

IEE 456/556 Introduction to Systems Engineering (Online)

Syllabus [Sum 24 X]¹

1)Welcome All!

I am so excited to start this course. I am looking forward to a great semester! This is an ASU Online Course without any meeting dates.

This is the syllabus for your course. Read, clarify, discuss it carefully and make sure you understand fully. No word or sentence is colored or underlined in the sentences (except for some titles), as every line is important for your success!

2) All students should have access to pdfs of the Power Point slides, lectures, readings, video links and any additional readings on Canvas. Make sure to complete all the requirements in the initial module (Module0) to unlock the course content.

Instructor: Ali Kucukozyigit

Office: BYENG 360 (use zoom link to meet with me)

e-mail: akucukoz@asu.edu <Messages sent through Canvas Inbox or a personal and/or third-party email account (like iCloud, Gmail, Yahoo and all others) do not get a response.>

Office hours: See Canvas for Office Hours

Course Description: This course addresses the concepts needed for a successful system engineering process. Topics include successfully bringing large scale systems to completion on schedule and on budget. standards driving Systems Engineering such as ISO 15288 and ISO 12207 for software, EIA 632 and IEEE 1220, the Systems Engineering professional association certification topics from INCOSE, the modern new product development process, systems engineering modeling techniques, cost estimating techniques, and finally an introduction to risk and risk analysis.

Pre-requisite: Undergraduate Engineering juniors and seniors. Graduate students are expected to have a background in and understanding of large-scale systems.

COURSE FOUNDATION

3)This course is the introductory course to our Systems Engineering curriculum at ASU. As such it must address all of the concepts needed for a successful system engineering process. The foundation for the course is based upon the following notions:

- The course must be directly related to ISO 15288 and EIA 632 as the standard of choice.
- The course must be directly related to INCOSE as the handbook of choice.
- The course must be based upon IEEE 1220 as the foundation of choice.
- The course must be timely and relevant to the practicing Systems Engineer.
- Yet highlight the solid, analytical foundation needed for success.

¹ This syllabus is subject to change (only by the instructor) as needed through the semester

- The course must be engineering-oriented.
- The course must take a complete system engineering view.

COURSE OBJECTIVE AND EXPECTED LEARNING OUTCOMES

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

- an understanding of the Systems Engineering Concept, scope and scale
- an understanding of the applicable standards and foundations
- an understanding of how the professional association of INCOSE applies Systems Engineering principles
- an introduction to Large Scale Systems and all the phases needed for success
- an introduction to CMM and CMMI
- an introduction to a modern New Product Development process
- an understanding of developing a complete systems view
- an understanding of static and dynamic modeling techniques
- an introduction to the modern cost estimation technique of CoSYSMo and COCOMO
- an introduction to variability and making decisions under certainty

SUGGESTED TEXTBOOK

5)No textbook required.

Instead of using a specific textbook, the class is going to cover a broad range of topics in system engineering. Students can use class slides as learning and reviewing materials. Refer to the instructions how to access to the copyright protected material, if you have any technical problems contact directly to the provided name for solutions. Students will also attain ANSI ISO 15288 standards through their ASU account. Details access instructions will be given later.

COURSE TIME COMMITMENT AND SUCCESS TIPS

6)This 3-credit course requires approximately 135 hours of work. Expect to spend 3+ hours per day over a 5-day week preparing for and actively participating in this course.

- Suggestion: Taking notes directly on the lecture slides is a proven, effective means of material retention. Attend lecture and participate in the discussions, this will also increase your material retention. You can also try taking digital notes if that works best for you
- You are expected to watch the recordings. Students who try to get through the course without watching the videos will earn a failing grade the course as this will not be enough for a performance that earns a passing grade.
- You have an advantage that the campus students do not: You can view the lecture videos as many times as you want! Take advantage of that fact. If you do not understand something, watch the video again, stop as you see necessary to digest the material
- Make sure you do not miss quiz, assignment and discussions due dates as there will be late submission/completion penalties. (1% per hour)
- Once the due date passes three days, you will not be able to earn points from that particular submission/work, you are going to be honored a zero from that assignment.
- Due date changes will be granted for only five situations itemized in this syllabus (all of them required pre-coordination with Prof., officially documented(email to Prof.is not enough) and shared with Student Advocacy.

