COURSE SYLLABUS**SYLLABUS**  
**COM399: Senior Project**

Course Description

This course is designed to model Software Development activities. Real jobs require planning, critical thinking and analysis, reading/writing/research skills, and meeting deadlines. This course will require you to be presenting an exhibition of your best work. It will showcase all the techniques and experience you have gained while being a student at Coleman University.

General Course Information

|  |  |
| --- | --- |
| Number of Units/Weeks | 8/10 |
| #Hours Lecture/#Hours Laboratory/#Hours Homework | 40/00/80 |
| Prerequisite(s) | Completion of all Advanced Technology Requirements |
| Co-requisites (s) | None |
| Course Developer(s) | Leticia Rabor, M.S. |
| Date Approved / Last Review | September 2017 / September 2017 |

Learning Outcomes

* (CLO1) Identify possible solutions/algorithms to a real-world problem.
* (CLO2) Apply software design principles and practices to real-world problems.
* (CLO3) Effectively describe technical concepts and material both orally and in writing
* (CLO4) Create and deliver a fully tested software suite to a client in fulfillment of that customer's specifications

Instructional Methods Employed in this Course

* Research
* Student presentations
* Practical application of theory and skills in authentic projects
* Build on prior knowledge and experience of students to enhance richness of class activities

Information Resources for this Course

 **Standard References**  
Application Development Standards: Standards for SDLC. Retrieved from <https://dr6j45jk9xcmk.cloudfront.net/documents/1890/go-its-54-application-development-standards-for.pdf>

Types of Software Development Lifecycles (SDLC). Retrieved from <https://melsatar.blog/2012/03/15/software-development-life-cycle-models-and-methodologies/>

International Organization for Standardization (ISO). Retrieved from <https://www.iso.org/developing-standards.html>

Agile Development Best Practices. Retrieved from <https://www.versionone.com/agile-101/agile-software-programming-best-practices/>

Table/Topics & Assignments

**Types of Assignments:**

Considered Lecture Hours

**In Class Critique -**   
Considered Lecture Hours

**Delivering Oral Presentations -**   
Considered Lecture Hours

**In Class (IC) Status Review -**   
Considered Lecture Hours

**WebClass lesson (non-online courses) -**   
Considered HW, work done outside of class

**Quiz, Midterm or Final -**   
Considered Lecture Hours

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Week 1 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 1A | Introduction to Class  Get in Teams and discuss topic of final system project (brainstorm) | 4 |  |  |  |  |
| HW 1A | Deliverable: Project Description |  |  | 4 | 20 | Beginning of Week 2 |
| Total Week 1 |  | 4 | 0 | 4 | 20 |  |
| Week 2 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 2A | PHASE 1: Planning, Requirements & Specification | 3 |  |  |  |  |
| IC Review | Status Meeting | 1 |  |  |  |  |
| HW 2A | Deliverable: Requirements Specification Document including a Feasibility Study |  |  | 10 | 100 | Due Week 3 |
| Total Week 2 |  | 4 | 0 | 10 | 100 |  |
| Week 3 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 3A | PHASE 2: Design (Process Diagrams) | 4 |  |  |  |  |
| HW 3A | Deliverable: System Design Document |  |  | 8 | 100 | Week 5 |
| Total Week 3 |  | 4 | 0 | 8 | 100 |  |
| Week 4 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 4A | PHASE 2: Design (Risk and Security Assessment | 4 |  |  |  |  |
| IC Review | Status Meeting |  |  |  |  |  |
| HW 4A | Deliverable: Contingency Plan |  |  | 8 | 100 | Week 5 |
| Total Week 4 |  | 4 | 0 | 8 | 100 |  |
| Week 5 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 5A | PHASE 3: Implementation | 4 |  |  |  |  |
| HW 5A | Deliverable: Implementation Plan |  |  | 15 | 100 | Due 6 |
| Total Week 5 |  | 4 | 0 | 15 | 100 |  |
| Week 6 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 6A | Implementation | 4 |  |  |  |  |
| Total Week 6 |  | 4 | 0 | 0 | 0 |  |
| Week 7 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 7A | Implementation | 3 |  |  |  |  |
| IC Review | Status Code Review | 1 |  |  | 10 |  |
| Total Week 7 |  | 4 | 0 | 0 | 10 |  |
| Week 8 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 8A | PHASE 4: Testing | 4 |  |  |  |  |
| HW 8A | Deliverable: Test Plan |  |  | 10 | 100 | Week 9 |
| Total Week 8 |  | 4 | 0 | 10 | 100 |  |
| Week 9 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 9A | PHASE 5: Deployment | 3 |  |  |  |  |
| IC Review | Status Code Review | 1 |  |  | 20 |  |
| HW 9A | Deliverable: User Documentation |  |  | 10 | 100 | Week 10 |
| Total Week 9 |  | 4 | 0 | 10 | 120 |  |
| Week 10 |  |  |  |  |  |  |
| Type | Topic/Description | \*LEC Hours | LAB Hours | HW Hours | Point Value | Due |
| LEC 10A | Project Presentation | 4 |  |  | 50 |  |
| HW 10A | Final Project System. CLO1, CLO2, CLO3, CLO4 |  |  | 20 | 300 | Due Week 10 |
| Total Week 10 |  | 4 | 0 | 20 | 350 |  |

