Syllabus
COMP 595OSE: Open Source Software Engineering
Fall 2010

Course Information

Class materials:	Papers and articles will be posted at the class web site.
	http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=11216&mode=toc
	http://www.catb.org/~esr/writings/cathedral-bazaar/
	http://oreilly.com/catalog/osfreesoft/book/
Instructor:	Taehyung (George) Wang, *twang@csun.edu*
Class website	http://www.csun.edu/~twang/595OSE
Class number	18070
Lecture:	JD3508, W. 19:00 – 21:45
Office hour:	JD4447, MW 15:30 – 16:30 or by appointment
Midterm exam	TBD
Final exam:	TBD
Prerequisite:	COMP380/L

Course Description

Introduces concepts, principles and applications of open source software. Discuss about open source software development process. Cover economy, business, societal and intellectual property aspects of open source software. Obtain hands-on experiences on open source software and related tools through developing various open source software applications such as mobile applications and Web applications.

Course Objectives

Upon successful completion of the course the student will be able to:
- Understand concepts, strategies, and methodologies related to open source software development.
- Understand the business, economy, societal and intellectual property issues of open source software.
- Be familiar with open source software products and development tools currently available on the market.
- Be able to utilize open source software for developing a variety of software applications, particularly Web applications.

Course Requirements

Homework Assignments

Homework assignments will be given to assess your preparation and understanding of the course objectives. Homework assignments should be submitted before the lecture starts on the due date. The students will be required to present the homework assignments.

Group Project

One of the class objectives is to be familiar with popular open source software products currently available on the market. The possible subjects of the project would be mobile software applications and Web applications. You need to prepare a set of documents including requirements and specification, design, and source code as the required deliverables.

Midterm Exams

Two midterm exams will be given. No makeup exam is allowed unless you have a legal document.

Final Exam

The scope of final exam is comprehensive. No makeup exam is allowed unless you have a legal document.

Course Policies

Late Assignment

No late assignments are accepted.

Academic Dishonesty

"Cheating or plagiarism in connection with an academic program at a campus is listed in Section 41301, Title V, California Code of Regulations, as an offense for which a student may be expelled, suspended, or given a less severe disciplinary sanction." - (http://www.csun.edu/catalog/)

Grading

The portion for each grading component and the grading formula are as follows:

Grading components	Percentage
Homework assignments	30%
Group project	25%
Midterm exams	20%
Final exam	25%
Total	100%

Grade	Grade cutoff
A	>= 93.00 %
A-	>= 90.00 %
B	80 – 89.99%
C	70 – 79.99%
D	60 – 69.99%
F	< 60%

If class performance is not good, class rank may be considered for the final grade. Attendance and peer evaluation will be counted. Note that the number of homework assignments is tentative; the grading formula can be changed depending on different circumstances and instructor's decision.

Course Schedule and Outline

Week	Topic
Week 1	An Introduction to Open Source Software Engineering

Week 2	An Introduction to Open Source
	   Required reading
	     "Open source paradigm shift," Tim O'Reilly

Week 3	Open Source Software in Practice
	   Required reading
	     "The Cathedral and the Bazaar," Eric Raymond

Week 4	Economics of Open Source
	   Required reading
	     "The Simple Economics of Open Source" Josh Lerner and Jean Tirole

Week 5	Open Source Business Models (Part 1)
	   Required readings
	     "The Halloween Document," Vinod Vallopillil and Eric Raymond
	     "Seven Open source Business Strategies for Competitive Advantage," John Koenig

Week 6	Open Source Business Models (Part 2) Required Readings

	" IBM's Pragmatic Embrace of Open Source," Pamela Samuelson " What Road Ahead for Microsoft the Company?" Michael A. Cusumano

Week 7	Roles of Open Source & Proprietary Software in the Private Sector
	  Required Readings
	  "Anarchism Triumphant: Free Software and the Death of Copyright," Eben Moglen
	  "The Commodification of Information," Niva Elkin-Koren and Neil Weinstock Netanel, eds.
	  Speech by Microsoft Senior Vice President at NYU Stern School of Business, Craig Mundie
	  "Code, Culture, and Cash: The Fading Altruism of Open Source Development," David Lancashire

Week 8	Midterm

Week 9	Government Policy About Open Source
	  Required Readings
	  "Politics And Programming: Government Preferences for Promoting Open Source Software," David S. Evans
	  "Free/Libre Software and Open Source Software, Survey and Study," Rishab Aiyer Ghosh, Bernhard Krieger, Ruediger Glott and Gregorio Robles

Week 9	Regulability of Open Source/Open Source as a Global Phenomenon
	  Required Readings
	  "The Limits in Open Code: Regulatory Standards & the Future of the Net," Lawrence Lessig
	  "The Paradoxes of Free Software," Stephen M. McJohn

Week 10	Conceptual Underpinnings of Free and Open Source Licenses: Property, Contract, or Something Else?
	  Required Readings
	  "Reconstructing the Software License," Michael Madison Loy
	  "Personal Property Servitudes," Glen O. Robinson

Week 11	Enforceability of Open Source Licenses
	  Required Readings
	  GNU General Public License (GPL)
	  "Legal Implications of Open Source Software," David McGowan

Week 12	Midterm 2

Week 13	Adapting the Open Source Concept to Biotech Innovations
	  Required Readings
	  "Open Source Patenting," Sara Boettiger and Dan L. Burk
	  "Open and Collaborative Research: A New Model for Biomedicine," Arti Rai

Week 14	Open source software in US, Europe and Asia
	  Required Readings
	  "Asian Trio's Adoption of Linux-based Open Source Development," Bongsug (Kevin) Chae and Roger McHaney

Week 15	Future of Open Source Software
	  Required Readings
	  "Has Open Source Software a Future?" Brain Fitzgerald

Week 16	Group project presentation and review for final exam

*Note that the course schedule and outline can be changed without advance notice.