

**CIS 5307-115, 60158, Advanced Systems Analysis and Design
Summer 2023
Texas A&M University-Central Texas**

COURSE DATES, MODALITY, AND LOCATION

Course Dates: June 5, 2023 – July 28, 2023

This is a 100% online course, and uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com/>] for delivery of lectures and course materials.

INSTRUCTOR AND CONTACT INFORMATION

Instructor: Dr. Hashai Papneja

Office: Founder's Hall 323P

Email: hpapneja@tamuct.edu, or through Canvas Inbox.

Office Hours

Mondays: 10AM – 12PM online on TAMUCT's Microsoft Teams

Wednesdays: 3PM – 5PM online on TAMUCT's Microsoft Teams

To join via Microsoft Teams: Please sign into Microsoft Teams using your Warrior account and search for my name to place a call.

I am also available to students on an appointment basis. Please email me *from your Warrior email account* to schedule an appointment.

Student-Instructor Interaction

I usually respond to student emails within 2 working days, if not sooner.

Emergency Warning System for Texas A&M University-Central Texas

SAFEZONE. SafeZone provides a public safety application that gives you the ability to call for help with the push of a button. It also provides Texas A&M University-Central Texas the ability to communicate emergency information quickly via push notifications, email, and text messages. All students automatically receive email and text messages via their myCT accounts.

Downloading SafeZone allows access to push notifications and enables you to connect directly for help through the app. You can download SafeZone from the app store and use your myCT credentials to log in. If you would like more information, you can visit the [SafeZone](http://www.safezoneapp.com) website [www.safezoneapp.com].

To register SafeZone on your phone, please follow these 3 easy steps:

1. Download the SafeZone App from your phone store using the link below:
 - [iPhone/iPad](https://apps.apple.com/app/safezone/id533054756): [https://apps.apple.com/app/safezone/id533054756]
 - [Android Phone / Tablet](https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp)
[https://play.google.com/store/apps/details?id=com.criticalarc.safezoneapp]
2. Launch the app and enter your myCT email address (e.g. {name}@tamuct.edu)
3. Complete your profile and accept the terms of service

For updates on COVID information, please monitor the University [website](https://www.tamuct.edu/covid19/)
[https://www.tamuct.edu/covid19/]

COURSE INFORMATION

Course Overview and Description

This course examines the system analysis and design processes. Students will be introduced to comparative development methodologies and modeling tools including project management and cost benefit analysis, information systems planning and project identification and selection, requirements collection and structuring, process modeling, conceptual and logical data modeling, database design and implementation, design of the human-computer interface, system implementation, system maintenance and change management.

Course Objective or Goal

Student Learning Outcomes

After a successful completion of the course, a student should be able to:

- Design and explain each of the different parts of a Computer Information System
- Examine system components, identify how they are used, and relate the pieces to the system whole
- Complete an information system project to develop system analysis and design skills
- Learn about the tools used to create various software design artifacts
- Explore and discuss current topics and developments in the system analysis and design field
- Evaluate career options in system analysis and design field.

Required Reading and Textbook(s)

Title: Systems Analysis and Design: An Object-Oriented Approach with UML

Authors: Alan Dennis, Barbara Wixom, and David Tegarden

ISBN: 978-1-119-56121-7

Edition: 6th edition

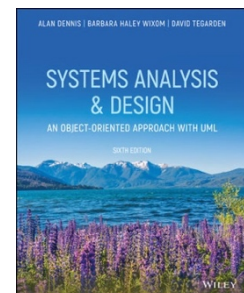
Publisher: Wiley

Student Companion Site: <https://bcs.wiley.com/he-bcs/Books?action=index&itemId=1119561213&bcsId=11998>

Note: Students may use the 5th edition; it will also work for this course.

ISBN-13: 978-1118804674

ISBN-10: 1118804678



Note: A student of this institution is not under any obligation to purchase the required materials from a university-affiliated bookstore. The same materials may also be available from the publisher, or other online retailers.

