#### Course Syllabus

# **CSCI 359-01W**

Systems Analysis and Design **Summer I, 2020** 

Class Meetings: Online

Instructor:

Name: Dr. S. Suh

Professor, Computer Science, Texas A&M University-Commerce

Regents Professor, Texas A&M University System

Office: Jour 223; Office Hours: N/A

Phone: 903.468.8199; Fax: 903.886.5404;

E-mail: sang.suh@tamuc.edu

Preferred form of communication: Email
Communication response time: 48 hours

# Textbook required:

Systems Analysis and Design in a Changing World, 7th Edition

John W. Satzinger | Robert B. Jackson | Stephen D. Burd ISBN-10: 1305117204 | ISBN-13: 9781305117204, © 2016

# **Course Description:**

Traditional and Object-Oriented methods for analysis, design, and implementation of computer based information systems; also includes project management and Computer Assisted System Engineering (CASE) tools. Prerequisites: CSCI 270 or COSC 2336.

#### (Additional Course Information)

The content of the system analysis and design life cycle (SDLC) in this textbook closely mirrors what our student audience will face in the local area job market. One of the best ways to learn SDLC is through case studies and this textbook has a running case study throughout each chapter better than the other competing textbooks.

The main objective of this course is to teach students a comprehensive, balanced and up-to-date coverage of traditional and the object-oriented approach to systems analysis and design.

# STUDENT LEARNING OUTCOMES (SLO):

- 1) Understand concepts relating to different types of information systems
- 2) Explain the purpose and activities of the systems development life cycle phases
- 3) Understand project management techniques
- 4) Identify and understand system inputs and outputs
- 5) Understand and model system entities and data stores
- 6) Understand and model system processes, events, and data flows within a system
- 7) Understand and model classes of data within a system
- 8) Understand concepts relating to various models, tools, and techniques used in system analysis and design.

# **COURSE REQUIREMENTS:**

#### Minimal Technical Skills Needed

Students must know using the learning management system. Students must have basic programming knowledge in a high level programming language. Additionally, students should have knowledge of Microsoft Word and PowerPoint, presentation and graphics programs, etc.

# **Instructional Methods**

Delivery modalities: D2L online platform Course structure: Online course

Assessments: Quizzes, tests, project development, and presentation

# **Tips for Success in the Course**

Completion of weekly exercise assignment (2 hours estimated weekly) Weekly preview of chapters to be covered (2 hours estimated weekly)

Review of chapters covered (1 hour estimated weekly)

# Student Responsibilities:

- 1. Check the course website regularly (3 times every week) so that you follow the course schedule and plan.
- 2. Read the slides, examples and other supplementary material carefully.
- 4. Work independently on individually assigned tasks.
- 5. Choose your project topic and team carefully, and collaborate with your team members on tasks assigned to teams.
- 5. Ask your questions in a timely manner to the instructor or the teaching assistant, if any.
- 6. Students are responsible for missed assignments, quizzes, projects, and exams.

# Method of Evaluation (Tentative):

Assignments/Quizzes (20%)
Project (20%)
Midterm Exam (20%)
Final Exam (40%)

Final grades in this course will be based on the following scale:

A = 90%-100% B = 80%-89% C = 70%-79%

D = 60%-69%

F = 59% or Below

# **TECHNOLOGY REQUIREMENTS:**

# **Browser support**

D2L is committed to performing key application testing when new browser versions are released. New and updated functionality is also tested against the latest version of supported browsers. However, due to the frequency of some browser releases, D2L cannot guarantee that each browser version will perform as expected. If you encounter any issues with any of the browser versions listed in the tables below, contact D2L Support, who will determine the best course of action for resolution. Reported issues are prioritized by supported browsers and then maintenance browsers.

Supported browsers are the latest or most recent browser versions that are tested against new versions of D2L products. Customers can report problems and receive support for issues. For an optimal experience, D2L recommends using supported browsers with D2L products.

Maintenance browsers are older browser versions that are not tested extensively against new versions of D2L products. Customers can still report problems and receive support for critical issues; however, D2L does not guarantee all issues will be addressed. A maintenance browser becomes officially unsupported after one year.

# Note the following:

- Ensure that your browser has JavaScript and Cookies enabled.
- For desktop systems, you must have Adobe Flash Player 10.1 or greater.
- The Brightspace Support features are now optimized for production environments when using the Google Chrome browser, Apple Safari browser, Microsoft Edge browser, Microsoft Internet Explorer browser, and Mozilla Firefox browsers.

**Desktop Support** 

Browser	Supported Browser Version(s)	Maintenance Browser Version(s)
Microsoft® Edge	Latest	N/A
Microsoft® Internet Explorer®	N/A	11
Mozilla® Firefox®	Latest, ESR	N/A
Google® Chrome™	Latest	N/A
Apple® Safari®	Latest	N/A

**Tablet and Mobile Support** 

Device	Operating System	Browser	Supported Browser Version(s)
Android™	Android 4.4+	Chrome	Latest
Apple	iOS®	Safari, Chrome	The current major version of iOS (the latest minor or <b>point</b> release of that major version) and the previous major version of iOS (the latest minor or <b>point</b> release of that major version). For example, as of June 7, 2017, D2Lsupports iOS 10.3.2 and iOS 9.3.5, but not iOS 10.2.1, 9.0.2, or any other version.  Chrome: Latest version for the iOS browser.
Windows	Windows 10	Edge, Chrome,	Latest of all browsers, and Firefox ESR.

