

<b>Course</b>	COSC 5010 Object Oriented Analysis and Design										
<b>Term</b>	Spring 1, 2008										
<b>Instructor</b>	Eleazar Monroy Office Hours: after class or you may call me to my cell phone.										
<b>Catalog Description</b>	Students will learn the principals of object-oriented analysis and design: classes, polymorphism, encapsulation, and inheritance. The emphasis is on development principals for medium, large, and distributed systems. Students will develop a logic design project.										
<b>Prerequisites</b>	Programming proficiency in C++										
<b>Course Level Learning Outcomes</b>	<p>At the completion of this course students will be able to:</p> <ol style="list-style-type: none"> <li>1. Explain and apply the concept of a Software Development Process.</li> <li>2. Analyze a problem domain and formulate a set of software requirements</li> <li>3. Design a software application based on the initial analysis.</li> <li>4. Explain the Unified Process (UP).</li> <li>5. Interpret and correctly use Unified Modeling Language (UML).</li> <li>6. Implement both the UP and UML in a term-long project.</li> <li>7. Communicate requirements and logical design in class presentations.</li> <li>8. Meet project requirements and deadlines.</li> </ol>										
<b>Materials</b>	<p><b>REQUIRED TEXTS:</b> UML and the Unified Process, Last Edition, Practical Object-Oriented Analysis and Design. ISBN: 0-321-32127-8</p> <p><b>SUGGESTED SUPPLEMENTAL READINGS:</b> Current event articles pertaining to Object Oriented Analysis and Design.</p> <p>C++ How to Program, Prentice Hall, H.M. Deitel &amp; P.J. Deitel, 6<sup>th</sup> edition, Print ISBN: 0-13-615250-3.</p>										
<b>Grading</b>		<table border="1"> <thead> <tr> <th><b>COURSE REQUIREMENTS:</b></th> <th><b>% OF GRADE</b></th> </tr> </thead> <tbody> <tr> <td><b>a. Mid-Term Exam</b></td> <td><b>25 %</b></td> </tr> <tr> <td><b>b. Final Exam</b></td> <td><b>25 %</b></td> </tr> <tr> <td><b>c. Weekly Assignments</b></td> <td><b>30 %</b></td> </tr> </tbody> </table>	<b>COURSE REQUIREMENTS:</b>	<b>% OF GRADE</b>	<b>a. Mid-Term Exam</b>	<b>25 %</b>	<b>b. Final Exam</b>	<b>25 %</b>	<b>c. Weekly Assignments</b>	<b>30 %</b>	
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<b>d. Research Paper</b>	<b>10 %</b>
<b>e. Attendance and Participation</b>	<b>10 %</b>

Taking the numerical score from the formula above and converting it to the appropriate letter grade from the chart determine the student's letter grading for the course.

<b>Letter Grade</b>	<b>Numerical Score</b>
A	96-100% (4.0)
A-	91-95% (3.67)
B+	87-90% (3.33)
B	82-86% (3.0)
B-	78-81% (2.67)
C	70-77% (2.0)
F	69 & below (0)
I	Incomplete (0)
W	Withdraw

<p><b>Activities</b></p>	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Facilitated discussion of assigned homework</li> <li>• Review current articles of interest</li> <li>• Term (research) paper</li> <li>• Midterm and final exams</li> </ul>
<p><b>Policy Statements:</b></p> <p><b>University Policies</b></p>	<p>University policies are provided in the current course catalog and course schedules. They are also available on the university website. This class is governed by the university's published policies. The following policies are of particular interest:</p> <p><b>Academic Honesty</b></p> <p>The university is committed to high standards of academic honesty. Students will be held responsible for violations of these standards. Please refer to the university's academic honesty policies for a definition of academic dishonesty and potential disciplinary actions associated with it.</p> <p><b>Drops and Withdrawals</b></p>

