CIIC 4151 - Senior Design Project

1. **General Information:**

   Alpha-numeric codification: CIIC 4151
   Course Title: Senior Design Project
   Number of credits: 3
   Contact Period: 3 hours per week

2. **Course Description:**

   English: Team project to design, implement, test, and document a system based on Computer Systems and Computer Architecture techniques, incorporating computer science standards, engineering standards and problem constraints.

   Spanish: Proyecto en equipo para diseñar, implementar, probar, y documentar un sistema que conlleve el uso de técnicas de Sistemas Computación y Arquitecturas de Computadora, incorporando estándares de Computación, Ingeniería, y restricciones del problema.

3. **Pre/Co-requisites and other requirements:**

   (CIIC 4025 and CIIC 4060 and INSO 4101) or Authorization from department chair

4. **Course Objectives:**

   Students will work in teams to design, implement, test, and document a software system that solves a real-world problem using techniques for Computer Systems and Computer Architecture. The student should demonstrate his/her capability to apply previous knowledge to formulate, model and solve a real computer science and engineering problem.

5. **Instructional Strategies:**

   ☒conference ☐discussion ☐computation ☐laboratory

   ☐seminar with formal presentation ☐seminar without formal presentation ☐workshop

   ☐art workshop ☒practice ☐trip ☐thesis ☐special problems ☐tutoring

   ☐research ☐other, please specify:

6. **Minimum or Required Resources Available:**

   Students will use the Departmental computer laboratories to complete course projects.

7. **Course time frame and thematic outline**

Outline	Contact Hours
Introduction and project proposal preparation	6
Seminars on topics such as: - Product specification - Budgeting - Ethics - IDE Tools - Environmental and social issues related to the Engineering Practice - Project Management - Any other as the design projects dictate	10
Design of software system and progress reports	26
Oral presentation of project report	3
Total hours: (equivalent to contact period)	45

8. Grading System

☒Quantifiable (letters) ☐ Not Quantifiable

9. Evaluation Strategies

	Quantity	Percent
☐ **Exams**		
☐ **Final Exam**		
☐ **Short Quizzes**		
☒ **Oral Reports**	1	30%
☐ **Monographies**		
☐ **Portfolio**		
☒ **Projects**	1	40%
☐ **Journals**		
☒ **Other, specify: Written progress and final reports**	3-5	30%
TOTAL:		**100%**

10. Bibliography:

1. David Adamy, *Preparing and Delivering Effective Technical Presentations*, Artech House, 2000. [Classic Book] [Available at the Circulation Collection (T10.5 .A33 2000), UPRM General Library]

2. Electronic resources available through the UPRM Library's website: http://www.uprm.edu/library/cre/listdbsp.php?l=1&st=0&topic=63.
3. Other references, depending on software project chosen.

11. Course Outcomes

After successful completion of the course, the student will be able to:	Program Student Outcomes Impacted
1. Demonstrate attainment of all student outcomes of the program	1-8

12. 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 (Office #4) at (787)265-3862 or (787)832-4040 extensions 3250 or 3258.

13. Academic Integrity

-The University of Puerto Rico promotes the highest standards of academic and scientific integrity. Article 6.2 of the UPR Students General Bylaws (Board of Trustees Certification 13, 2009-2010) states that academic dishonesty includes, but is not limited to: fraudulent actions; obtaining grades or academic degrees by false or fraudulent simulations; copying the whole or part of the academic work of another person; plagiarizing totally or partially the work of another person; copying all or part of another person answers to the questions of an oral or written exam by taking or getting someone else to take the exam on his/her behalf; as well as enabling and facilitating another person to perform the aforementioned behavior. Any of these behaviors will be subject to disciplinary action in accordance with the disciplinary procedure laid down in the UPR Students General Bylaws.—