Supplemental Material: The course textbook may be supplemented with other materials including research articles, case studies, industry articles, videos including TED talks, PowerPoint presentations, etc. Students must know how to search for and download research articles from the Web (e.g., from Google Scholar <https://scholar.google.com/>) and from the University Library (<https://tamuct.libguides.com/index>).

COURSE REQUIREMENTS

Chapter Readings

The textbook has 13 chapters, and we will be going through each one. Chapter readings for each week are listed in the Course Calendar below. Additionally, PowerPoint slides for each chapter are available on Canvas. Lecture videos will be posted on a weekly basis. Students are expected to read and understand the chapters, and go through the lecture videos before working through any assignments.

Discussions

There are 4 discussions in this course, each worth 25 points. The purpose of these discussions is to stimulate your thinking of the material presented in the class, and to help you connect and learn from other students.

Assignments

There are 5 assignments in this course, each worth 80 points. The purpose of these assignments is to measure your understanding of the material. Some of the assignments will be related to the Final Project, and you would need to integrate them at the end of the semester into your Final Project Report. Multiple submissions before the deadline are allowed. If an assignment involves submitting multiple files, please zip the files and upload only the zipped file. Before submitting an assignment, please run it on your computer to make sure it works. For coding assignments, you also need to submit a screenshot showing that your code works.

Midterm

There is 1 midterm, worth 150 points. Details about the midterm will be provided during the course on Canvas.

Final Project

There is 1 final project, worth 200 points. The Final Project Report is a compilation of the project-related assignments along with additional deliverables as requested by the instructor. It is the student's responsibility to incorporate all feedback given on the project-related assignments into the Final Project Report. More information will be provided during the course on Canvas.

Final Exam

There is 1 final exam, worth 150 points. Details about the final exam will be provided during the course on Canvas.

Note that the above assignments are all **individual assignments**, to be worked on individually. Seeking unauthorized assistance from others would constitute a violation of Academic Policy.

Grading Criteria Rubric and Conversion

The following grading criteria will be used to determine your final grade in the course. Note that a multiplication factor has been introduced in order to make the Quizzes and “Use It” Exercises account for a higher percentage of the final grade.

Assignment Category	Quantity	Points Each	Total Points
Discussions	4	25	100
Assignments	5	80	400
Midterm	1	150	150
Final Project	1	200	200
Final Exam	1	150	150
Total			1,000

The following cutoffs (no rounding) will be used to arrive at your final grade in the course:

Total Percentage Score	Total Points Score	Letter Grade
At or above 90%	At or above 900	A
At or above 80%	At or above 800	B
At or above 70%	At or above 700	C
At or above 60%	At or above 600	D
Below 60%	Below 600	F

Posting of Grades

All student grades will be posted to the Canvas Gradebook. Grades will be posted usually within 7 working days after the assignment due date.

Grading Policies

All assignments must be submitted before the posted deadline (i.e., by 11:59PM CT on the due date noted in the Course Calendar below). Late assignments will generally not be accepted, unless you have a genuine reason (e.g., sickness) **with documented evidence**. In such cases, please email me, and depending on the situation, I may make an exception for you to make up the work. It is always advisable to start working through the assignments as soon as possible.

Plagiarism Policy

Students are strongly advised not to copy and paste material from websites, study guides (such as Chegg, Course Hero, etc.), research articles, industry articles, blog posts, or any other online resources. Students must rephrase and properly cite any of the material used in their submissions. All submissions will be checked using the automated plagiarism check / similarity match software built into Canvas. Submissions with more than a 40% similarity will automatically receive a grade of 0 (zero). It is the student's responsibility to check for this score on Canvas, and, if needed, revise the assignment, and resubmit. Rephrasing and citing sources properly or quoting with proper citations are key here.

COURSE OUTLINE AND CALENDAR

Complete Course Calendar

Below is a tentative course outline and calendar, subject to change by the instructor.