Device	Operating System	Browser	Supported Browser Version(s)
		Firefox	

- You will need regular access to a computer with a broadband Internet connection. The minimum computer requirements are:
  - o 512 MB of RAM, 1 GB or more preferred
  - o Broadband connection required courses are heavily video intensive
  - o Video display capable of high-color 16-bit display 1024 x 768 or higher resolution
- You must have a:
  - o Sound card, which is usually integrated into your desktop or laptop computer
  - Speakers or headphones.
  - \*For courses utilizing video-conferencing tools and/or an online proctoring solution, a webcam and microphone are required.
- Both versions of Java (32 bit and 64 bit) must be installed and up to date on your machine.
   At a minimum Java 7, update 51, is required to support the learning management system.
   The most current version of Java can be downloaded at: <u>JAVA web site</u>
   <a href="http://www.java.com/en/download/manual.jsp">http://www.java.com/en/download/manual.jsp</a>
- Current anti-virus software must be installed and kept up to date.

Running the browser check will ensure your internet browser is supported.

Pop-ups are allowed.

JavaScript is enabled.

Cookies are enabled.

- You will need some additional free software (plug-ins) for enhanced web browsing. Ensure that you download the free versions of the following software:
  - Adobe Reader https://get.adobe.com/reader/
  - o Adobe Flash Player (version 17 or later) https://get.adobe.com/flashplayer/
  - Adobe Shockwave Player https://get.adobe.com/shockwave/
  - Apple Quick Time http://www.apple.com/quicktime/download/
- At a minimum, you must have Microsoft Office 2013, 2010, 2007 or Open Office. Microsoft Office is the standard office productivity software utilized by faculty, students, and staff. Microsoft Word is the standard word processing software, Microsoft Excel is the standard spreadsheet software, and Microsoft PowerPoint is the standard presentation software. Copying and pasting, along with attaching/uploading documents for assignment submission, will also be required. If you do not have Microsoft Office, you can check with the bookstore to see if they have any student copies.

#### ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or <a href="https://hepotestamuc.edu">helpdesk@tamuc.edu</a>.

**Note:** Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

# COMMUNICATION AND SUPPORT Brightspace Support Need Help? Student Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

# **Technical Support**

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778 or click on the **Live Chat** or click on the words "click here" to submit an issue via email.



# **System Maintenance**

D2L runs monthly updates during the last week of the month, usually on Wednesday. The system should remain up during this time unless otherwise specified in an announcement. You may experience minimal impacts to performance and/or look and feel of the environment.

#### COMMUNICATION AND SUPPORT:

Preferred form of communication: Email Communication response time: 48 hours

# **COURSE AND UNIVERSITY PROCEDURES/POLICIES**

#### **Course Policies:**

Attendance/Lateness: Students are expected to be present at all class lectures. The maximum number of excused absences allowed per semester will be 3. 3 or more absences will automatically result in F as course grade.

Late Work: Under no circumstances will the late work be accepted. If a student is absent from class on the due date of any assignment, they are expected to make alternative arrangements to assure that the assignment is turned in ON TIME. Credit will be given for ONLY those assignments, programs, and/or projects turned in no later than the deadline as announced by the instructor of this class.

Missed Exams and Quizzes: Missed exams and quizzes will result in 0 in all circumstances. Extra Credit: No extra credit work will be given under any circumstances.

Withdrawal: Any student wishing to withdraw from the course must do so officially as outlined in the class schedule. THE INSTRUCTOR CANNOT DROP OR WITHDRAW ANY STUDENT.

# Syllabus Change Policy:

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

# **UNIVERSITY SPECIFIC PROCEDURES**

# **Student Conduct:**

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the Student Guidebook.

http://www.tamuc.edu/admissions/registrar/documents/studentGuidebook.pdf Students should also consult the Rules of Netiquette for more information regarding how to

interact with students in an online forum: Netiquette http://www.albion.com/netiquette/corerules.html

#### **TAMUC Attendance:**

For more information about the attendance policy please visit the Attendance webpage and Procedure 13.99.99.R0.01.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf

# **Academic Integrity:**

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Graduate Student Academic Dishonesty 13.99.99.R0.10

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf

#### **ADA STATEMENT**

#### Students with Disabilities:

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

# Office of Student Disability Resources and Services:

Texas A&M University-Commerce

Gee Library- Room 162, Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services

http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServi

ces/

## **Nondiscrimination Notice:**

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

# **Campus Concealed Carry Statement:**

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the <u>Carrying Concealed Handguns On Campus</u> document and/or consult your event organizer.

#### Web url

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

# **Smoke, Vapor & Tobacco Free Environment:**

University Procedure 34.05.99.R1 now prohibits the use of vapor/electronic cigarettes, smokeless tobacco, snuff and chewing tobacco inside and adjacent to any building owned, leased, or operated by A&M – Commerce.

# Course Outline/Calendar\*:

DATES	SUBJECTS TO BE COVERED
1 (6/1)	Chapter 1 – An Overview of Systems Analysis and Design
2 (6/4)	Chapter 2 – Investigating System Requirements Chapter 3 – Identifying User Stories and Use Cases
3 (6/8)	Chapter 4 – Domain Modeling
. (2())	Chapter 5 – Use Case Modeling
4 (6/11)	Chapter 6 – Foundations for Systems Design Chapter 7 – Defining the System Architecture
5 (6/15)	Chapter 8 – Designing the User Interface Chapter 9 – Designing the Database
6 (6/18)	Midterm Exam
7 (6/22)	Chapter 10 – Approaches to System Development Chapter 11 – Project Planning and Project Management
8 (6/25)	Chapter 12 – Object-Oriented Design: Fundamentals Chapter 13 – Object-Oriented Design: Use Case Realizations
9 (6/29)	Project Due and Presentation
10 (7/2)	Final Exam (Comprehensive)

<sup>\*</sup> The course outline/calendar may be subject to change.