	<p>Please be aware that, should you choose to drop or withdraw from this course, the date on which you notify the university of your decision will determine the amount of tuition refund you receive. Please refer to the university policies on drops and withdrawals (published elsewhere) to find out what the deadlines are for dropping a course with a full refund and for withdrawing from a course with a partial refund.</p> <p><b>Special Services</b> If you have registered as a student with a documented disability and are entitled to classroom or testing accommodations, please inform the instructor at the beginning of the course of the accommodations you will require in this class so that these can be provided.</p> <p><b>Disturbances</b> Since every student is entitled to full participation in class without interruption, disruption of class by inconsiderate behavior is not acceptable. Students are expected to treat the instructor and other students with dignity and respect, especially in cases where a diversity of opinion arises. Students who engage in disruptive behavior are subject to disciplinary action, including removal from the course.</p> <p><b>Student Assignments Retained</b> From time to time, student assignments or projects will be retained by The Department for the purpose of academic assessment. In every case, should the assignment or project be shared outside the academic Department, the student's name and all identifying information about that student will be redacted from the assignment or project.</p> <p><b>Contact Hours for this Course</b> It is essential that all classes meet for the full instructional time as scheduled. A class cannot be shortened in length. If a class session is cancelled for any reason, it must be rescheduled.</p>
<b>Course Policies</b>	<p>Attendance at all class sessions is expected.</p> <p>Late weekly write-ups and written case assignments will be accepted if prior arrangements have been made with the instructor, but will be given reduced points based upon the number of class sessions it is late.</p>
<b>Week 1 Schedule</b>	<p><b>PREPARATION FOR CLASS:</b> Read Chapter 1 (What is UML?) and Chapter 2 (What is the Unified Process?).</p> <p><b>CLASSROOM DISCUSSION TOPICS:</b> Course Introduction, Syllabus, Expectations, chapter(s) 1 &amp; 2.</p>
<b>Week 2</b>	<p><b>PREPARATION FOR CLASS:</b> Read Chapters 3, 4 and 5 (Requirements).</p>

<b>Schedule</b>	<b>CLASSROOM DISCUSSION TOPICS:</b> Workflow, Case Modeling and Advanced use Case Modeling.
<b>Week 3 Schedule</b>	<b>PREPARATION FOR CLASS:</b> Read Chapters 6, 7, 8, 9, 10 (Analysis). <b>CLASSROOM DISCUSSION TOPICS:</b> Objects and Classes, Relationships, Inheritance and Polymorphism.
<b>Week 4 Schedule</b>	<b>PREPARATION FOR CLASS:</b> <i>Be prepared to take the Mid-Term Exam covering all material to date.</i> <b>CLASSROOM DISCUSSION TOPICS: Mid-Term Exam.</b>
<b>Week 5 Schedule</b>	<b>PREPARATION FOR CLASS:</b> Read Chapters 11, 12, 13, 14 and 15 (Analysis) <b>CLASSROOM DISCUSSION TOPICS:</b> Packages use Case Realization, and Activity Diagrams.
<b>Week 6 Schedule</b>	<b>PREPARATION FOR CLASS:</b> Read Chapter 16, 17, 18 and 19 (Design). <b>CLASSROOM DISCUSSION TOPICS:</b> Workflow, Design Classes, Refining analysis relationships, Interfaces and Components.
<b>Week 7 Schedule</b>	<b>PREPARATION FOR CLASS:</b> Read Chapters 20, 21 and 22 (Design). <b>CLASSROOM DISCUSSION TOPICS:</b> Use Case Realization-Design, and State Machine.
<b>Week 8 Schedule</b>	<b>PREPARATION FOR CLASS:</b> Read Chapters 23 and 24 (Implementation). <b>CLASSROOM DISCUSSION TOPICS:</b> Workflow and Deployment.
<b>Week 9 Schedule</b>	<b>PREPARATION FOR CLASS:</b> <i>Be prepared for comprehensive final examination covering all material to date.</i> <b>CLASSROOM DISCUSSION TOPICS: Final examination.</b>

**PURCHASING TEXTBOOKS**--Most textbooks can be purchased through **MBS Direct**. Check the syllabus for textbook information. Give MBS Direct the campus location (for the purpose of ordering books the campus is **Space Coast Campus**, course name, number and section number (i.e. Space Coast Campus, COMP5000/64) and most important, the **title, author, edition, and ISBN** of the book you are ordering. MBS Direct will buy back your book at the end of the term should you elect not to retain it as a reference book. Order by phone or online. Orders should be placed no earlier than 4 weeks prior to the start of the term.

**MBS Direct:** 1-800-325-3252  
[www.mbsdirect.net/webster](http://www.mbsdirect.net/webster)  
Monday-Thursday 7am-10pm (Central Time)  
Friday 7am-6pm (Central Time)

MBS Direct Website is

Saturday 8am-5pm (Central Time)  
Sunday noon-4pm (Central Time)

In order to meet the course objectives this syllabus may be modified at the discretion of the instructor without approval of the students.

**Original approved by:**

Dr. Calvin D. Fowler Academic Dean Space Coast Region, November 14, 2007

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