

**CIS 5307-120, CRN 11225, Advanced System Analysis and Design  
Spring 2021  
Texas A&M University-Central Texas**

**Instructor:** Dinesh Reddy, Ph.D.

**Office:** FH 323G

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**Office Hours:** TR 2 pm - 5 pm virtual (emails, calls, or video desktop sharing) (or by appointment)

**Mode of instruction and course access:**

This is a completely online course - there will be NO “official” face-to-face classroom time. This course uses the A&M-Central Texas Canvas Learning Management System [<https://tamuct.instructure.com>]. I use Canvas to post course content, assignments, quizzes, exams, etc., and to communicate any other announcements with the class. So please check Canvas regularly (on a daily basis) for updates.

**Student-instructor interaction:**

You may use the Canvas “inbox” feature or email me with your questions anytime as you would by attending the class and coming into my office. Your questions will be answered within 24 hours on weekdays and within 48 hours on weekends and holidays.

**WARRIOR SHIELD**

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

Warrior Shield is an emergency notification service that gives Texas A&M University-Central Texas the ability to communicate health and safety emergency information quickly via email, text message, and social media. All students are automatically enrolled in Warrior Shield through their myCT email account.

Connect to Warrior Shield by [911Cellular](https://portal.publicsafetycloud.net/Account/Login) [<https://portal.publicsafetycloud.net/Account/Login>] to change where you receive your alerts or to opt out. By staying enrolled in Warrior Shield, university officials can quickly pass on safety-related information, regardless of your location.

**COVID-19 SAFETY MEASURES**

To promote public safety and protect students, faculty, and staff during the coronavirus pandemic, Texas A&M University-Central Texas has adopted policies and practices to minimize virus transmission. All members of the university community are expected to adhere to these measures to ensure their own safety and the safety of others. Students must observe the following practices while participating in face-to-face courses, course-related activities (office hours, help sessions, transitioning to and between classes, study spaces, academic services, etc.) and co-curricular programs:

- Self-monitoring—Students should follow CDC recommendations for self-monitoring. Students who have a fever or exhibit symptoms of COVID-19 should participate in class remotely and should not participate in face-to-face instruction. Students required to quarantine must participate in courses and course-related activities remotely and must not attend face-to-face course activities. Students should notify their instructors of the quarantine requirement.

Students under quarantine are expected to participate in courses and complete graded work unless they have symptoms that are too severe to participate in course activities.

- Face Coverings— Face coverings must be worn inside of buildings and within 50 feet of building entrances on the A&M-Central Texas Campus. This includes lobbies, restrooms, hallways, elevators, classrooms, laboratories, conference rooms, break rooms, non-private office spaces, and other shared spaces. Face coverings are also required in outdoor spaces where physical distancing is not maintained. The university will evaluate exceptions to this requirement on a case by case basis. Students can request an exception through the Office of Access and Inclusion in Student Affairs.
  - If a student refuses to wear a face covering, the instructor should ask the student to leave and join the class remotely. If the student does not leave the class, the faculty member should report that student to the Office of Student Conduct. Additionally, the faculty member may choose to teach that day's class remotely for all students.
- Physical Distancing—Physical distancing must be maintained between students, instructors, and others in the course and course-related activities.
- Classroom Ingress/Egress—Students must follow marked pathways for entering and exiting classrooms and other teaching spaces. Leave classrooms promptly after course activities have concluded. Do not congregate in hallways and maintain 6-foot physical distancing when waiting to enter classrooms and other instructional spaces.
- The university will notify students in the event that the COVID-19 situation necessitates changes to the course schedule or modality.

## **COURSE INFORMATION**

### **Course Overview and description:**

Examine 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.

### **Student Learning Outcomes:**

Students will design and explain each of the different parts of a Computer Information System. Students will examine system components, identify how they are used and relate the pieces to the system whole.

Students will complete an information system project to develop system analysis & design skill. Students will learn about the tools used to create various software design artifacts.

Students will explore and discuss current topics and developments in system analysis and design field.

Students will evaluate career options in system analysis and design field.

## **Required Reading and Textbook(s):**

System Analysis and Design: An Object Oriented Approach with UML, 5th Edition, by Dennis, Wixom, Tegarden.

ISBN-13: 978-1118804674

ISBN-10: 1118804678

Student Companion Site:

<http://bcs.wiley.com/he-bcs/Books?action=index&bcsId=9422&itemId=1118804678>

## **Supplemental Material**

Additional required readings, related videos, web resources, and optional readings will be posted on Canvas.

## **COURSE REQUIREMENTS**

### **Introduction Task**

Write a short biography and explain what you hope to learn from this class in the discussion board. Include a professional digital photo of yourself in your Canvas profile (10 points).

