Cover Sheet: Request 10549

CPE 3923C - Computer Engr Design 1

Info

Process	Course|New|Ugrad/Pro
Status	Pending
Submitter	Banerjee,Arunava arunava@ufl.edu
Created	11/10/2015 3:47:42 PM
Updated	2/11/2016 6:11:11 PM
Description	This is the first course in a 2-course capstone design sequence for the Computer Engineering curriculum.

Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	ENG - Computer and Information Science and Engineering 011914001	Gilbert, Juan Eugene		11/10/2015
No document changes					
College	Approved	ENG - College of Engineering	Caple, Elizabeth		1/21/2016
No document changes					
University Curriculum Committee	Comment	PV - University Curriculum Committee (UCC)	Case, Brandon	Added to the February agenda	1/21/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			1/21/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

Course|New for request 10549

Info

Request: CPE 3923C - Computer Engr Design 1
Submitter: Banerjee,Arunava arunava@ufl.edu
Created: 2/13/2016 2:27:10 PM
Form version: 3

Responses

Recommended Prefix: CEN
Course Level : 3
Number : 923
Lab Code : C
Course Title: Computer Engineering Design 1
Transcript Title: Comp Engr Design 1
Effective Term : Fall
Effective Year: 2016
Rotating Topic?: No
Amount of Credit: 3
Repeatable Credit?: No
S/U Only?: No
Contact Type : Regularly Scheduled
Degree Type: Baccalaureate
Weekly Contact Hours : 03
Category of Instruction : Intermediate
Delivery Method(s): On-Campus
Course Description : Students reinforce basic computer engineering skills; design, produce, and report on a computer engineering project, meeting defined specifications and using a structured design methodology and project management.
Prerequisites : "CEN 3031(C) & "EEL 3744C(C)"
Co-requisites : None
Rationale and Placement in Curriculum : This is the first course in a 2-course capstone design sequence for the Computer Engineering curriculum.
Course Objectives : Students will be able to identify basic computer engineering techniques and demonstrate skills through learning modules. Working in small groups, students will be able to design a project based on the learning modules.
Course Textbook(s) and/or Other Assigned Reading: There is no textbook.
Required Software: SQL, MySQL, Java, JavaScript, C++, Flash, microprocessor development tool, Altium PCB design software.
Weekly Schedule of Topics : 1. Introduction and course overview
2. Learning modules:
- Database tools, SQL, MySQL
- Web programming languages and tools, Java and JavaScript, C++
- Graphics tools, Flash, OpenGL
- Mobile-apps development tools
- Micro-controller applications, I/O, LCD, interface
- Interfacing Serial D/A, A/D to a microcontroller
- PCB design using the Altium Suite
3, Design project overview, project selection, project plan with GANTT chart
4. Design project report /demonstrations
Grading Scheme : 50% Six modules
50% Final project
Instructor(s) : Dr. Herman Lam

CEN 3923C Computer Engineering Design I

1. Catalog Description – (3 credits) Students reinforce basic computer engineering skills; design, produce, and report on a computer engineering project, meeting defined specifications and using a structured design methodology and project management.

2. Pre-requisites – CEN 3031, EEL 3744C

3. Course Objectives – Students will be able to identify basic computer engineering techniques and demonstrate skills through learning modules. Working in small groups, students will be able to design a project based on the learning modules.

4. Contribution of course to meeting the professional component (ABET only – undergraduate courses) – 3 hours of Engineering Design

5. Relationship of course to program outcomes: (ABET only undergraduate courses) - ABET Outcomes c, e, g

6. Instructor – Dr. Herman Lam
    a. Office location: 313 Benton
    b. Telephone: 392-2689
    c. E-mail address: hlam@ufl.edu
    d. Class Web site: http://lss.at.ufl.edu
    e. Office hours: MWF 9:30-10:30 or by appointment

7. Teaching Assistant – TBD

8. Meeting Times and Location – M W F 6th, 101 NEB

9. Class/laboratory schedule – 3 class periods each week consisting of 50 minutes each and 1 laboratory period consisting of 180 minutes

10. Material and Supply Fees - None

11. Textbooks and Software Required – There is no textbook
    a. Software: SQL, MySQL, Java, JavaScript, C++, Flash, microprocessor development tool, Altium PCB design software.

12. Recommended Reading – Provided by the Instructor

13. Course Outline –
    - Introduction and course overview
    - Learning modules:
        - Database tools, SQL, MySQL
        - Web programming languages and tools, Java and JavaScript, C++
        - Graphics tools, Flash, OpenGL

    - Mobile-apps development tools
    - Micro-controller applications, I/O, LCD, interface
    - Interfacing Serial D/A, A/D to a microcontroller
    - PCB design using the Altium Suite
- Design project overview, project selection, project plan with GANTT chart
- Design project report /demonstrations

14. Attendance and Expectations – The course is comprised of six learning modules (selected by student) and a final project.

    Students are expected to complete each module. Full completion of each module requires an on-time pass on the demonstration and an on-time pass on the associated write-up. For incomplete modules, a full letter grade will be deducted from the final course grade.

    Students must submit individual work individually on each module/final project. Students are encouraged to work together on homework assignments and share ideas on lab assignments. However, students are not allowed to copy or duplicate any lab material (code, drawings, etc) from another student. Otherwise, it will be considered cheating.

    It is the student's responsibility to return all equipment and clean his/her work area before leaving the lab unless the equipment is specifically checked out.

    Cell phones and other electronic devices are to be silenced. No text messaging during class, demonstrations, or exams.

    Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found in the online catalog at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

15. Grading –
    50% Six modules
    50% Final project

16. Grading Scale – The final grade for the course will be determined by reducing the final grade by any letter grade reductions due to failure to fully complete any of the modules.

A	A-	B+	B	B-	C+	C	C-	D+	D	D-	E
90-100	87-89	86	80-85	77-79	76	70-75	67-69	66	60-65	58-59	0-57

    A C- will not be a qualifying grade for critical tracking courses. In order to graduate, students must have an overall GPA and an upper-division GPA of 2.0 or better (C or better). Note: a C- average is equivalent to a GPA of 1.67, and therefore, it does not satisfy this graduation requirement. For more information on grades and grading policies, please visit: https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

17. Make-Up Exam Policy - If you have a University-approved excuse and arrange for it in advance, or in case of documented emergency, a make-up exam will be allowed and arrangements can be made for making up missed work. University attendance policies can be found at: https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

    Otherwise, make-up exams will be considered only in extraordinary cases, and must be taken before the scheduled exam.

18. Honesty Policy – UF students are bound by The Honor Pledge which states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code (http://www.dso.ufl.edu/sccr/process/student-conduct-honor-code/) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

19. Accommodation for Students with Disabilities – Students requesting classroom accommodation must first register with the Dean of Students Office. That office will provide documentation to the student who must then provide this documentation to the course instructor when requesting accommodation.

20. UF Counseling Services – Resources are available on-campus for students having personal problems or lacking clear career and academic goals. The resources include:
    - UF Counseling & Wellness Center, psychological and psychiatric services, 3190 Radio Rd, 392-1575, online: http://www.counseling.ufl.edu/cwc/Default.aspx,
    - Career Resource Center, Reitz Union, career and job search services, 392-1601.
    - University Police Department, 392-1111 or 911 for emergencies

21. Software Use – All faculty, staff and student of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

22. Course Evaluation – Students are expected to provide feedback on the quality of instruction in this course based on 10 criteria. These evaluations are conducted online at: https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at: https://evaluations.ufl.edu/results.