

**Electrical & Computer Engineering Department
Sexton Campus, Dalhousie University**

ECED 4900 - SYP Part I

CLASS INFORMATION

2013/2014 Winter

Coordinator: Yuan Ma (Yuan.Ma@dal.ca, Office: C314)

Course Website: mems.ece.dal.ca/syp.php



Course Outcomes:

- Identify and summarize project needs, criteria, and deliverables;
- Generate and propose design strategies; Contrast, and select optimal design strategies;
- Use and apply appropriate engineering analysis and tools;
- Collaborate within a team environment; Communicate in both written and oral form.

Course Evaluation:

	SYP Final Mark
Attending seminars:	10%
Written design requirements memo:	20%
Oral presentation:	20%
Log book:	10%
Progress report:	40%

Note: The SYP coordinator reserves the right to give individual mark for each team member in a group.

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List of Seminars and Due Dates

Class Time: Fridays, 11:35 – 12:25

Date	Topics	Guest Speaker	Location
7-Jan	Industry Project Proposal Due		
10-Jan	Course introduction		D501
17-Jan	Project management and how to think	Dr. Peter Gregson	D501
24-Jan	Intellectual property and authors rights	Mrs. Erica Fraser, B.Eng. L.L.B. Manager – Technology Commercialization Industry Liaison and Innovation	D501
	Project Selection (1:00pm)		
29-Jan	SYP Design Tutorial	Dr. Peter Gregson	C234 2:30-4:30
31-Jan	Group discussion	Final Project Match Notification & Internal supervisor selection	
14-Feb	How to manage expectations and work effectively with an industry sponsor	Glenn D. Isenor, Ph.D., P.Eng. Industrial Technology Advisor, National Research Council Industrial Research Assistance Program (NRC-IRAP)	D501
28-Feb	Design Requirement Memo Due		Dept. Office
7-Mar	Scientific writing and presentation	Dr. Mohamed El-Hawary	D501
14-Mar	Group presentation I	Group 1 & 2: identify project needs, and deliverables; propose design strategies etc.)	Dept. Office
21-Mar	Group presentation II	Group 4, 5, 6	D501
28-Mar	Group presentation III	Group 7, 8, 9	D501
4-Apr	Group presentation IV Log Book and Progress Report Due	Group 3, 10, 11 Log book signed by internal supervisor; Progress report submitted to supervisors and SYP coordinator	Dept. Office

Note: Students are expected to start work at the earliest date possible.

Students who have not made project selection by the cutoff date will be assigned a group and/or project by the SYP coordinator.

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List of Final Project Match and Presentation Dates

Projects Submitted on Students' Behalf						Preliminary Design Review Presentation
Group #	Students	Sponsoring Organization	Project Title	External Supervisor	Internal Supervisor	
1	Craig Sheppard, Rosalind Dickinson	Akoostix Inc	Investigation of machine learning techniques in active and passive marine monitoring	Joe Hood (jhood@akoostix.com) & Thomas Trappenberg (trappenberg@gmail.com)	Bousquet	Mar. 14
2	Marianne LeBlanc, Jerrad Johnson, Declan Murphy	Aspin Kemp & Associates (AKA)	A Device For Fault Current Mitigation In Common DC Bus Systems	Chris Wright (chriswright@aka-group.com)	El - Masry	Mar. 14
3	Ryan Haley, Matthew Thomson, William Perrett, Victor Wong	Halifax Curling Club on behalf of Train Smart for Curling	Train Smart for Curling - Rock Tracking System	Joseph M. Murphy (murphyjm@bellaliant.net)	Gregson	Apr. 4
4	Ueli Haltner, Hatem Ali, AbdelRahman Eliwa	Dalhousie Univ. ECED	Sound Share Device	Christian Schlegel (Christian.Schlegel@dal.ca)	Ilow	Mar. 21
11	Amjad Altawil, Bo Liu	Scotiamax Engineering	Water/Steam level detection in industrial boiler steam drums	Abdallah Hamed (abdallah@scotiamax.com)	Little	Apr. 4

Compiled Senior Year Project Match						
5	Talor Lawson, Jonathan Bakvis, Lorne 'William' Marsman	Private Venture	New Product Development - Omni Presence Environment (OPE) for Smartphones/Pads	Randy Wyatt etc. (Randy.Wyatt@forces.gc.ca;cpelletier@eastlink.ca)	Ponomarenko	Mar. 21
6	C. Gregory Dunn, Matt Pyne, Max Wawer	Alentic Microscience	Computational Vision Algorithms for Particle Analysis and Classification - Part II	Alan Fine (a.fine@dal.ca)	Cada	Mar. 21
7	Alex Hunt, Sarah McLeod, Owen Reader	Visimetrics Inc	SmartHeat-II	Peter Gregson (pgregson1@gmail.com)	El-Hawary	Mar. 28
8	Fazeleh Afkari, Stephen chandler, Guan Xiong Gong, Vignesh Ramasamy	Nova Scotia Rehabilitation Centre	Assistive Technology	Kim Parker (kim.parker@cdha.nshealth.ca)	Brown	Mar. 28
9	Caleb Lamrock, Matt Chisholm, Connor Pratt, Taylor Leopold	Visimetrics Inc	DataPuck	Peter Gregson (pgregson1@gmail.com)	Gonzalez-Cueto	Mar. 28
10	Dave Roberston, Brian James, John Kerr, Ryan O'Sullivan	Lorax Systems Inc	Low-cost remote sensor monitoring	Mark Bishoff & Adam Donaldson (adam.donaldson@dal.ca, markb@loraxsystems.com)	Ma	Apr. 4