7) I want you all to be successful, and I believe you can be! However, you need to do the followings (more on Canvas for you to read) that will potentially lead your success both in the course and in your professional development;

- make a study plan and go with your own tempo
- create a study and/or assignment schedule to stay on track
- make sure to complete the necessary modules before the exam dates
- check the course canvas site daily
- read announcements and act timely
- read and respond to course email messages as needed
- complete assignments by the due dates specified
- communicate regularly with your instructor, TA(if applicable) and peers (on discussion platform)
- be aware of the course materials and access them on time
- inform instructor in a timely fashion for any issues
- cramming before the exam does not really help
- not only do your part in a project, ensure the validity of the entire project (if you have team members)
- get involved in the content and classmates through Yellowdig discussion platform (if you have any)

SCHEDULE

8)A detailed schedule of lecture topics, required reading, assignments, and exams is going to be posted separately on Canvas. The schedule and this syllabus may be subject to change with reasonable advance notice. It is OK to adjust your learning tempo and speed (actually you must) according to how you think of your school- work-family balance. Your responsibility is to cover and understand all the required material (at least) once before each exam, quiz and assignment dates. No extension request will be granted and No extra work or make-up will be given.

CANVAS, PLAYPOSIT, YELLOWDIG AND ZOOM

9) All course materials will be posted on the Canvas site for this class. You are mandated to complete the Module 0 other modules (if applicable) first to be able to unlock the course content modules. Your ASU courses can be accessed by both my.asu.edu and asu.instructure.com ([Links to an external site.](#)); bookmark both in the event that one site is down. You are going to have access to course Canvas Site by the close of business on the first day of the classes officially starts. All lecture slides, readings, homework, class schedules, and other items will be posted there. You also must choose a topic, otherwise you will be assigned one. (presentation for undergraduate students and literature review research for graduate students)

PLAYPOSIT

Playposit will be used to enhance your knowledge through engagement with the course content and recordings. You will be collecting points as you view and interact with lectures towards your final course grade. Feel free to take digital notes that can be downloaded or used later to jump around the videos for review. Questions are easy but still pay attention to retain the knowledge. Attending half of the playposit questions (in the entire course) is required, or your performance will be scrutinized for possible AIP. Students are required to complete playposit before each exam.

ZOOM

10) Zoom is the primary synchronous communication mean for faculty office hours, individual or group meetings and also class meetings (if applicable) - like course introduction and icebreaker (if the instructor deem necessary for any reason). You must familiarize yourself with Zoom features and also where to find the correct links. All the links are on

Canvas. Pay attention to Zoom netiquette. Office hours will also be conducted via Zoom. Any class meetings are going to be conducted via Zoom. It is the primary synchronous communication modality for faculty office hours, individual or group meetings and also class meetings (if the instructor deem necessary for any reason). You must familiarize yourself with Zoom features and also where to find the correct links.

YELLOWDIG

11) This course uses a discussion platform called "Yellowdig" for general questions and comments about the course in addition to communicating with your fellow classmates. Prior to posting a question or comment, check the syllabus, check announcements, and check existing posts on yellowdig to ensure it's not redundant. You are encouraged to respond to the questions of your classmates to build a community and create class synergy. Make sure to tag (#) your posts so they are easy to filter later. You also need to use "labels" appropriately. More details are on your course canvas page.

12) This platform is used by students to help each other and by TAs (if applicable) to help students with their assignments and other questions. General questions about assignments will not be answered by email; instead, post your questions to peer platform and they will be answered there. While there, help someone else with their question. If your issue cannot be resolved via the platform with peer interactions, see a TA, UGTA or the Instructor for help during office hours or just email them. Do not expect your Professor to answer and comment posts on this platform!

13) Think of Yellowdig mostly a "Professor-free" environment, where you learn from peers, interact with course content and create a group synergy and even remind each other due dates. This will save time and effort for you, class and the instructor. Email questions of a personal nature directly to your faculty and/or TA (if applicable). Your interactions will be good indicators for the instructor that the students are engaged with the class and class content. There is "scoring" in yellowdig where you will collect points with your responses and comments to other students. It is a cumulative grade throughout the semester so do not be concerned if your score is low in the initial portions of the semester. You will increase your total through weekly maximums throughout the semester as you post each week. Do not share posts for the exam, quiz, assignment; like questions, solutions, answers and others like sharing your work. Doing so will be considered an academic integrity policy (AIP) violation.

