

GRANDE PRAIRIE REGIONAL COLLEGE

COURSE OUTLINE - FALL 1997

COMPUTER SYSTEMS TECHNOLOGY 3610

Systems Analysis and Design

INSTRUCTOR

Stephen Rochefort

OFFICE AND PHONE

Rm.: C211, 539-2964

E-mail: rochefort@gprc.ab.ca

Office Hours: To be announced.

Office hours may also be arranged by individual appointment with the instructor.

I can also be reached at 538-0962 in the case of emergencies.

PREREQUISITE

CS 1140

COURSE DESCRIPTION

By means of lectures and case studies the student will be introduced to the methods used by Systems Analysts in determining the information needs of an organization. The concept of a Systems Development Life Cycle will be discussed in detail. The CASE tool Excelsior will be used for the lab portion of the course.

This is an introductory course that includes an overview of information systems as well as in-depth study of systems development life cycles. Emphasis will be placed on tools and techniques used to analyze, design and document information systems.

COURSE MATERIALS

Text:

Whitten, J. L., and Bentley, L. D. *Systems Analysis and Design Methods*, 4th edition. Irwin, 1998.

Materials:

Several 3½" floppy disks are required for saving your work.

DATES TO REMEMBER

17 September 1997

Last day to Drop Registration for fall courses.

05 November 1997

Last day to apply for Withdrawal With Permission for fall courses.

04 December 1997

Last day of scheduled classes.

08-12, 15-16 December 1997

Fall Semester Exam Period. The final exam may be scheduled *at any time* during this period. The student should not plan to be absent during this period until his/her final exams have been completed.

EVALUATION PROFILE AND GRADING

Quizzes, Assignments	30%
Term Test 1	15%
Term Test 2	15%
Final Exam	<u>40%</u>
	100%

The final percentage achieved by the student will be converted to GPRC's nine point scale as follows:

9	90 - 100	4	50 - 56
8	80 - 89	3	45 - 49
7	72 - 79	2	26 - 44
6	65 - 71	1	0 - 25
5	57 - 64		

HANDING IN ASSIGNMENTS

Assignments should be securely fixed together with staples or "bulldog" paper clips, or fixed in binders/duotangs for submission. Assignments that are handed in loose will be penalized. Each assignment should begin with a title page having your name (or names, in the case of team assignments), the course name, assignment number and date of submission (not due date) clearly marked on it. When assignments consist of several pages, it is the *student's* responsibility to ensure that all portions of the assignment are handed in together. Assignments are required to be neat and well-organized; marks will be deducted for sloppy presentation.

LATE ASSIGNMENTS

The due date for each assignment will be given on the assignment handout. Assignments are due *at the beginning of class* on the given due date. If an assignment is handed in after the beginning of class on the due date, it will be penalized 5%. Those assignments that are not handed in on or before the due date will be penalized 10% per school day late (for example, an 80% assignment due on Friday but handed in on Tuesday would be considered 2 days late, and would receive a final mark of 64%). Any assignment more than a week late will *not* be accepted, without prior permission of the instructor. Late assignments should be handed in to the instructor in person, or slipped under the instructor's office door. *It is the student's responsibility to ensure that assignments get to the instructor!*

Note: If a portion of an assignment is handed in late, the *entire* assignment is deemed to have been submitted at that time, and will be penalized accordingly. Thus, handing in part of an assignment late causes the rest of that assignment to be penalized as well.

COURSE CONTENT

Three hours per week will be dedicated to a classroom presentation of computer topics. The lab component of the course may consist of discussion of tools and techniques for information systems work, instruction in how to use the CASE software chosen for this course, and/or time to apply the methods discussed and to work on assignments. The student will need to use this lab time efficiently in order to complete assignments on time.

Week	Theory Topics	Lab Topic	Assignments
1	Introduction to course,		
2	Ch. 1-3: The Modern Systems Analyst, Information Systems Building Blocks, Information Systems Development.		
3	Ch. 3: Information Systems Development.		Asst. 1,
4	App. A: Project and Process Management, App. B: Fact-Finding and Information Gathering Techniques. Ch. 4: Systems Analysis.		
5	Ch. 4: Systems Analysis. App. D: Joint Application Development,		Asst. 2,
6	App. C: Feasibility and Cost-Benefit Analysis. Ch. 5: Data Modeling.		
7	Ch. 6: Process Modeling. Review.		Asst. 3, Term Test 1.
8	Ch. 6: Process Modeling.		
9	Ch. 7: Network Modeling. Ch. 8: Object Modeling.		Asst. 4.
10	App. E: Interpersonal Skills and Communication. Ch. 9: Systems Design and Construction.		
11	Ch. 10: Application Architecture and Process Design. Review.		Ass. 5, Term Test 2.
12	Ch. 10: Application Architecture and Process Design. Ch. 11: Database Design.		
13	Ch. 12: Input Design and Prototyping. Ch. 13: Output Design and Prototyping. Ch. 14: User Interface Design and Prototyping.		Asst. 6.

(continued...)

Week 13 (cont.)

Ch. 15: Software Design.

Ch. 16: Object-Oriented Design.

14 Ch. 17: Systems Implementation.

Ch. 18: Systems Support.

The readings from the Whitten and Bentley text are required, and are examinable material. The student should read the indicated chapters either before or during the week the material is presented in class.

The exact course content, order of presentation and schedule described above are subject to adjustment at the instructor's discretion.