

Course Proposal

CSE-175: Entrepreneurship in Computing Tech Elective

Instructor(s): Michalis Faloutsos e-mail: michalis@cs.ucr.edu

Prerequisite(s): CS100 and senior/junior standing

Units: 4

Class Meetings: TBD

Office Hours: TBD

Final Examination: TBD

Description This is a course for students in a computing major. The class aims to provide students with entrepreneurial skills so that they can turn their technical ideas into viable business. Topics include: a) technical aspects of real world IT projects, i.e. developing software and services for the real world, understanding user requirements, designing usable systems, and b) business aspects, such as, technological assessment, market analysis, strategy, legal and intellectual property issues in business, financial analysis, business ethics and communication. Students will be required to submit a complete software/service product with documentation, a written business plan and to give an oral presentation. CS 100 and senior/junior standing in engineering are required.

**Catalog
Description** An introduction of business and technological concepts on how to build a company based on computer technology and hands-on teaching the related skills. Topics include: a) technical aspects of real world IT projects, i.e. developing software and services for the real world, understanding user requirements, designing usable systems, and b) business aspects, such as, technological assessment, market analysis, strategy, legal and intellectual property issues in business, financial analysis, business ethics and communication

Textbook Kawasaki, G., *The art of the start*, Portfolio Inc. Preferably version 2.0
Barringer, B. R., *Preparing effective business plans: An entrepreneurial approach* Pearson/ Prentice Hall, 2009
Selected topics from:
Krug, Steve, *Don't Make Me Think: A common Sense Approach to Web usability.*

**Detailed
Contents and
Objectives**

The students will be taught:

- To understand how to specify, provision and complete real world programming projects
- To learn how to design with usability in mind
- To assess the quality of their software or service
- To identify business opportunities based on technical innovations and to articulate a business vision
- To understand the challenges in launching a new business based on technical innovations
- To understand strategic options
- To conduct market research and analysis
- To conduct financial analysis
- To understand the legal issues in the business environment
- To develop an appreciation of the social and ethical aspects of business
- To communicate a business plan in written and oral format

Coursework

Instructors will cover material related to the business plan and the business of developing professional services and software. Students will work in groups and have weekly deliverables (presentations and reports) on the topics listed below for their business plan under the supervision of the instructor and advisors. Over the course of the quarter, students will work on individual aspects of their business plan. Workshop periods will be used to workshop the business plan. The final deliverable of the class will be a comprehensive business plan that addresses the students' plan to bring the product to market.

The business plan and pitch should be of such quality as is fit for presentation to venture capitalists, investors and to SBIR (small business) grants. At the end of the quarter, selected teams will also present their business ideas in an open forum to which venture capitalists and other funding agencies will be invited.

Individual student activity will involve students approaching specific companies and other relevant entities to collect data and prepare financial projections, solidify a realistic business plan proposal, and receive industry feedback on their sales pitch/final presentation. This activity will be explicitly evaluated as a part of their ability to improve and adopt their business plan and final presentation and

report.

Grading

There are two main deliverables a business plan and a technical document presenting the technology. Each deliverable will be broken into sub-deliverables to help the students complete the work timely.

Progress reports: 30%

Final report (business and technical components): 30%

Final presentation: 20%

Class participation and in-progress presentations: 20%

Grading will vary by year, please consult the current syllabus.

The final scores will be assigned letter grades according to the following scheme:

100% – 96%	A+	70% – 66%	C
96% – 90%	A	66% – 62%	C-
90% – 86%	A-	62% – 58%	D+
86% – 82%	B+	58% – 54%	D
82% – 78%	B	54% – 50%	D-
78% – 74%	B-	50% – 0%	F
74% – 70%	C+		

Academic Integrity

Any incident of academic dishonesty, including plagiarism and cheating, will be handled according to University guidelines. See <http://library.ucr.edu/?view=help/plagiarism2.html> and <http://conduct.ucr.edu/> for guidance