

CIS 233 - Systems Analysis

Instructor: Pete Farrar Phone: <i>not available by telephone</i> E-mail: Peter.Farrar@edcc.edu Office Location: Alderwood Hall, ALD 234-A (shared with Eva Smith) Office Hours: Available by special arrangement only	Quarter: Winter 2010 Section: A (Hybrid) Location: (Snohomish) SNH 124 Meets: Saturdays, 1:00 p.m. – 3:40 p.m. Credits: 5
--	--

COURSE DESCRIPTION

A practical approach to real world systems analysis and design. Includes the systems development life cycle, structured methodologies and project planning. A case study project is analyzed, requirements are written and a systems design specification document is prepared. Prerequisite: Completion of at least 45 credits toward an ATA degree or CIS 116 and completion of at least one writing requirement or equivalent experience.

COURSE OBJECTIVES

These are based on nationally recognized industry skill standards as published by the NWCET (Northwest Center for Emerging Technologies). Upon successful completion of this course, students should be able to demonstrate proficiency in the following areas:

- ❖ Describe the phases of a systems development lifecycle.
- ❖ Use root-cause analysis techniques to define the scope of a system problem.
- ❖ Use industry-standard modeling methods to examine and diagram the components of a system.
- ❖ Identify and write functional requirements for a system.
- ❖ Research and compare possible solution options to meet system requirements.
- ❖ Evaluate and rate feasibility of potential options.
- ❖ Propose a solution that would meet defined requirements.

REQUIRED TEXTBOOK

- ❖ ***Systems Analysis and Design, 4th Ed.*** by Alan Dennis, Barbara Haley Wixom, & Roberta M. Roth. John Wiley & Sons, Inc, Copyright © 2009, ISBN: 978-0-470-22854-8

OPTIONAL/SUPPLEMENTAL TEXTBOOK

- ❖ ***Writing Effective Use Cases*** by Alistair Cockburn. Addison-Wesley, Copyright © 2001, ISBN 0-201-70225-8

REQUIRED SUPPLIES

- ❖ Stapler to turn in *CERTAIN* labs.
- ❖ Notebook for keeping project notes. This notebook must be separate from your regular note taking materials (you will turn in as a lab for grading).
- ❖ A portable jump-drive to hold various individual/team documents/contributions.
- ❖ Microsoft Visio (can be obtained from Misty Cline, CIS Program Assistant)
 - **EMAIL mcline@edcc.edu with a copy of your schedule to get into the MSDNAA system**

COURSE DELIVERABLES

They are intended to:

- 1) provide hands-on practice
- 2) encourage you to seek related knowledge on your own
- 3) assess your understanding of the concepts covered in this course.

GROUND RULES regarding deliverables:

- ❖ **Deliverables:** Will be submitted online through Blackboard unless otherwise specified, and will be due by either the beginning or the end of the class period depending on the specific deliverable that is due.
- ❖ **Late Deliverables:** There is ***NO grace period for late deliverables***, and they will be accepted only at the beginning of the next class period after the original due date. **50% will be deducted** from the total assigned points for deliverables received after the specified due date. Also, I cannot guarantee that you will receive instructor comments or feedback on any deliverable received late.
- ❖ **Lab Assignments:** most will be individual assignments, although at least two are team-related. Specific details will be provided through a separate document detailing the instructions to complete each lab.
- ❖ **Exam:** There will be **ONE (1) exam** during the quarter. It will cover chapters 1 – 4 in the required textbook. **NO MAKE-UP EXAMS WILL BE GIVEN.** The exam will be taken online in Blackboard. You will have **TWO (2) ATTEMPTS** to pass it, and will receive the higher of the 2 scores as your final grade. Although there is no official "final exam", attendance for the final class meeting on Saturday, March 12th is mandatory, so plan to be in class.
- ❖ **Term Projects: Two (2) team-based** research projects are assigned over the quarter. Each project will be written-up in a formal report style. They include the FEASIBILITY STUDY (Preliminary Investigation Report) & SYSTEM PROPOSAL (System Requirements Document). In addition, the Systems Proposal Document will be submitted in **draft form** in advance of the final due date to allow for instructor review and feedback. The final document is due on **Saturday, March 12th** (last class day). **LATE PROJECTS WILL NOT BE ACCEPTED.** Specific details will be provided through a separate document detailing the instructions to complete each project.
- ❖ **Project Presentation:** On the last day of class, each team will give an oral presentation of their two term projects to the rest of the class and other invited guests, incorporating a MS PowerPoint slide presentation and any other type of visual aid deemed appropriate. All team members must participate and present some portion of the presentation in order to earn their grade points for the presentation.
- ❖ **Team activities:** Each team will create a team contract that will be in effect through the duration of the course. This contract will specify team member responsibilities, rules & possible exceptions for **individual participation** grading purposes. All participants will receive the same grade for the **content** portion of the activity or deliverable. However, if a team member chooses not to contribute to the activity or deliverable **according to the team contract**, they will receive **ZERO (0)** points for that deliverable or activity.
- ❖ **Attendance & Participation:** Points will be assigned based on the individual's class attendance record **AND** their participation in class work and team projects. If you miss a class, it is YOUR responsibility to get the lecture or activity notes from one of your teammates. I do not provide written copies of my lecture or class activity notes.