### **Exams**

There will be three exams (two mid-terms and one final). Each exam is worth 100 points. Pattern of all the exams include multiple choice and true/false questions. Make up exams are not typically given. The only acceptable excuses for missing an exam are circumstances clearly outside your control, such as illness, death in family, etc. If you miss an exam, notify me as soon as possible. I may require documentation of the circumstances.

### **Assignments (Project Milestones)**

A semester-long project will dominate your activities during this course. You will be assigned to one of the case studies supplied by your book. The project will run very similar to an actual project and will be divided into ten milestones. The due date for completing each milestone is specified in the course schedule. Milestones must be submitted before the end of the day (11:59 PM) on the due date mentioned in the course schedule. Late submissions will not be accepted for full points and will attract 10% deduction for each day that it is late. I will be the project manager and quality assurance manager for your project in continually reviewing your progress on the assigned milestones. As quality assurance manager, I will review your delivered milestones for completeness and accuracy. Each milestone is worth 35 points.

### **Project Report**

The final project report is the integration of all previous milestones plus some additional content as specified in the project instructions posted on Canvas. Each student will need to incorporate all comments and feedback provided by the instructor (while evaluating the project

milestones) throughout the semester. Guidelines for preparing a professional project report will be uploaded on Canvas. Project report is worth 150 points.

### **Quizzes**

There will be ten quizzes (multiple choice, true/false) that are designed to test the general understanding of the topics covered in the course. The quizzes can be conducted either in-class or online through Canvas. Each quiz is worth 10 points.

### **Threaded Discussions**

The purpose of the threaded discussions is to learn from personal knowledge and/or experiences of each other. Active participation in the threaded discussion is an important component of this course. It is expected that you enrich the course through relevant discussions and contribution of personal knowledge and experience. You should read over comments made by others and respond to the comments rather than just repeating what was said. I encourage you to add value to the discussion by bringing a new perspective to what was said rather than simply repeating the points. Examples of acceptable discussion material are (1) your own interpretations of issues discussed in the readings, (2) relating conceptual material from the readings to real-world examples, (3) drawing parallels with or integrating ideas covered in previous classes, (4) critiquing a classmate's analysis, (5) applying outside readings to the discussion at hand, and (6) demonstrating that you have carefully read the material and thought about it. Evaluation of your participation will be based on substantive contribution to the class or group learning experience, and not merely on how many times you entered your comments.

In a typical threaded discussion for a unit, I will pose a topic for discussion or a series of topics and you as the student, can respond to the topics and/or respond to the other students' responses. You enter the threaded discussion by clicking on the respond button in the thread page.

Your participation will be evaluated as follows:

#### Rubric for Online Content Assessment

<b>Points</b>	<b>Skills</b>
9-10	Demonstrates excellence in grasping key concepts; critiques the work of others; provides ample evidence of support for opinions; readily offers new interpretations of discussion material.
7-8	Shows evidence of understanding most of the major concepts; is able to agree or disagree when prompted; is skilled in basic level of support for opinions; offers an occasional divergent viewpoint.

- 5-6 Has mostly shallow grasp of the material; rarely takes a stand on issues; offers inadequate levels of support.
- 1-4 Shows no significant understanding of material.

#### Rubric for Assessing Online Participation

##### **Points Skills**

- 9-10 Contributions are prompt, timely, relevant, self-initiated; remarks are posted freely on all assignments throughout the course; there is no attempt to dominate conversation.
- 7-8 Student generally keeps up with the discussion; needs an occasional prompting to contribute; might participate in some discussions more than others.
- 5-6 Participation is spotty; picks and chooses topics to get involved in; offers short, perfunctory postings when prompted; takes limited initiative.
- 1-4 Student rarely participates freely; makes short, irrelevant remarks.

It is important to participate early (rather than just the last hours) and very often to see everybody's contributions in order to be able to add value to the discussion. In your discussions and especially in the open ended questions, you need to (1) make inferences, (2) relate new knowledge to prior knowledge and experience, and (3) interpret content through the analysis, synthesis, and evaluation of others' understanding. Please note: Late threaded discussions will NOT be accepted. Each individual thread discussions worth 10 points.

The highest grade for online participation portion of the threaded discussions is achieved if you post at least three times during the discussion period and add value to discussion each time.