Week	Dates	Learning Materials	Graded Assignments Due	Due Date*
1	June 5 – 11, 2023	Syllabus, Introductions, Chapter 1: Introduction to Systems Analysis and Design	Discussion 1, Discussion 2	June 11
2	June 12 – 18	Chapter 2: Project Management, Chapter 3: Requirements Determination	Assignment 1	June 18
3	June 19 – 25	Chapter 4: Business Process and Functional Modeling, Chapter 5: Structural Modeling	Assignment 2	June 25
4	June 26 – July 2	Chapter 6: Behavioral Modeling, Chapter 7: Moving on to Design	Midterm	July 2
5	July 3 – 9	Chapter 8: Class and Method Design, Chapter 9: Data Management Layer Design	Assignment 3, Discussion 3	July 9
6	July 10 – 16	Chapter 10: Human-Computer Interaction Layer Design, Chapter 11: Physical Architecture Layer Design	Assignment 4	July 16
7	July 17 – 23	Chapter 12: Construction, Chapter 13: Installation and Operations	Assignment 5, Discussion 4	July 23
8	July 24 – 28	Finals Week	Final Exam, Final Project	July 28

* Unless otherwise noted, all assignments are due to Canvas by 11:59PM CT on the due date.

Important University Dates

Please see the link below for the A&M-Central Texas Academic Calendars, which track important deadlines and dates (e.g., drop deadlines, etc.):

<https://www.tamuct.edu/registrar/academic-calendar.html>

TECHNOLOGY REQUIREMENTS AND SUPPORT

This course requires access to Cengage's MindTap platform, and Microsoft Office 365 software. As a University student, you can download Office 365 at no cost. Please access this University link for download instructions: <https://tamuct.onecampus.com/task/all/office365-software>

Technology Requirements

This course requires access to the A&M-Central Texas Instructure Canvas learning management system. **We strongly recommend using the latest versions of Chrome or Firefox browsers. Canvas no longer supports any version of Internet Explorer.**

Logon to A&M-Central Texas Canvas [<https://tamuct.instructure.com/>] or access Canvas through the TAMUCT Online link in myCT [<https://tamuct.onecampus.com/>]. You will log in through our Microsoft portal.

Username: Your MyCT email address. Password: Your MyCT password

Canvas Support

Use the Canvas Help link, located at the bottom of the left-hand menu, for issues with Canvas. You can select "Chat with Canvas Support," submit a support request through "Report a Problem," or call the Canvas support line: 1-844-757-0953.

For issues related to course content and requirements, contact your instructor.

Online Proctored Testing

A&M-Central Texas uses Proctorio for online identity verification and proctored testing. This service is provided at no direct cost to students. If the course requires identity verification or proctored testing, the technology requirements are: Any computer meeting the minimum computing requirements, plus web camera, speaker, and microphone (or headset). Proctorio also requires the Chrome web browser with their custom plug in.

Other Technology Support

For log-in problems, students should contact Help Desk Central, 24 hours a day, 7 days a week

Email: helpdesk@tamu.edu

Phone: (254) 519-5466

[Web Chat](http://hdc.tamu.edu): [<http://hdc.tamu.edu>]

Please let the support technician know you are an A&M-Central Texas student.

UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES

Academic Accommodations

At Texas A&M University-Central Texas, we value an inclusive learning environment where every student has an equal chance to succeed and has the right to a barrier-free education. The Warrior Center for Student Success, Equity and Inclusion is responsible for ensuring that students with a disability receive equal access to the university's programs, services and activities. If you believe you have a disability requiring reasonable accommodations, please

contact the Office of Access and Inclusion, WH-212; or call (254) 501-5836. Any information you provide is private and confidential and will be treated as such.

For more information, please visit our [Access & Inclusion](https://tamuct.instructure.com/courses/717) Canvas page (log-in required) [https://tamuct.instructure.com/courses/717]

Academic Integrity

Texas A&M University-Central Texas values the integrity of the academic enterprise and strives for the highest standards of academic conduct. A&M-Central Texas expects its students, faculty, and staff to support the adherence to high standards of personal and scholarly conduct to preserve the honor and integrity of the creative community. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. All academic misconduct concerns will be referred to the Office of Student Conduct. When in doubt on collaboration, citation, or any issue, please contact your instructor before taking a course of action.