E-MAIL CORRESPONDENCE

14) Your primary communication means with your Professor is through office hours and email- not through yellowdig. ASU e-mail is an official means of communication among ASU's students, faculty, and staff (refer to [SSM 107-03](#)). Students are expected to ensure that e-mail is accessed, read, and acted upon in a timely fashion. Students bear the responsibility of any missed messages and should check their ASU-assigned e-mail on a regular basis. You **MUST** send all email from your official ASU email account. Emails not sent from that account will be automatically filtered, deleted, or best case ignored to keep your privacy and education confidentiality. Messages sent through Canvas Inbox or a personal and/or third-party email account (like iCloud, Gmail, Yahoo and all others) do not get a response. Also, do not use SpeedGrader comments section to communicate with the instructor. All correspondence is needed to be kept in the same domain to ensure archiving, documenting and easy reach purposes. Do not forward your official ASU.edu emails to third party as you might not get Canvas announcements and faculty emails.

15) All instructor correspondence is sent to your ASU email account. If you have it forwarded elsewhere, you may miss important information. Not forwarding your ASU email at the first place is highly suggested. Always include the e-mail

subject line such that it facilitates the process. One such example can be “IEE XXX” followed by a descriptive subject line (e.g., “IEE XXX question about the homework 1”). Expect a response in the second business day after the day you emailed. The instructor has a workflow and teaching/grading tempo to be managed. If do not receive any response, kindly follow up if you think the problem is not solved. Check if your problem is already addressed with announcements and/or peer platform post. If you think, the concern is time sensitive (meaning can’t wait until the second business day), start your subject with phrase “URGENT”. Always include course name and number, online or in-person with your name and last name. Remember something you call urgent may not be really urgent from different viewpoints.

16) Course Canvas Inbox, SpeedGrader Comments section and Yellowdig platform are not direct ways of communication with the instructor in this course for personal and time-sensitive situations. The best way to directly communicate is your instructor’s official asu.edu email or office hours. Be professional and respectful in your email correspondences. If you are answering an email from the instructor “always use reply” so an email chain is created documenting the background of what happened.

CALCULATORS

17) You will need a calculator for exams in this course, but it is going to be provided by the proctoring software, do not bring a physical calculator. Learn and practice how to use it before the exam

REQUIRED: APPROVED PHOTO ON FILE

18) Online students must have an approved photo on file with Sun Devil Card Services (additional information at [“ID photos for ASU Online students”](#)). This university requirement supports academic integrity. The photo ID that you provide for exams will be compared with the photo on file. You will receive a “0” for all exams taken without a photo on file. The first exam comes quickly, so you should start the process immediately if your photo is missing. If you are an international student in countries other than US, a government issued (not employer and others) ID or passport with a photo is enough for the exam.

SCHEDULE AND DUE DATES (AZ TIME)

19) Here is the schedule, the exact due dates are on Canvas. If you think the course is not right for you or you are having trouble catching up with the course content, comprehending the material, check the due dates for drop, course withdrawal or complete semester withdrawal. Advisors are the best contact point to help you figure out what to do in such situations.

Week	Notes	Work Due
1	Module 0 (Welcome) Module 1	Quiz 0 Quiz1 Yellowdig
2	Module 2	Due: PLR (only graduate students) -check exact date on Canvas Quiz2 Exam 1 (covers Module 0-1-2) check exact date on Canvas

		Yellowdig
3	Module 3	Quiz3 Yellowdig
4	Module 4	Quiz4 Yellowdig Exam 2 (covers Module 3-4) check exact date on Canvas (not cumulative or comprehensive)
5	Module 5	Quiz5 Yellowdig
6	Module 6	Quiz6 Yellowdig FLR Due (only graduate students) -check exact date on Canvas Presentations Due (only undergraduate students) – check exact date on Canvas
7	Module 7	No Quiz No Yellowdig Exam 3(Final exam) (covers Module 5-6-7) check exact date on Canvas (not cumulative or comprehensive)

GRADING POLICY

20)There is no curving in class or exams. The course grade will be guaranteed based upon the total points each individual student achieves in the followings. The detailed instructions and due dates for projects and assignments (like power point presentations, quizzes, literature reviews or any others) will be communicated separately on Canvas. You may receive an EU, EN or I -depending on your performance and engagement. Y grades are not honored in this course. If you miss any of two of the three exams, you will receive a failing grade from the course. Academic Status Reports (ASRs) are issued to track and monitor the student learning progression, please comply with the instructions communicated in it and see your advisor.

