



## Course Syllabus

### COM293 Game Programming Capstone

#### COURSE DESCRIPTION

The comprehensive capstone project will require students to work cooperatively to design and implement a game. Students will apply the concepts of game architecture and design acquired in previous classes to create at least one level of a comprehensive game which will include opening, game play, credits, and documentation, project will require students to work cooperatively in designing and implementing their own game.

#### GENERAL COURSE INFORMATION

|                                      |                          |
|--------------------------------------|--------------------------|
| Number of Units / Weeks              | 8/10                     |
| # Hours Lecture / # Hours Laboratory | 60/40/120                |
| Prerequisite(s)                      | COM 233, DSN 263         |
| Course Developer(s)                  | John Ramos, B.S.         |
| Date Approved / Last Review          | March 2010 / August 2104 |

#### LEARNING OUTCOMES

*Upon successful completion of the course, students will be able to:*

- Identify goals and apply best practices in the design and implementation of a comprehensive game
- Work cooperatively in a team environment to design and implement at least one level of a comprehensive game
- Develop and publish appropriate documentation for all aspects of the Game Design and Implementation cycle
- Incorporate appropriate opening, gameplay, and credits for a comprehensive game

## INSTRUCTIONAL METHODS EMPLOYED IN THIS COURSE

A number of instructional/learning methods are employed in this course, including the following:

- Lecture and Reading Assignments
- Hands-on Exercises and Labs
- Practical application of theory and skills in authentic Programming Projects
- Build on prior knowledge and experience of students to enhance richness of class activities
- Research
- Team Environment

## INFORMATION RESOURCES FOR THIS COURSE



### **Textbook**

Rollings, Andrew and David Morris. Game Architecture and Design. Berkeley: New Riders, 2004.  
ISBN: 9780735713635



### **Other Materials**

Coleman College. The College Writer's Guide. San Diego: Coleman College, 2009.

Visual Studio 2008 C#Express  
<http://www.microsoft.com/express/Downloads/>  
Retrieved on April 7, 2010



### **Web Site Readings**

TBD

## COURSE OUTLINE

| <i><b>WEEK</b></i> | <i><b>TOPIC</b></i>                                       | <i><b>READING</b></i> | <i><b>PROJECT<br/>ASSIGNED</b></i>   |
|--------------------|---|-----------------------|--|
| 1                  | Current Development Methods<br>Methods of Team Management | Chapters 16 & 9       | Read Chapters 9 & 16<br>40 pages: 4.0 hours<br><b>Evaluation:</b> Design Document /<br>Midterm<br>Development Document<br>Project, 25 hours<br><b>Evaluation:</b> graded, 20 points<br>Capstone Project, 100 hours<br><b>Evaluation:</b> graded, 40 points |

| <b>WEEK</b> | <b>TOPIC</b>   | <b>READING</b>       | <b>PROJECT<br/>ASSIGNED</b>  |
|-------------|--|----------------------|--|
| 2           | Roles and Divisions<br>Initial Design<br>The Software Factory                | Chapters 10, 17 & 11 | Read Chapters 10, 11 & 17<br>100 pages: 10 hours<br><b>Evaluation:</b> Design Document / Midterm   |
| 3           | Building Blocks<br>Milestones and Deadlines                                  | Chapters 19 & 12     | Read Chapters 12 & 19<br>87 pages: 8.7 hours<br><b>Evaluation:</b> Design Document / Midterm   |
| 4           | Use of Technology<br>Procedures and “Process”<br>Initial Architecture Design | Chapters 18, 13 & 20 | Read Chapters 13, 18 & 20<br>110 pages: 11 hours<br><b>Evaluation:</b> Design Document / Midterm   |
| 5           | Troubleshooting<br>Development   | Chapters 14 & 21     | Read Chapters 14 & 21<br>91 pages: 9.1 hours<br><b>Evaluation:</b> Design Document / Final<br>Capstone Design Project, 1 hour<br><b>Evaluation:</b> graded, 5 points<br>Midterm Exam |
| 6           | Run-Up to Release<br>Postmortem  | Chapters 22 & 23     | Read Chapters 22 & 23<br>58 pages: 5.8 hours<br><b>Evaluation:</b> Final   |
| 7           | Future of Industry<br>Future of Game Development                             | Chapters 15 & 24     | Read Chapters 15 & 24<br>56 pages: 5.6 hours<br><b>Evaluation:</b> Final   |
| 8           | Capstone Project   |                      |  |
| 9           | Finalize Capstone Project  |                      |  |
| 10          | Program Wrap-Up  |                      | Final Exam   |

|   |                            |             |
|---|----------------------------|-------------|
| Total hours of required reading:        |                            | 54.2 hours  |
| Total hours Program sets                | 126 hours – 40 hours lab = | 86 hours    |
| Total hours of out-of-class activities: |                            | 140.2 hours |

## 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<br>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](mailto: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.