For more [information regarding the student conduct process](https://www.tamuct.edu/student-affairs/student-conduct.html), [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may [submit a referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0), [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0].

Drop Policy

If you discover that you need to drop this class, you must complete the [Drop Request](https://eis-prod.ec.tamuct.edu:443/samlso&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612) Dynamic Form through Warrior Web.

[https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdpid=https://eis-prod.ec.tamuct.edu:443/samlso&SpSessionAuthnAdapterId=tamuctDF&TargetResource=https%3a%2f%2fdynamicforms.ngwebsolutions.com%2fSubmit%2fStart%2f53b8369e-0502-4f36-be43-f02a4202f612].

Faculty cannot drop students; this is always the responsibility of the student. The Registrar's Office will provide a deadline on the Academic Calendar for which the form must be completed. Once you submit the completed form to the Registrar's Office, you must go into Warrior Web and confirm that you are no longer enrolled. If you still show as enrolled, FOLLOW-UP with the Registrar's Office immediately. You are to attend class until the procedure is complete to avoid penalty for absence. Should you miss the drop deadline or fail to follow the procedure, you will receive an F in the course, which may affect your financial aid and/or VA educational benefits.

Important information for Pregnant and/or Parenting Students

Texas A&M University-Central Texas supports students who are pregnant, experiencing pregnancy-related conditions, and/or parenting. In accordance with requirements of Title IX and related guidance from US Department of Education's Office of Civil Rights, the Dean of Student Affairs' Office can assist students who are pregnant and/or parenting in seeking accommodations related to pregnancy and/or parenting. Students should seek out assistance as early in the pregnancy as possible. For more information, please visit [Student Affairs](#)

[<https://www.tamuct.edu/student-affairs/pregnant-and-parenting-students.html>]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](#) online, please visit the website [<http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf>].

Title IX of the Education Amendments Act of 1972 prohibits discrimination on the basis of sex and gender—including pregnancy, parenting, and all related conditions. A&M-Central Texas is able to provide flexible and individualized reasonable accommodation to pregnant and parenting students. All pregnant and parenting students should contact the Associate Dean in the Division of Student Affairs at (254) 501-5909 to seek out assistance. Students may also contact the University's Title IX Coordinator.

Tutoring

Tutoring is available to all A&M-Central Texas students, both virtually and in-person. Student success coaching is available online upon request.

If you have a question, are interested in becoming a tutor, or in need of success coaching contact the Warrior Center for Student Success, Equity and Inclusion at (254) 501-5836, visit the Warrior Center at 212 Warrior Hall, or by emailing WarriorCenter@tamuct.edu.

To schedule tutoring sessions and view tutor availability, please visit [Tutor Matching Services](#) [<https://tutormatchingservice.com/TAMUCT>] or visit the Tutoring Center in 111 Warrior Hall.

Chat live with a remote tutor 24/7 for almost any subject from on your computer! Tutor.com is an online tutoring platform that enables A&M-Central Texas students to log in and receive online tutoring support at no additional cost. This tool provides tutoring in over 40 subject areas except writing support. Access Tutor.com through Canvas.

University Library & Archives

The University Library & Archives provides many services in support of research across campus and at a distance. We offer over 350 electronic databases containing approximately 631,525 eBooks and 75,149 journals, in addition to the 97,443 items in our print collection, which can be mailed to students who live more than 50 miles from campus. Research guides for each subject taught at A&M-Central Texas are available through our website to help students navigate these resources. On campus, the library offers technology including cameras, laptops, microphones, webcams, and digital sound recorders.

