Department of Electrical and Computer Engineering

COURSE OUTLINE

CENG 356 – Engineering System Software

Term - FALL 2014 (201409)

Instructor

Dr. Yanguo (Michael) Liu

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Office Hours

Days: Monday, Wednesday
(Or By appointment)

Time: 19:30 PM – 20:30 PM
Location: EOW 419

Lectures

A-Section(s): A01 / CRN 10401

Days: Monday, Wednesday
Time(s): 18:00 PM-19:20PM
Location: ECS124

B-Section(s): A02 / CRN 10402

Days: Monday, Wednesday
Time: 18:00 PM-19:20PM
Location: ECS124

Required Text

Title:	Computer Systems An Integrated Approach to Architecture and Operating Systems
Author:	Ramachandran and Leahy Jr.
Publisher:	Addison Wesley
Year:	2011

Optional Text

	Embedded Systems (2nd Edition)
	Marwedel
	Springer
	2011

References: Lecture notes and article reprints available on CourseSpace
http://coursespaces.uvic.ca

Assessment:

Assignments:	10%
Projects	20%
Mid-term	20%
Final	50%

Date: October 15th, 2014

Note: Failure to complete all laboratory requirements will result in a grade of N being awarded for the course.

Due Dates for Assignments: Due date to be announced.

The final grade obtained from the above marking scheme will be based on the following percentage-to-grade point conversion:

Passing Grades	Grade Point Value	Percentage for Instructor Use Only	
A+ A A-	9 8 7	90 – 100 85 – 89 80 – 84	
B+ B B-	6 5 4	77 – 79 73 – 76 70 – 72	
C+ C	3 2	65 – 69 60 – 64	
D	1	50 – 59	
Failing Grades	**Grade Point Value**	**Percentage for Instructor Use Only**	**Description**
E	0	0 - 49	Fail, *Conditional supplemental exam. (For undergraduate courses only)
F	0	0 – 49	Fail, no supplemental.
N	0	0 – 49	Did not write examination, Lab or otherwise complete course requirements by the end of term or session; no supplemental exam.

**Assignment of E grade will be at the discretion of the Course Instructor.*

The rules for supplemental examinations are found on page 80 of the current 2014/15 Undergraduate Calendar.

Term in which E Grade Was Obtained	Application Deadline for Supplemental Exam	Supplemental Exam Date
First term of Winter Session (Sept – Dec)	February 28 in the following term	First week of following May
Second term of Winter Session (Jan – Apr)	June 30 in the following term	First week of following September
Summer Session (May – Aug)	October 31 in the following term	First week of following January

Deferred exams will normally be written at the start of the student's next academic term; i.e., approximately 4 months following the deferral of the exam.

Course Description

1. Course Objectives

- To apply software requirement and design processes in the implementation of software components in electrical and computer engineering systems
- To apply engineering system software concepts to portable devices, embedded systems, real-time systems, and multi-processor systems

2. Learning Outcomes

- Able to understand the role of system software and their synergy with hardware and applications in engineering computer systems
- Able to use and extend fundamental system software and hardware concepts in computer systems
- Able to identify potential hazards and apply system software principles to solve unique electrical and computer engineering problems in various domains (e.g., mechatronics, signal processing)

3. Syllabus

System software principles, components, usage, protection, and their relation to hardware and engineering systems. Modern operating systems characteristics and engineering applications; portable operating system interface standard. Requirements, design, development, and maintenance of complex software for portable devices, real-time systems, and multi-processor systems.

Note to Students:

Students who have issues with the conduct of the course should discuss them with the instructor first. If these discussions do not resolve the issue, then students should feel free to contact the ECE Chair by email or the ECE Chair's Secretary eceasst@uvic.ca to set up an appointment.

Accommodation of Religious Observance
See http://web.uvic.ca/calendar2014/GI/GUPo.html

Policy on Inclusivity and Diversity
See http://web.uvic.ca/calendar2014/GI/GUPo.html

Standards of Professional Behaviour

You are advised to read the Faculty of Engineering document Standards for Professional Behaviour at http://www.uvic.ca/engineering/current/undergrad/index.php#section0-25 which contains important information regarding conduct in courses, labs, and in the general use of facilities.

Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department. You should consult

http://web.uvic.ca/calendar2014/FACS/UnIn/UARe/PoAcI.html for the UVic policy on academic integrity.