21)Your work is weighted for your course average as follows:

Category	
Exam 1[online proctoring] [100]	65%
Exam 2[online proctoring] [100]	
Exam 3 Final (not cumulative) [online proctoring] [100]	
Pre-literature Review [20] (only graduate students)	20%
Final Literature Review [80] (only graduate students)	
Presentations [100] (only undergraduate students)	
Quizzes (<one lowest score will drop>) [100]	5%
Yellowdig Engagement (earn weekly maximums, need to post weekly) [100]	5%

Playposit (two lowest score will drop) [100]	5%
Total Available 700	100%

22) Be assured that no one with an average lower than your average received a higher grade! As you can see projects, assignments, yellowdig discussions and Quizzes are an integral part of the course collectable points, make sure you submit a professional write-up and comply with specific instructions. There will be no make-up or extra opportunity to collect points at the end of the semester. However, extra credits will be disseminated in some of the exams, that means you can collect >100 points from the exams. 1 of the lowest quiz (including reference sheet uploads) will be dropped before calculating course final grade. Use this opportunity. There will be built-in extra credit exams and assignments if you opt to attempt those questions and points. If you need honors contract, communicate early in the semester, there might be some opportunities.

23) Extra credit work is not available in this class to bump up your grade at the end of the semester. If you dispute the grading of your work, you will have three calendar days after graded work is returned to request a review. When your request is received, a meeting will be scheduled if needed. No review can be done after the following exam, so plan accordingly. Usually, office hours are the best times to carry out an exam review. Joining office hours is the best way for getting this done quickly. You can just click the office hours link during the dedicated faculty times and discuss your exam. You do not need to submit any forms to make a review, this eliminates extra step for you to take. There will be no make-up or extra opportunity to collect points. Not attempted and not completed assignments, quizzes or exams can't be completed all together at the end of the semester (no last-minute submissions for the past due assignments). Instructors has to be fair to all students in the class and protect other student's rights too. This mechanism is established to prevent bottlenecks during the busy end of semester period.

24) 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 further. However, the instructor maintains discretion over final grades. If a student disagrees with the grading, that student has the right to confer with the TA/grader or instructor before the conclusion of the next class period after the initial grade is recorded to discuss concerns.

25) Final exam questions are usually not posted, final questions and answers can be reviewed only after the following semester starts. There is no time between final date and grades are due to discuss concerns.

26) *Important Note about Grading Disputes:* According to the academic integrity code, it is an academic violation to bring up the impact of a course grade on your enrollment status, graduation, scholarships, job prospects, etc. as an explicit or implicit, direct or indirect, written or spoken attempt to influence a change in announced grade. Therefore, you are strongly advised against approaching me or the course TA/grader (if applicable) with grading disputes that are unrelated to actual academic achievement, as such incidents will be forced to report these occurrences as potential academic code violations. Do not contact (verbal or email, direct or indirect) instructor for any grade or point bumps at the end of the semester, this is a serious academic integrity violation. This behavior will be reported to Dean's office.

27) You are guaranteed a course grade per the following: (EU, EN, I and Academic Integrity Violation grades are considered and evaluated case by case)

Course Average	$X \geq 99\%$	$90\% \leq X < 99\%$	$80\% \leq X < 90\%$	$70\% \leq X < 80\%$	$60\% \leq X < 70\%$	$X < 60\%$
Course Grade	A+	A	B	C	D	E

MAKE-UP POLICY

28) *Assignments and any submissions* due dates are on the schedule and fixed. All submissions are due by 1159 pm-AZ on the declared day on canvas. There will be no deadline extensions; Late homework/assignment loses 1% (one percent) per hour from the final submission score. Three days after the due date, the assignment is not going to be graded and you will receive a zero. Carefully check the difference between due dates and availability dates in each assignment, quiz or other submissions. In some case, instructor has the authority to extend the due dates deemed necessary.