Research assistance from a librarian is also available 24 hours a day through our online chat service, and at the reference desk when the library is open. Research sessions can be scheduled for more comprehensive assistance, and may take place virtually through WebEx, Microsoft Teams or in-person at the library. [Schedule an appointment here](#) [<https://tamuct.libcal.com/appointments>]. Assistance may cover many topics, including how to find articles in peer-reviewed journals, how to cite resources, and how to piece together research for written assignments.

Our 27,000-square-foot facility on the A&M-Central Texas main campus includes student lounges, private study rooms, group work spaces, computer labs, family areas suitable for all ages, and many other features. Services such as interlibrary loan, TexShare, binding, and laminating are available. The library frequently offers workshops, tours, readings, and other events. For more information, please visit our [Library website](https://tamuct.libguides.com/index) [https://tamuct.libguides.com/index]

University Writing Center

University Writing Center: Located in Warrior Hall 416, the University Writing Center (UWC) at Texas A&M University–Central Texas (A&M–Central Texas) is a free service open to all A&M–Central Texas students. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday in Warrior Hall 416 (with online tutoring available every hour as well) with satellite hours available online only Monday thru Thursday from 6:00-9:00 p.m. and Saturday 12-3 p.m.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. By providing a practice audience for students' ideas and writing, our tutors highlight the ways in which they read and interpret students' texts, offering guidance and support throughout the various stages of the writing process. In addition, students may work independently in the UWC by checking out a laptop that runs the Microsoft Office suite and connects to WIFI, or by consulting our resources on writing, including all of the relevant style guides. Whether you need help brainstorming ideas, organizing an essay, proofreading, understanding proper citation practices, or just want a quiet place to work, the UWC is here to help!

Students may arrange a one-to-one session with a trained and experienced writing tutor by making an appointment via [WConline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at bruce.bowles@tamuct.edu if you have any questions about the UWC, need any assistance with scheduling, or would like to schedule a recurring appointment with your favorite tutor.

OTHER POLICY STATEMENTS

A Note about Sexual Violence at A&M-Central Texas

Sexual violence is a serious safety, social justice, and public health issue. The university offers support for anyone struggling with these issues. University faculty are mandated reporters, so if someone discloses that they were sexually assaulted (or a victim of Domestic/Dating Violence or Stalking) while a student at TAMUCT, faculty members are required to inform the Title IX Office. If you want to discuss any of these issues confidentially, you can do so through Student Wellness and Counseling (254-501-5955) located on the second floor of Warrior Hall (207L). Sexual violence can occur on our campus because predators often feel emboldened, and victims often feel silenced or shamed. It is incumbent on ALL of us to find ways to actively create environments that tell predators we don't agree with their behaviors and tell survivors

we will support them. Your actions matter. Don't be a bystander; be an agent of change. For additional information on campus policy and resources visit the [Title IX webpage](https://www.tamuct.edu/compliance/titleix.html) [https://www.tamuct.edu/compliance/titleix.html].

Behavioral Intervention

Texas A&M University-Central Texas cares about the safety, health, and well-being of its students, faculty, staff, and community. If you are aware of individuals for whom you have a concern, please make a referral to the Behavioral Intervention Team. Referring your concern shows you care. You can complete the [referral](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2) online [https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=2].

Anonymous referrals are accepted. Please see the [Behavioral Intervention Team](https://www.tamuct.edu/bit) website for more information [https://www.tamuct.edu/bit]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5805.

Syllabus and Course Materials

The instructor reserves the right to modify the course syllabus during the semester for the benefit of the students. The instructor reserves the right to supplement materials presented in the text with additional course material that may help the students better understand the topic(s).

Syllabus, Grading Policies, and Rubrics

The instructor reserves the right to deduct points for any late submissions to remain fair to other students' timely submissions. The instructor reserves the right to modify the syllabus, grading policies, and rubrics for current and future assignments for the benefit of the students.

Copyright Notice

Students should assume that all course material is copyrighted by the respective author(s). Reproduction of course material is prohibited without consent by the author and/or course instructor. Violation of copyright is against the law and Texas A&M University-Central Texas' Code of Academic Honesty. All alleged violations will be reported to the Office of Student Conduct.

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