Office (AIO). The AIO maintains record of all violations and has access to academic integrity violations committed in all other ASU college/schools.

All course content and materials, including lectures (Zoom recorded lectures included), are copyrighted materials and students may not share outside the class, upload to online websites not approved by the instructor, sell, or distribute course content or notes taken during the conduct of the course (see **ACD 304–06** (<https://www.asu.edu/aad/manuals/acd/acd304-06.html>), “Commercial Note Taking Services” and ABOR Policy **5-308 F.14** (<https://public.azregents.edu/Policy%20Manual/5-308-Student%20Code%20of%20Conduct.pdf>) for more information).

You must refrain from uploading to any course shell, discussion board, or website used by the course instructor or other course forum, material that is not the student's original work, unless the students first comply with all applicable copyright laws; faculty members reserve the right to delete materials on the grounds of suspected copyright infringement.

Plagiarism

Although ASU encourages collaboration between students, and faculty, in the sharing of ideas and experiences, individual work needs to represent the student's original thought and be distinguishably different from other students' work. Copying from other people's work in part or in whole will result in a ZERO grade for the whole work. Recurring plagiarism will result in obtaining an XE and reporting each student's misconduct.

No Generative AI Use Permitted

In this course, all assignments must be completed by the student. Artificial Intelligence (AI), including ChatGPT and other related tools used for creating of text, images, computer code, audio, or other media, are not permitted for use in any work in this class. Use of these generative AI tools will be considered a violation of the **ASU Academic Integrity Policy** (<https://www.google.com/url?q=https://www.google.com/url?q%3Dhttps://provost.asu.edu/academic-integrity/policy%26amp;sa%3DD%26amp;source%3Deditors%26amp;ust%3D1691848796240190%26amp;usg%3DAOvVaw3dJ3IblLUhmO-g65l5Fgy0&sa=D&source=docs&ust=1691848796250399&usg=AOvVaw2wCWmHHUJhIL5UPbHG28pZ>), and students may be sanctioned for confirmed, non-allowable use in this course

Threatening Behavior Policy

Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services (see **SSM 104-02** (<https://www.asu.edu/aad/manuals/ssm/ssm104-02.html>)). Interfering with the peaceful conduct of university-related business or activities or remaining on campus grounds after a request to leave may be considered a crime. All incidents and allegations of violent or threatening conduct by an ASU student (whether on- or off-campus) must be reported to the ASU Police Department (ASU PD) and the Office of the Dean of Students.

Harassment and Sexual Discrimination

Arizona State University is committed to providing an environment free of discrimination, harassment, or retaliation for the entire university community, including all students, faculty members, staff employees, and guests. ASU expressly prohibits discrimination, harassment, and retaliation by employees, students, contractors, or agents of the university based on any protected status: race, color, religion, sex, national origin, age, disability, veteran status, sexual orientation, gender identity, and genetic information.

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> (<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> (<https://eoss.asu.edu/counseling>) is available if you wish to discuss any concerns confidentially and privately.

ASU online students may access 360 Life Services, <https://goto.asuonline.asu.edu/success/online-resources.html> (<https://goto.asuonline.asu.edu/success/online-resources.html>).

Disability Resources

Suitable accommodations will be made for students having disabilities. Students needing accommodations must register with the ASU Disabilities Resource Center and provide documentation of that registration to the instructor. Students should communicate the need for an accommodation insufficient time for it to be properly arranged. See **ACD 304-08** (<https://www.asu.edu/aad/manuals/acd/acd304-08.html>). Classroom and Testing Accommodations for Students with Disabilities.

Students who have accommodations for this course are encouraged to communicate with me as soon as possible to make appropriate arrangements.

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. One element of this legislation requires that all qualified students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities.

If you require an accommodation, please contact the Disability Resource Center (DRC) at ASU Polytechnic located in Student Affairs Quad # 4 or call 480-727-1039 / TTY: 480-727-1009. Please note that students who may need accommodations must register with the ASU Disability Resource Center and provide documentation of that registration to the instructor. Eligibility and documentation policies online: <http://www.asu.edu/studentaffairs/ed/drc/> (<http://www.asu.edu/studentaffairs/ed/drc/>)

Technical Support

- This course uses Canvas to deliver content. It can be accessed through MyASU at <http://my.asu.edu> (<http://my.asu.edu/>) or the Canvas home page at <https://myasucourses.asu.edu> (<https://myasucourses.asu.edu/>)
- To monitor the status of campus networks and services, visit System Health Portal at <http://syshealth.asu.edu/> (<http://syshealth.asu.edu/>)
- To contact the help desk call toll-free at 1-855-278-5080.