29) *Concept Quiz* due dates are on the schedule and on canvas. Quizzes are due by 1159 pm-AZ. There will be no deadline extensions or make-ups. There might be extra quizzes if the instructor sees necessary. In that case, the total quiz weight is not going to be impacted. There is no make up for initial quizzes as well.

30) *Exam* dates are on the schedule and fixed in Canvas. No late submissions for exams. It is a good idea to follow the most current canvas announcements (and student discussion board if applicable) as things might change slightly. You will have more than 24 hours to complete it, so use this time wisely. The opportunity for a make-up exam will be available in the following situations: [however each situation needs documentation, an email from the student is not an official documentation]

1. Required class absence due to university-sanctioned activities (refer to [ACD 304-02](#)). It is your responsibility to notify the Instructor *early in the semester* about the need to be absent from class due to participation in a university-sanctioned activity.
2. Religious observance (refer to [ACD 304-04](#)). It is your responsibility to notify the Instructor *at the beginning of the semester* about the need to be absent from class due to a religious observance.
3. The death of an immediate family member, accident, or other emergency. Please work with Student Advocacy and Assistance (<https://eoss.asu.edu/dos/srr/StudentAdvocacyandAssistance>) for guidance. Once I receive notification from Student Advocacy and Assistance, you will have the opportunity for a make-up.
4. Military deployment or other military service that prohibits taking the exam. Excused absences related to missed class due to military line-of-duty activities that are in accord with [ACD 304-11](#), "Missed Class Due to Military Line-of-Duty Activities," and SSM 201-18, "Accommodating Active Duty Military". Work performed in the line-of-duty according [SSM 201-18](#)
5. Illness, quarantine, or self-isolation related to illness as documented by a ASU Health Clinic/health professional. Absences for illness, quarantine or self-isolation related to illness should be documented by a health professional and communicated to the instructor as soon as possible by email and/or joining office hours.

31) You must provide verifiable documentation for all of the above situations You need to pre-coordinate, document and get Student Advocacy involved. For #1 and #2, it is your responsibility to notify the instructor at the beginning of the semester. For #3 and #5, work with Student Advocacy and Assistance for documentation; this will simplify communication with all your faculty in your other courses. For #4, let us plan when you first learn about it, and let us

have a contingency plan but before the deployment a documentation is still needed. Work with your official commanding officer and Student Advocacy and Assistance for documentation.

Excused absences do not relieve students from responsibility for any part of the course work required during the period of absence. You must seek guidance and instruction from the instructor for activities, assignments and make-up work.

32) If you are unable to take an exam or quiz due to illness, you must (a) inform and email the instructor before the exam window opens. (b) produce an authorized, verifiable doctor's (not nurse or nurse practitioner) excuse within 3 (three) days of the missed exam. If (a) and (b) are complying, you will be honored make-up the exam again at a later date. The weight can't be moved because each exam covers different material and not comprehensive. This might require you to take an "Incomplete grade" and fulfill the requirement even after the semester. If you miss an exam for a non-emergency situation (forgetting, last minute unexpected IT crisis due to your lack of personal preparation etc), you will receive a score of "0" for that exam. Students who are very ill and unable to attend an exam, or on a date when a printed assignment must be turned in to me on the due date must notify me by with an email prior to the due date, and provide a doctor's note with signature from the ASU Health Clinic or a licensed MD doctor (no nurse practitioners) as explained. The exam needs to be taken in any case since the final exam is not total cumulative in terms of content covered.

33) If you do not take the Final Exam and if you are excused by the instructor, you will receive a course grade of "I" In order to pass this course, you must take the Final Exam beginning of the next semester.

SYLLABUS QUIZ AND CONCEPT QUIZZES

34) Syllabus and concept quizzes are in Canvas. These quizzes use online proctoring (see canvas). You must take the quizzes to unlock the content. The purpose of concept quizzes is to test lecture, homework, and reading concepts. If you attend lectures, do the homework, and read the textbook according to the schedule, you will do well on the quizzes. You are expected to complete the quizzes by yourself with your own tempo (make sure to complete before the due date). You are also expected to not share questions and/or answers with others (inside or outside of the classroom). Early quizzes will not be given except in provable, extreme, circumstances. Personal travel, family or friend visitation, etc. will not qualify. Libraries and other locations in all cities have internet. Just plan to sneak away for a short period of time to take the quiz. Forgetting an assignment is not an excuse. Overall, remember the lowest one quiz will be dropped. Refer to the dedicated canvas pages for all assignments/quiz/exams.