**Grading Criteria:**

<b>Course Requirement</b>	<b>Points</b>	<b>Weightage</b>
Two Mid-Term Exams (100 points each)	200	20%
Final Exam	100	10%
Ten Assignments (Milestones) (35 points each)	350	35%
Ten Quizzes (10 points each)	100	10%
Project Report	150	15%
Nine Threaded Discussions (10 points each)	90	9%
Introduction Task	10	1%
<b>Total</b>	<b>1000</b>	<b>100%</b>

Final letter grade distribution will be as per the following scale:

<b>Letter Grade</b>	<b>Point Range</b>
<b>A</b>	900-1000
<b>B</b>	800-899
<b>C</b>	700-799
<b>D</b>	600-699
<b>F</b>	500-599

**Posting of Grades**

All students' grade will be posted on the Canvas Grade book, and students can monitor their progress on Canvas grade book. Students can expect to see their grades within two weeks of the closing of class tests, exams, and assignments. Students are expected to visit Canvas course webpage regularly to get any update regarding this course.

## COURSE OUTLINE AND CALENDAR

**Course Schedule\* \*\*** (\* This schedule provides a general plan. Deviations may be necessary)  
 (\*\* Readings for each week will be posted on Canvas)

Week	Date	Readings	Due
1	1/19	Syllabus, Chapter 1 – Course Introduction	
	1/21	Chapter 1 – Continued	Chapter 1 Quiz
2	1/26	Chapter 2 – Project Management	Milestone 1
	1/28	Chapter 2 – Continued	Chapter 2 Quiz, TD1
3	2/2	Chapter 3 –Requirements Determination	Milestone 2
	2/4	Chapter 3 - Continued	Chapter 3 Quiz, TD2
4	2/9	Chapter 4 - Business Process & Functional Model	Milestone 3
	2/11	Chapter 4 – Continued	Chapter 4 Quiz, TD3
5	2/16	Exam 1 Review	
	2/18	<b>Exam 1</b>	<b>Exam 1</b>
6	2/23	Chapter 5 - Structural Modeling	Milestone 4
	2/25	Chapter 5 – Continued	Chapter 5 Quiz, TD4
7	3/2	Chapter 6 – Behavioral modeling	Milestone 5
	3/4	Chapter 6 – Continued	Chapter 6 Quiz, TD5
8	3/9	Chapter 7 - Moving on to Design	Milestone 6
	3/11	Chapter 7 – Continued	Chapter 7 Quiz, TD6
9	3/16	SPRING BREAK	
	3/18	SPRING BREAK	
10	3/23	Chapter 8 - Class and Method Design	Milestone 7
	3/25	Chapter 8 – Continued	Chapter 8 Quiz
11	3/30	Exam 2 Review	
	4/1	<b>Exam 2</b>	<b>Exam 2</b>
12	4/6	Chapter 9 – Data Management Layer Design	Milestone 8
	4/8	Chapter 9 - Continued	Chapter 9 Quiz, TD7
13	4/13	Chapter 10 - Human Computer Interaction Layer	Milestone 9
	4/15	Chapter 10 - Continued	Chapter 10 Quiz, TD8
14	4/20	Chapter 11 – Physical Architecture Layer Design	Milestone 10
	4/22	Chapter 11 - Continued	TD9
15	4/27	Chapter 12 – Construction	
	4/29	Chapter 12 - Continued	
16	5/4	Chapter 13 - Installation and Operation	Project Report
	5/6	Final Exam Review	
17	5/11	<b>Final Exam</b>	<b>Final Exam</b>

## **Important University Dates:**

January 19, 2021 Add, Drop and Late Registration Begins for 16- and First 8-Week Classes \$25 Fee assessed for late registrants  
January 19, 2021 Classes Begin for Spring Semester  
January 21, 2021 Deadline for Add, Drop, and Late Registration for 16-and First 8-Week Classes  
January 26, 2021 Deadline to Drop First 8-Week Classes with No Record  
February 3, 2021 Deadline to Drop 16-Week Classes with No Record  
February 26, 2021 Deadline to Drop First 8-Week Classes with a Quit (Q) or Withdraw (W)  
March 1, 2021 Deadline for Teacher Education Program Applications  
March 12, 2021 Classes end for 1st 8-Weeks Session  
March 15, 2021 Deadline for Clinical Teaching/Practicum Applications  
March 16, 2021 Deadline for Faculty Submission of First 8-Week Final Class Grades (due by 3pm)  
March 15-19, 2021 Spring Break (No Classes - Administrative Offices Open)  
March 22, 2021 Class Schedule Published for Summer Semester  
March 22, 2021 Add, Drop, and Late Registration Begins for Second 8-Week Classes \$25 Fee assessed for late registrants  
March 22, 2021 Classes Begin for Second 8-Week Session  
March 24, 2021 Deadline for Add, Drop, and Late Registration for Second 8-Week Classes  
March 26, 2021 Deadline for Spring Graduation Application for Ceremony Participation  
March 29, 2021 Deadline to Drop Second 8-Week Classes with No Record  
April 1, 2021 Deadline for GRE/GMAT Scores to Graduate School Office  
April 5, 2021 Registration Opens for Summer Semester  
April 16, 2021 Deadline for Final Committee-Edited Theses with Committee Approval Signatures for Spring Semester to Graduate School Office  
April 30, 2021 Deadline to drop Second 8-week Classes with a Quit (Q) or Withdraw (W).  
May 14, 2021 Deadline to Withdraw from the University for 16- and Second 8-Week Classes  
May 14, 2021 Spring Semester Ends

