

## CAMOSUN COLLEGE Trades and Technology Computer Science

## ICS 215 Introduction to Systems Analysis and Design Fall, 2018

# **COURSE OUTLINE**

#### The calendar description is available on the web @

#### D2L-2018FICS215X01ABCD

• Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

### 1. Instructor Information

- (a) Instructor Mr. Stephen Lang
- (b) Office hours Tuesday 10:00-11:00 AM, Thursday 3:30-4:30
- (c) Location Tech 252
- (d) Phone 250-370-4454
- (e) E-mail langs@camosun.ca
- (f) Website http://hal.cs.camosun.bc.ca/~langs

#### 2. Intended Learning Outcomes

Upon completion of this course, students will be able to

• apply a project life-cycle discipline and effectively communicate the analysis and design of a software project by:

Alternative:

- o explaining overall concepts relating to information systems development;
- o using communications skills effectively in the development process;
- o analyzing and designing a system;
- o identify and scope problems;
- o use project management techniques for communicating with end users;
- o initializing and planning a systems development; and
- o using various tools and techniques appropriately in the development process
- o design appropriate UML models to document the requirements and process.

#### 3. Required Materials

#### (a) Texts

None required. Recommended:

The textbook for this course is: **Systems Analysis and Design (9<sup>th</sup> Edition)** by Kendall and Kendall (Prentice Hall ISBN: 0133023443)

(b) Other

Pre-requisite: C in ENGL 151, or ENGL 161, or ENGL 163; COMP 155 and COMP 235 and either ENGL 150 or ENGL 170

Course notes are all online on the D2L course web site.

### 4. Course Content and Schedule

Week	Lecture	Lab
1	Introduction to Systems Analysis Modeling Systems Project Management	Lab 1: Prepare a Project Charter
2	Project Management Work Breakdown Structure	Lab 2: Kick Off – Requirements Planning and Gathering
3	Information Gathering Use Case Modeling Scenarios	Lab 3: Project Planning; create a Gantt chart
4	Use Case workshop Agile Modeling Scrum	Lab 4: Requirements Documentation: Use Cases
5	Readings and Tasks Review Midterm Questions	Lab 4 (continued)
6	Midterm Data Flow diagrams	Lab 5: Scrum; build an online scrum backlog
7	Visio Process Specifications Data Dictionaries Database Normalization Review	Lab 6: Requirements Documentation: Process/Flow Models; create context level diagram and dataflow diagrams
8	Designing Databases Data model review	Lab 7: Requirements Documentation: Data and Behaviour Models; create logical ER models
9	UML Use Case diagram and scenarios workshop	Lab 7 (continued)
10	UML Activity diagram workshop	Lab 8: UML; create UML activity diagrams and UML use case descriptions
11	UML Sequence diagram workshop	
12	UML Statechart diagram workshop	
13	Quality Assurance	
14	HCI Review	

Class hours: 3 lectures per week x 14 weeks – 3 statutory days = 39 lecture hours Lab hours: 2 lab hours per week x 14 weeks = 28 lab hours Out of Class Requirements: roughly 3-6 hours per week for reading and completing lab work Lab assignments (8 total) Midterm (One, in class, closed book)

Final written exam comprehensive, closed book (3 hours)

## 5. Basis of Student Assessment (Weighting)

(a) Assignments

8 labs collectively worth 40% of the final grade (4% 4% 5% 5% 5% 5% 6% 6%)

(b) Quizzes

Thirteen review quizzes worth 10% of the final grade. Online review questions also provided.

(c) Exams

One midterm (closed book) worth 15% Final exam (closed book) worth 30%. You must pass the final exam to pass the course.

(d) Other (e.g. Project, Attendance, Group Work)

Some of the labs can be completed as a group of three students. (Team peer assessment: 5%)

### 6. Grading System

(If any changes are made to this part, then the Approved Course description must also be changed and sent through the approval process.)

(Mark with "X" in box below to show appropriate approved grading system – see last page of this template.)



Standard Grading System (GPA)

Competency Based Grading System

## 7. Recommended Materials or Services to Assist Students to Succeed Throughout the Course

- Students are strongly encouraged to attend all lectures and scheduled labs

## LEARNING SUPPORT AND SERVICES FOR STUDENTS

There are a variety of services available for students to assist them throughout their learning. This information is available in the College Calendar, Student Services or the College web site at http://www.camosun.bc.ca

## STUDENT CONDUCT POLICY

There is a Student Conduct Policy. It is the student's responsibility to become familiar with the content of this policy. The policy is available in each School Administration Office, Registration, and on the College web site in the Policy Section.

http://www.camosun.bc.ca/policies/policies.html

### A. GRADING SYSTEMS <u>http://www.camosun.bc.ca/policies/policies.php</u>

#### The following two grading systems are used at Camosun College:

#### 1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	А		8
80-84	A-		7
77-79	B+		6
73-76	В		5
70-72	B-		4
65-69	C+		3
60-64	С		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

#### 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description	
СОМ	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.	
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.	
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.	

## **B.** Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <a href="http://www.camosun.bc.ca/policies/E-1.5.pdf">http://www.camosun.bc.ca/policies/E-1.5.pdf</a> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete</i> : A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress</i> : A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal</i> : A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.