EXAM PROCTORING

35) This course uses online proctoring for exams. Online proctoring records both your computer screen activity and the physical room environment in order to mimic in-person proctoring conditions. The recordings are captured to help ensure academic integrity. Check your Canvas page for extremely useful and detailed information.

36) Online proctoring records your face, your computer screen activity, your voice and your physical room environment in order to mimic in-person proctoring conditions. The recordings are captured to help ensure academic integrity. The proctoring service will flag your exam if suspicious activity is detected or if exam rules are broken. These recordings will be reviewed for exam rule compliance and academic integrity by your instructor. If there is a suspicious activity, the situation will be reported to AIP office experts.

37) It is your individual responsibility to be ready for the exam. You have to get familiar and have the necessary hardware, software and preparation for the exams with the proctoring service. Here are essential rules and additional specific rules will be communicated prior to exams; (make sure to read more on canvas, the list below is not an exhaustive list). Every second of your recordings are recorded and later manually viewed. Any violation of these rules, you will be granted a zero from the assessment.

- You may use your handwritten one-page (standard 8.5-11) reference sheet for each exam (you will need to upload this within 5 minutes after your submission, the link will be provided on Canvas)
- You must have a photo ID. Get an ASU Sun Card if you don't have one: <https://cfo.asu.edu/cardservices-suncard>
- You must have a roster photo uploaded to ASU
- Your face, eyes, both hands and surface of the desk must be on camera at all times (tilt your laptop to 45 degrees left or right and adjust the screen to cover all these items- check your adjustment with the self-view you have on your screen)
- Make sure your voice and noise in the room is being recorded.
- You must do a complete, and thorough room scan (360 degrees)- including around, above and under the table, slowly
- You must be alone in the room, no one must come into room during the exam
- You May not have a calculator- use the scientific calculator on the proctoring software service window
- You may not use your cell phones. Show your mobile phone and ipad to camera and put it a location that you can't reach but still visible from the camera
- You may not be on-line on any other devices
- You may not wear headsets or earplugs
- You may not have any windows open other than the exam window on your screen
- You may not leave the room, no bathroom breaks are allowed
- You may not wear a watch of any kind. The exam has a timer that is visible.
- You may not discuss the exam with any other student while the exam is open/"live"
- You may not post exam questions anywhere online, in text messages, or reproduce the exam questions in any way at any time, even after the exam closes.
- You may not take photos or screen shots of any portion of any exam at any time, even after it closes. You will be able to see the full questions when the exam closes.
- You may not use any AI tools like ChatGPT or Bard. Consult your professor how to use these AI tools without violating AIP policies

38) Forgetting the exam instructions is not a valid excuse or reason for the violation. If any of the above musts be violated, you will receive a zero on the exam. Should any of the above may nots occur, you will receive a zero on the exam and be reported to Academic Integrity Officer (AIO) for an academic integrity violation with the recommendation that your final course grade be lowered a full letter grade. Additionally, you may be suspended or expelled from ASU if this is a serious and/or repetitive. After that moment, the process is not run by the instructor. Academic integrity is taken very seriously by both faculty, administration and leadership.

IT HELP

39) To help ensure that everything will function properly, you must complete a practice exam before the first exam. Additional information about the online proctoring service is posted with class materials. If you need assistance, contact

the ASU Experience Center for assistance: access 24/7 live chat, create a case from your My ASU Service Center, or call 855-278-5080. More details are posted in course Canvas site. For technical support, use the Help icon in the black global navigation menu in your Canvas course or call them. Representatives are available to assist you 24 hours a day, 7 days a week. Make sure you provide your ticket number for any technical problem you will encounter, including exams. Attaining a ticket number is required step but not sufficient to skip(excuse from) the test. You have to solve the problem with IT helpdesk within the exam window. More details are posted in course Canvas site.