TERM PROJECT

The theoretical aspects of systems analysis and design will be put to practical use in the development of a computer information systems requirement specification as a team project. A case study project will be studied and analyzed, and you will work with a team to produce documents that can be included in your portfolio. It is expected that the quality of your work should be at a level that you would be proud to display to prospective employers.

You will do a lot of writing in this class. You should have at least one of the writing requirements for the CIS program completed prior to taking this course or be able to show proficiency in writing skills. If you do not meet the prerequisite writing requirements for this class, you may be asked to submit a writing sample to demonstrate your writing skills. You are encouraged to make use of the Writing Center on campus. It is located in its new location of Mukilteo Hall, room 113 (1st floor, west side of building).

ASSIGNMENTS/PROJECTS AND GRADING

Grading will be weighted based on total points earned for each assignment (listed below) and calculated as a percentage of the total possible points. These are added together to total up to 100%. Your total % earned out of all possible points would equate to a grade on the grading table that follows.

Class Curriculum Component	Percentage of Total Grade
Lab Assignments	10%
Chapter Review Quizzes	5%
Exams	20%
Feasibility Study (Preliminary Investigation Report)	20%
System Proposal (System Requirements Document <i>draft</i>)	5%
System Proposal (System Requirements Document <i>final</i>)	15%
Project Presentation	20%
Attendance & Participation (Instructor Discretionary Points)	5%
Total	100%

GRADING TABLE

Grade Points for Percentage of Points earned			Letter Grade Equivalency
4.0=95%	2.8=83%	1.6=71%	A = 4.0 - 3.9
3.9=94%	2.7=82%	1.5=70%	A- = 3.8 - 3.5
3.8=93%	2.6=81%	1.4=69%	B+ = 3.4 - 3.2
3.7=92%	2.5=80%	1.4=68%	B = 3.1 - 2.9
3.6=91%	2.4=79%	1.4=67%	B- = 2.8 - 2.5
3.5=90%	2.3=78%	1.3=66%	C+ = 2.4 - 2.2
3.4=89%	2.2=77%	1.2=65%	C = 2.1 - 1.9
3.3=88%	2.1=76%	1.1=64%	C- = 1.8 - 1.5
3.2=87%	2.0=75%	1.0=63%	D+ = 1.4 - 1.2
3.1=86%	1.9=74%	0.9=62%	D = 1.1 - 0.9
3.0=85%	1.8=73%	0.8=61%	D- = 0.8 - 0.7
2.9=84%	1.7=72%	0.7=60%	F = 0.6 and below

Instructor's Discretion:

I reserve the right to change deliverables and breakdown of percentages listed above, and will notify the class accordingly. **Extra credit** may or may not be offered – I reserve the right to decide on the meritocracy of extra credit on a class-by-class basis.

A SPECIAL NOTE ABOUT GRADING:

My grading philosophy may be slightly different than you have encountered in other courses. I am assessing the quality of your work (from an employer's point of view), not just your effort or ability to complete the work. The following describes my expectations for each grade, and how you will be evaluated:

4.0 = Exemplary (i.e., "Walks on Water"). A 4.0 indicates that a student consistently produced exemplary work of perfect or near-perfect quality on all deliverables, attended class sessions and was an active participant in class activities. The student not only demonstrated understanding of material, but also stretched his or her learning experiences beyond what was covered in class. I would be proud to show off this student's work to other instructors or employers or write a recommendation letter on the student's behalf.

3.5 – 3.9 = Excellent. (This is still an "A" grade!) Most deliverables were perfect or near perfect, but perhaps could have been a little more polished to be exemplary. May have missed some points due to late deliverables, a low exam score, attendance, etc. It demonstrates high quality work and a strong understanding of the material presented during the quarter.

3.0 – 3.4 = Good. (Strong "B" grade.) Most deliverables were very good, but the quality was not consistent, or needed more attention to quality and details to be excellent. Met all of the objectives of the class, and demonstrated a solid understanding of the material. May have missed some points due to late deliverables, missing or low quiz scores, attendance, etc...

2.0 – 2.9 = Average. Met all of the objectives of the class, but no more. Demonstrated understanding of most of the material, but may have missed some important concepts. Missed a fair number of points due to lack of participation in team activities, late or missing deliverables, etc., or the student's deliverables did not demonstrate evidence of a solid understanding of the course material.