## **TECHNOLOGY REQUIREMENTS AND SUPPORT**

### **Technology Requirements**

This course will use the A&M-Central Texas Instructure Canvas learning management system. We strongly recommend 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](mailto: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.*

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## **UNIVERSITY RESOURCES, PROCEDURES, AND GUIDELINES**

### **Drop Policy.**

If you discover that you need to drop this class, you must complete a [Drop Request Form](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf) [[https://www.tamuct.edu/registrar/docs/Drop\\_Request\\_Form.pdf](https://www.tamuct.edu/registrar/docs/Drop_Request_Form.pdf)].

Professors 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, signed and returned. Once you return the signed 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.

### **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. Academic integrity is defined as a commitment to honesty, trust, fairness, respect, and responsibility. Any deviation by students from this expectation may result in a failing grade for the assignment and potentially a failing grade for the course. Academic misconduct is any act that improperly affects a true and honest

evaluation of a student's academic performance and includes, but is not limited to, working with others in an unauthorized manner, cheating on an examination or other academic work, plagiarism and improper citation of sources, using another student's work, collusion, and the abuse of resource materials. All academic misconduct concerns will be referred to the university's Office of Student Conduct. Ignorance of the university's standards and expectations is never an excuse to act with a lack of integrity. 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 report](https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout_id=0),  
[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\_id=0].

### **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 Office of Access 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]

### **Important information for Pregnant and/or Parenting Students**

Texas A&M University-Central Texas supports students who are pregnant 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/index.html) [https://www.tamuct.edu/student-affairs/index.html]. Students may also contact the institution's Title IX Coordinator. If you would like to read more about these [requirements and guidelines](http://www2.ed.gov/about/offices/list/ocr/docs/pregnancy.pdf) 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, on a remote online basis. Visit the Academic Support Community in Canvas to view schedules and contact information. Subjects tutored on campus include Accounting, Advanced Math, Biology, Finance, Statistics, Mathematics, and Study Skills. Tutors will return at the Tutoring Center in Warrior Hall, Suite 111 in the current semester. Student success coaching is available online upon request.

If you have a question regarding tutor schedules, need to schedule a tutoring session, are interested in becoming a tutor, success coaching, or have any other question, contact Academic Support Programs at (254) 501-5836, visit the Office of Student Success at 212F Warrior Hall, or by emailing [studentsuccess@tamuct.edu](mailto:studentsuccess@tamuct.edu).

Chat live with a 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 Writing Center**

The University Writing Center (UWC) at Texas A&M University–Central Texas (TAMUCT) is a free service open to all TAMUCT students. For the current semester, all services will be online as a result of the COVID-19 pandemic. The hours of operation are from 10:00 a.m.-5:00 p.m. Monday thru Thursday with satellite hours online Monday thru Thursday from 6:00-9:00 p.m. The UWC is also offering hours from 12:00-3:00 p.m. on Saturdays.

Tutors are prepared to help writers of all levels and abilities at any stage of the writing process. 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. While tutors will not write, edit, or grade papers, they will assist students in developing more effective composing practices. 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 [WCOonline](https://tamuct.mywconline.com/) [https://tamuct.mywconline.com/]. In addition, you can email Dr. Bruce Bowles Jr. at [bruce.bowles@tamuct.edu](mailto:bruce.bowles@tamuct.edu) if you have any questions about the UWC and/or need any assistance with scheduling.

## **University Library**

The University Library provides many services in support of research across campus and at a distance. We offer over 200 electronic databases containing approximately 250,000 eBooks and 82,000 journals, in addition to the 85,000 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 on Skype or in-person at the library. 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](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index].

**All reference service will be conducted virtually. Please go to our [Library website](http://tamuct.libguides.com/index) [http://tamuct.libguides.com/index] to access our virtual reference help and our current hours.**

### **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/student-affairs/bat.html) website for more information [https://www.tamuct.edu/student-affairs/bat.html]. If a person's behavior poses an imminent threat to you or another, contact 911 or A&M-Central Texas University Police at 254-501-5800.

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