Course Hours Summary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week | Topic | LEC LEC | LAB LAB | HW HW Hours |
| 1 | Introduction to Class | 4 | 0 | 4 |
| 2 | Phase 1: Planning, Requirements, and Specification | 4 | 0 | 10 |
| 3 | Phase 1: Design | 4 | 0 | 8 |
| 4 | Phase 2: Design | 4 | 0 | 8 |
| 5 | Phase 3: Implementation | 4 | 0 | 15 |
| 6 | Phase 3: Implementation | 4 | 0 | 0 |
| 7 | Phase 3: Implementation | 4 | 0 | 0 |
| 8 | Phase 4: Testing | 4 | 0 | 10 |
| 9 | Phase 5: Deployment | 4 | 0 | 10 |
| 10 | Project Presentation | 4 | 0 | 20 |
| Total |  | 40 | 0 | 85 |

Table/Point Breakdown

|  |  |  |  |
| --- | --- | --- | --- |
| Week | Assignment | Possible Points | Percent  of Grade |
| 1 | Project Description | 20 | 2% |
| 2 | Requirement Specification Document | 100 | 10% |
| 3 | Design Specification Document | 100 | 10% |
| 4 | Contingency Plan | 100 | 10% |
| 5 | Implementation Plan | 100 | 10% |
| 7 | Status Code Review | 10 | 1% |
| 8 | Test Plan | 100 | 10% |
| 9 | Status Code Review | 20 | 2% |
| 9 | User Document | 100 | 10% |
| 10 | Project Presentation | 50 | 5% |
| 10 | Final Project System | 300 | 30% |
| Total |  | 1000 | 100% |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Your Grades for this Course** | | |  |  |  |  |
| Your final grade for this course will be based on an assessment by the Instructor of your performance on a number of course activities, which may include objective tests, classroom exercises, laboratory demonstrations, project papers, or other types of activities. The chart below indicates in what activities you will engage, how many possible points can be earned for each activity, and the percentage of your final grade that will be accounted for by each activity. | | | | | | |
| Students in this course should be graded following Coleman University assessment practices and policies. A point system is used in the University to indicate student performance on various required activities or projects. For this course, it is recommended that points be distributed as follows: | | | | | | |
| **Coleman University Grade Assignment Policy:** | | | |  |  |  |
|  | **Percent** | | **Letter Grade** | **Grade Points** |  |  |
|  | 94-100 | | A | 4 |  |  |
|  | 90-93 | | A- | 3.67 |  |  |
|  | 87-89 | | B+ | 3.33 |  |  |
|  | 84-86 | | B | 3 |  |  |
|  | 80-83 | | B- | 2.67 |  |  |
|  | 77-79 | | C+ | 2.33 |  |  |
|  | 74-76 | | C | 2 |  |  |
|  | 70-73 | | C- | 1.67 |  |  |
|  | 67-69 | | D+ | 1.33 |  |  |
|  | 64-66 | | D | 1 |  |  |
|  | 60-63 | | D- | 0.67 |  |  |
|  | N/A | | INC | 0 |  |  |
|  | N/A | | W | 0 |  |  |
|  | 60 or above | | CR | 0 |  |  |
|  | 59 or below | | NC | 0 |  |  |
|  | N/A | | I | 0 |  |  |
|  | N/A | | W | 0 |  |  |
|  | N/A | | AU | 0 |  |  |
|  | N/A | | TR | 0 |  |  |
|  | N/A | | WV | 0 |  |  |
|  |  |  |  |  |  |  |
|  | **Legend** | | |  |  |  |
|  | CR = Credit | NC = No Credit | |  |  |  |
|  | I = Incomplete | W = Course Withdrawal | |  |  |  |
|  | AU = Audit | TR = Transfer Credit | |  |  |  |
|  | WV = Waiver |  | |  |  |  |
|  |  |  |  |  |  |  |
| **Academic Accommodation / Adjustment Policy:** | | | | | | |
| In accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), Coleman University offers accommodations to students with documented physical, psychological, and/or cognitive disabilities. Coleman University will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to offer equal educational opportunities to qualified disabled individuals. | | | | | | |
| To qualify for an academic accommodation under ADA, the student must provide adequate documentation of a disability. Students seeking academic accommodations should contact the campus ADA Coordinator at 858-966-3953 or via email at ada@coleman.edu. The ADA Coordinator will review the documentation provided and verify ADA coverage. Students covered under ADA must meet with the ADA Coordinator at the beginning of every term to determine the appropriate academic accommodations. Failing to meet with the ADA Coordinator at the beginning of every term may impact the availability of accommodations. | | | | | | |
|  |  |  |  |  |  |  |
| After the academic accommodations have been determined, the students’ instructors will be notified by the ADA Coordinator. If any problems or concerns regarding the provision of accommodations occur, the student must inform the ADA Coordinator. If the student feels accommodation is not being made appropriately, the student may follow the published Student Grievance Procedures. | | | | | | |