EXAM INSTRUCTIONS

40)There are pre-exam preparations that apply to every online exam. In addition, there will be exam-specific instructions for each exam that address exam time, permissible materials, and other exam information. Exam instructions will include, but not be limited to:

- You must have an approved photo on file to confirm your identity.
- Your hands, face, eyes and desk surface must be within the camera frame at all times.
- You must complete (360 degrees) a room scan of your testing area that shows the entire work environment. Otherwise you will be in violation of the exam instructions, and you may also be in violation of ASU's Student Academic Integrity Policy. Exam points may be deducted for violating exam instructions.
- You must not have access to a cell phone, smart watch, TI-Nspire calculator, or other internet-capable device during the exam. If a cell phone, smart watch, TI-Nspire calculator, or other internet-capable device is seen out in any way or is accessible during an exam, you will be in violation of the exam instructions, and you may also be in violation of ASU's Student Academic Integrity Policy. Use the scientific calculator provided by the proctoring software.
- You are required to upload your one page back and front hand-written reference page within 15 minutes of exam completion- this is considered as a regular assignment submission with 100 credits and regarded as one of the regular quiz and or assignment submission.

Expected Digital Classroom Behavior

41)Expectations for classroom behavior apply to in-person, on-line and iCourse classes and encompass both virtual and in-person interactions. If the class is cancelled or delayed, the instructor will make announcements or pre-arrangements to let the students know beforehand. If this does not happen, then students need to wait at least 15 minutes for the instructor unless they are directed for otherwise by someone from the academic unit. Students can leave the classroom after 15 minutes if the instructor or someone in the academic unit show up. Students are entitled to receive instruction free from interference by other members of the class. An instructor may withdraw a student from the course when the student's behavior disrupts the educational process per Instructor Withdrawal of a Student for Disruptive Classroom Behavior. Appropriate online behavior (also known as netiquette) is defined by the instructor and includes keeping course discussion posts focused on the assigned topics. Students must maintain a cordial atmosphere and use tact in expressing differences of opinion. Inappropriate discussion board posts may be deleted by the instructor.

Policy Against Threatening Behavior

42)Students, faculty, staff, and other individuals do not have an unqualified right of access to university grounds, property, or services. 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, per ASU policy ([SSM 104-02](#)). Note that “conduct” encompasses both in-person and virtual interactions.

DISABILITY ACCOMMODATIONS

43) Suitable accommodations will be made for students having disabilities. Students needing accommodations must register with the ASU Student Accessibility and Inclusive Learning Services (SAILS) and provide documentation of that registration to the Instructor. Students should communicate the need for an accommodation in sufficient time for it to be properly arranged. Campus-specific location and contact information, as well as information on eligibility and documentation policies, can be found at the <https://eoss.asu.edu/drc/s>

Accessibility Statement

44) In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities.

[Qualified students with disabilities may be eligible to receive academic support services and accommodations](#). Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are [responsible for requesting accommodations and providing qualifying documentation](#) to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities. Qualified students who wish to request an accommodation for a disability should contact the DRC by going to <https://eoss.asu.edu/drc>, calling (480) 965-1234 or emailing DRC@asu.edu. See [ACD 304-08](#) Classroom and Testing Accommodations for Students with Disabilities. The name is changed to SAILS (Student Accessibility and Inclusive Learning Services) but the websites and emails are correct.

HARASSMENT AND SEXUAL DISCRIMINATION

45) 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. Any occurrence of discrimination, harassment or retaliation will be reported, per ASU policy ([ACD 401](#)).

46) 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>.

47) As an employee of the University, I am considered a mandated reporter. 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>, is available if you wish to discuss any concerns confidentially and privately. Online students may also contact “360 Life Services” for counseling.

SCAI UNDERGRADUATE INSTRUCTIONAL CONCERNS PROCESS

48)SCAI has outlined the process to be followed to address instructional concerns and course-related complaints. Please refer to the guidelines posted at the SCAI website: [Undergraduate-Instructional-Concerns](#) Academic Integrity and Copyright Laws

Academic Integrity

49)Students in this class must adhere to ASU's Academic Integrity Policy, which can be found at <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 Student Honor Code](#) and the [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. Students in this class must adhere to ASU's academic integrity policy, which can be found at <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](#) and the Fulton Schools of Engineering [Honor Code](#).

50)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.

51) ASU "Two Strike" Policy

ASU tracks Academic Integrity issues across the campuses. So, one strike in English and another in IE and you will be asked to depart from the College of Engineering for at least a year.