Below 2.0 = Below Average Work. Did not meet expectations or objectives of the class. Did not demonstrate understanding of the material or missed a significant amount of points due to lack of participation in team activities, late deliverables, missing or low quiz scores, attendance, etc.

NOTE: I do not consider "I" (Incomplete) or "V" (Instructor Withdrawal) grades acceptable, and will consider granting them only under extraordinarily unique and extenuating circumstances.

BASIC EDUCATION REQUIREMENTS (COLLEGE WIDE ABILITIES)

This class supports the College-wide standards and objectives. While achieving the course objectives above, you will be applying and developing the following basic education requirements:

- ❖ Written and oral communications (through writing deliverables).
- ❖ Critical thinking and problem solving (through methods used to create individual projects).
- ❖ Group interaction (by helping each other get through projects).
- ❖ Quantitative Skills (through problem solving using mathematical notation, graphs, charts, tables, and symbols)

PARTICIPATION POLICIES

Students are expected to attend each class meeting. 5% of your final grade will be based upon participation in class (or online). I believe that attendance is vital to your success in this class. It has been proven that students who attend every class session better position themselves to not only comprehend and master the course material, but also receive a higher overall course grade.

ACCESS TO COURSE MATERIALS

Successful completion of student responsibilities in this class requires access to BlackBoard via an Internet browser. You are expected to login to the BlackBoard classroom *at least* 3 to 4 times per week. Instructions for access to Blackboard may be located online at the following address: http://online.edcc.edu/study/Bb_login.html. Toll-free technical support (24/7 service) is available at <http://blackboard.edcc.edu> (click on the HELP button).

A Blackboard classroom will be set up on the Web for this class and will be a central repository of the course assignments and discussions, as well as material you will need during the course. You are responsible for checking this site regularly for announcements and other information. More information and instructions for setting up and accessing your Blackboard account will be provided during the first week of class.

CLASSROOM CONDUCT IN THE LABS

Classrooms are shared environments where each individual pays dearly to hear all of the information presented. A few courtesies are required for everyone to have a quality experience.

- ❖ CELL PHONES, PAGERS, etc. *MUST BE TURNED OFF* while in the classroom.
- ❖ Please be on time. I will make every effort to start class on time and don't believe students who make the effort to be on time should be penalized.
- ❖ Please avoid side discussions with your neighbors unless instructed to do so, as they are highly distracting and cannot be tolerated.
- ❖ *DO NOT SURF THE NET IN THIS CLASS!* If the computers become too big a distraction, I may ask that you turn them completely off until needed.

EXPECTATIONS

This course involves a high level of independent problem solving and analytical thinking. You can expect to spend at least 8 to 12 hours per week outside of class to complete reading and other activities. Class time will be spent in lectures, team activities, hands-on practice, and group discussion.

I expect you will:

- ❖ assume an **active role** in your own learning process
- ❖ take **responsibility** for understanding what each deliverable entails
- ❖ complete reading/discussion/assignment deliverables **on time** and be prepared for in-class discussion
- ❖ share information freely with others and **actively participate** in team projects
- ❖ not distract others (see *the Classroom Conduct section above*) –
 - *****NOTE:** I reserve the right to DEDUCT class participation points during the quarter for activities or behaviors that detract from a productive classroom environment.
- ❖ deliver **high quality work** that is correctly spelled, neat, and readable
- ❖ **independently learn** necessary tools and seek out relevant resources

My role is to be your guide through this material, and therefore you can expect that *I will do my best to:*

- ❖ plan relevant "real-world" **learning activities** to meet course objectives
- ❖ clearly **define expectations** and deliverables
- ❖ adjust the **pace and schedule** as needed to assure understanding and meet objectives
- ❖ **explain difficult concepts** in a manner that allows you to understand them
- ❖ give you **meaningful feedback** to help with your learning process
- ❖ assign grades in a **fair and consistent** manner

POLICY ON CHEATING

Discussing the course topics with your classmates is encouraged. Helping your classmates solve problems is also encouraged. However, all quizzes, exams, and individual lab and project work turned in for a grade must be done independently. No points will be awarded for individual deliverables found to contain work directly copied from others.

Plagiarism and/or cheating are totally unacceptable and will be dealt with severely and on an individual basis.

SPECIAL ACCOMMODATIONS

If you require an accommodation for a disability, please contact Services for Students with Disabilities, MLT 159, (425) 640-1320, ssdmail@edcc.edu

EMERGENCY CLOSURE INFORMATION

In case of an emergency closure, please access the following web site for information: <http://www.schoolreport.org/> and or call this phone number: 425-640-1459.