

# **EMPOWER | ENGAGE | POSITIVE CHANGE**

Adv Syst Analysis and Design - 10512 - CIS 5307 - 115

# Spring 2023

Texas A&M University-Central Texas

# **COURSE DATES, MODALITY, AND LOCATION**

This is a 100% online course and uses the A&M-Central Texas Canvas Learning Management System [https://tamuct.instructure.com/].

Course Dates: January 17, 2023 – March 10, 2023

**Time**: Online (Lectures will be uploaded by Thursday night)

Day: Online

Classroom: Online Canvas

# **INSTRUCTOR AND CONTACT INFORMATION**

**Instructor: Dr. Piyush Vyas** 

Office: 323 Phone: TBD

Email: piyush.vyas@tamuct.edu or Canvas Inbox

#### Office Hours

I am available to all students on **an appointment basis**. Please send an email to Piyush.vyas@tamuct.edu to schedule an appointment. Meeting options are either via team, zoom or telephone. All appointments will be confirmed with an email from me to your Warrior email account. When sending an email to me, please utilize only your Warrior account. Emails sent from other providers will not be answered.

# **Student-instructor interaction**

I will respond to all student emails within 24 - 48 hours of receipt.

**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 <u>SafeZone</u> 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:
  - <u>iPhone/iPad</u>: [https://apps.apple.com/app/safezone/id533054756]
  - Android Phone / Tablet
     [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 <u>website</u> [https://www.tamuct.edu/covid19/]

#### **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.

# **Course Objective or Goal**

#### **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.

# **Competency Goals Statements (certification or standards)**

NA

# Required Reading and Textbook(s)

\*Students can use the old 5<sup>th</sup> edition. This will also work for the course.

New Edition: Systems Analysis and Design: An Object-Oriented Approach with UML, 6th Edition

By Alan Dennis, Barbara Wixom, David Tegarden

**ISBN**: 978-1-119-56121-7 **Student Companion Site:** 

https://bcs.wiley.com/he-bcs/Books?action=index&itemId=1119561213&bcsId=11998

Old Edition: System Analysis and Design: An Object Oriented Approach with UML, 5th Edition,

By Alan Dennis, Barbara Wixom, David Tegarden

ISBN-13: 978-1118804674 ISBN-10: 1118804678 Student Companion Site:

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

**Note**: A student of this institution is not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer, including an online retailer

# **COURSE REQUIREMENTS**

Exams: There will be two exams: midterm and final. Each is worth 150 points. Details about the midterm and final exams will be provided to you in the class.

Assignments: During the semester, you will get different assignments that measure your understanding to the material. Some of these assignments will be related to your project and you need to integrate them at the end of the semester into your final project report. Multiple submissions before the deadline are allowed. You need to zip the files before submission if the assignment has multiple files. Before you submit any assignment, run it on your computer and make sure it works. In addition, you need to submit a screenshot to prove that your code works. Assignments are worth 80 points.

Discussions: There will be many graded discussions that are 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.

Final project: The final project report is the compilation of all the assignments along with some additional material as will be requested by the instructor. It is the responsibility of each student to integrate all my comments in the final document. More information will be provided on Canvas. The project report is worth 200 points.

#### **Grading Criteria Rubric and Conversion**

The final grade for the course will be based upon the following:

Item	Points	
Exams	150 x 2 = 300	
Assignments	80 x 5= 400	
Discussions	25 x 4= 100	
Final project report	200	
Total	1000	

Percentage	Letter Grade	
89.5-100%	A	
79.5-89.4%	В	
69.5-79.4%	С	
59.5-69.4%	D	
0-59.4%	F	

# **Posting of Grades**

All student grades will be posted on the Canvas Grade Book and students should monitor their grading status through this tool. Grades will be posted within 7 days after of the due date

# **Grading Policies**

All assignments must be submitted before the posted deadline. No late assignments will be accepted.

# **COURSE OUTLINE AND CALENDAR**

# **Complete Course Calendar**

Below is a tentative schedule that is subject to change by instructor

Weeks	Topics	Assignments Due
Week 1- Jan 16 – Jan 22	Syllabus Introduction to Systems Analysis and Design	Introduction Discussion 1 and Discussion 2
Week 2 - Jan 23 – Jan 29	Project Management Requirements Determination	Assignment 1
Week 3 - Jan 30 - Feb 05	Business Process and Functional Modeling Structural Modeling	Assignment 2
Week 4 - Feb 06 – Feb 12	Behavioral Modeling	Midterm
Week 5 - Feb 13 – Feb 19	Moving on to Design Class and Method Design	Assignment 3 Discussion 3
Week 6 - Feb 20 – Feb 26	Data Management Layer Design Human-Computer Interaction Layer Design	Assignment 4
Week 7 - Feb 27 – Mar 05	Physical Architecture Layer Design Construction Installation and Operations	Assignment 5 Discussion 4
Week 8 - Mar 06 – Mar 10	Final Exam Final Project	

# **Important University Dates**

Please see the attached link for the A&M-Central Texas Academic Calendars, which track important deadlines and dates for the school year and semesters.

The link: https://www.tamuct.edu/registrar/academic-calendar.html

# **TECHNOLOGY REQUIREMENTS AND SUPPORT**

This course will use Microsoft Office 365 software. As a University student, you can download the software at no cost. Please access this University link for download instructions: https://tamuct.onecampus.com/task/all/office365-software

# **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: <a href="mailto:helpdesk@tamu.edu">helpdesk@tamu.edu</a>
Phone: (254) 519-5466

Web Chat: [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 <u>Access & Inclusion</u> 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 <u>information regarding the student conduct process</u>, [https://www.tamuct.edu/student-affairs/student-conduct.html].

If you know of potential honor violations by other students, you may <u>submit a referral</u>, [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 <u>Drop Request</u> Dynamic Form through Warrior Web.

[https://federation.ngwebsolutions.com/sp/startSSO.ping?PartnerIdpId=https://eis-prod.ec.tamuct.edu:443/samlsso&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 possible. For more information, please visit Student Affairs pregnancy as [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. visit the website please [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 <a href="mailto:WarriorCenter@tamuct.edu">WarriorCenter@tamuct.edu</a>.

To schedule tutoring sessions and view tutor availability, please visit <u>Tutor Matching Services</u> [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 <a href="Library website"><u>Library website</u></a> [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 12:00-3:00 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 <a href="WCOnline">WCOnline</a> [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 <a href="Ittle-IX"><u>Title-IX</u></a> webpage [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 <u>referral</u> online

[https://cm.maxient.com/reportingform.php?TAMUCentralTexas&layout\_id=2].

Anonymous referrals are accepted. Please see the <u>Behavioral Intervention Team</u> 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.

#### OTHER POLICIES

The instructor reserves the right to modify the course syllabus during the semester for the benefit of the students.

The instructor can deduct the grades for late submissions to be fair with others' timely submissions.

The instructor reserves the right to supplement materials presented in the text with additional course material that may help the students better understand a topic(s).

# **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.

Copyright. (2023) by (Piyush Vyas) at Texas A&M University-Central Texas, (*College of Business Administration*); 1001 Leadership Place, Killeen, TX 76549; 254-(519-5437); Fax 254-519-5470; (Piyush.vyas@tamuct.edu)