

University of Puerto Rico
 Mayagüez Campus
 College of Engineering
 Department of Electrical and Computer Engineering
 Bachelor of Science in Electrical Engineering

Course Syllabus

1. General Information:	
Alpha-numeric codification: ICOM 4066 Course Title: Software Project Management Number of credits: 3 Contact Period: 3 hours of lecture per week Elective in ICOM	
2. Course Description:	
English: Introduction to the concepts and techniques of project management for software systems. Discussion of issues related to planning, organization, and monitoring of all software life cycle phases. Topics on project management tools. Students will apply software management and assessment techniques.	
Spanish: Introducción a los conceptos y técnicas de la administración de proyectos de software. Discusión de temas relacionados a la planificación, organización y monitoreo de todas las fases del ciclo de vida de los sistemas de software. Tópicos sobre herramientas de administración de proyectos. Los estudiantes podrán aplicar técnicas de gestión y evaluación de proyectos de software.	
3. Pre/Co-requisites and other requirements:	
ICOM 4009	
4. Course Objectives:	
Student will apply project management concepts to software projects, develop software plans, manage resources, identify and manage risks, estimate software projects, and monitor project status.	
5. Instructional Strategies:	
<input checked="" type="checkbox"/> conference <input type="checkbox"/> discussion <input type="checkbox"/> computation <input type="checkbox"/> laboratory <input type="checkbox"/> seminar with formal presentation <input type="checkbox"/> seminar without formal presentation <input type="checkbox"/> workshop <input type="checkbox"/> art workshop <input type="checkbox"/> practice <input type="checkbox"/> trip <input type="checkbox"/> thesis <input type="checkbox"/> special problems <input type="checkbox"/> tutoring <input type="checkbox"/> research <input type="checkbox"/> other, please specify:	
6. Minimum or Required Resources Available:	
7. Course time frame and thematic outline	
Outline	Contact Hours
Overview of project management	2
Software Development models	3
Initiation and Planning	9
Estimation and scheduling	7
Risk management	3

Project personnel and organization	5
Monitoring and control	9
Project closeout	2
Project management tools	2
Exams	3
Total hours: (equivalent to contact period)	45

8. Grading System

Quantifiable (letters) Not Quantifiable

9. Evaluation Strategies (Suggested): The faculty member teaching the course will provide the student with the evaluation strategy he/she will be using throughout the semester. This will be done within the first week of classes.

	Quantity	Percent
<input checked="" type="checkbox"/> Exams	2	50
<input checked="" type="checkbox"/> Final Exam	1	25
<input type="checkbox"/> Short Quizzes		
<input type="checkbox"/> Oral Reports		
<input type="checkbox"/> Monographs		
<input type="checkbox"/> Portfolio		
<input checked="" type="checkbox"/> Projects	variable	25
<input type="checkbox"/> Journals		
<input type="checkbox"/> Other, specify:		
TOTAL:		100%

10. Bibliography:

Futrell, R.T, Shafer, D.F. Shafer L.I., Quality Software Project Management, Prentice Hall, 2002.

11. According to Law 51

Students will identify themselves with the Institution and the instructor of the course for purposes of assessment (exams) accommodations. For more information please call the Student with Disabilities Office which is part of the Dean of Students office (Chemistry Building, room 019) at (787)265-3862 or (787)832-4040 extensions 3250 or 3258.

Contribution of Course to meeting the requirements of Criterion 5:

Math	Basic Science	General	Engineering Topic
			√

12. Course Outcomes

Map to Program Outcomes

- Describe the role of project managers and their importance to an organization. (h)
- Explain and understand the activities or tasks required to do a project. (e)
- Compare and contrast the different project organizational (a)

- structures.
4. Compare and contrast the different software development models and identify those appropriate for the development of diverse software products and organizations. (a)
 5. Prepare a Work Breakdown Structure. (e)
 6. Prepare estimates of size and effort for a software project. (e)
 7. Analyze and develop schedules based on the CPM and Critical Chain methods. (e)
 8. Identify risks in a software project and formulate a management plan. (e)
 9. Recognize the important aspects of human resources management in a project context. (h)

Person (s) who prepared this description and date of preparation: José Borges. Submitted by: José F. Vega.