Examples of activities permitted in this course:

- You may and should work with other students in person and on yellowdig to do the homework problems and grow your understanding with the content.(before the assessments and not specific questions/answers from assessments)
- You may post your individual homework problem statement on yellowdig and seek answers and assistance from your peers. .(before the assessments and not specific questions/answers from assessments)
- You may discuss the quiz preparation on yellowdig.(before the assessments and not specific questions/answers from assessments)

Examples of activities forbidden in in this course:

- You may not use Chegg.com, CourseHero.com or any similar resource to find answers or solutions to any class work: homework, quizzes, or exams.
- You may not simply copy your friends' answers to homework problems.
- You may not collaborate with another person(s) on concept quizzes, including sharing questions and/or answers while the quiz is available in Canvas (i.e., the "open" time window).
- You may not collaborate with another person(s) on exams, including sharing questions and/or answers while the exam is available in Canvas (i.e., the "open" time window).
- You may not have another person do any part of any homework, quiz or exam for you.

- You may not post course content to Chegg.com, CourseHero.com or a similar web site.

52) If you do any of the forbidden activities above:

- You will be reported to the Dean's office for an academic integrity violation.
- The recommended sanctions will be a zero on the work item AND one full letter grade reduction for your final course grade.

53) The list of forbidden activities above is not comprehensive. If you are not sure whether something you are doing violates ASU's Academic Integrity Policy, ask the Instructor. Unless specifically permitted above, an activity or resource is forbidden until the Instructor says it is permitted. Check more information on Canvas and ASU websites.

Diversity and Inclusion

54) ASU is proud of not whom it excludes but whom it includes. All diverse backgrounds and perspectives be well served in this course. If any of you have any concern/conflicts rising out of being diverse, please let me know so we can work it out for you. It is important for me that you make the most out of my class with a comfortable learning environment. If you already have established accommodations, please convey it to me at your earliest convenience.

Copyright

55) Course content, including lectures, 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](#), "Commercial Note Taking Services" and [ABOR Policy 5-308 F.14](#), "Student Code of Conduct" for more information). Course content includes, but is not limited to, lecture slides, written materials, assignments, homework, exercises, quizzes, and exams.

56) 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.

57) All course content and materials, including lectures (Zoom recorded lectures included) are copyrighted materials. The assignment files, lecture example files, videos, and all other materials used in this course are the property of Arizona State University, Dr Dan Shunk and Dr A. Kucukozyigit and are copyright protected. They can NOT be copied, given to a friend, uploaded to an internet site, or distributed in any way.

Course Evaluation

58) Students are expected to complete the course evaluation. The feedback provides valuable information to the instructor and the college and is used to improve student learning. Students are notified when the online evaluation form is available, and there might be announcements encouraging the students to participate.

Tentative Content

- Understanding the Fundamentals of Systems
- Seeing the Big Picture of Systems
- Quality Management
- Lean and Six Sigma
- Quality Function Deployment- QFD
- COCOMO and COSYSMO Cost estimation techniques
- Earned Value Management – EVM
- Fundamentals of System Risks
- Developing Risk Responses Strategies
- Enterprise Risk Management- ERM
- FMEA/ PFMEA
- Root Cause Analysis- Fishbone and Brainstorming
- Desired Customer Outcome- VOC
- System Life Cycle
- Managing Project Schedule risks in Big Projects
- Static and Dynamic Modeling
- Why Systems Fail?
- Stage-Gate Process
- Change/Configuration Management
- IDEF and Idea Generation
- Navigating Teams Safely-Team Dynamics
- Understanding Team Lifecycle
- Formulating Product strategy
- Creating Vision-Mission and Goals
- Systems Engineering Management Plan
- INCOSE
- When Risk mitigation fails- Crisis management

Course and Syllabus Disclaimer

59)Every attempt is made by the instructor to provide a syllabus that is complete, comprehensive and that provides an accurate overview of the course. However, unforeseen circumstances (e.g. conflict of schedule, cancellation of classes due to any reasons) may make it necessary for the instructor to partly modify the syllabus during the semester. This will affect the scheduling not the grading and absence policies. This may also depend, in part, on the progress, needs, and experiences of the students attending the class. Any information in this syllabus (other than grading and absence policies) may be subject to change with reasonable advance notice. Remember to check your ASU email and the course site often for updates, announcements!
