Graduate Course Syllabus

IT 610: Object-Orientated Systems Analysis

Center: Online

Course Prerequisites

IT 501 and IT 510, or permission of instructor

Course Description

This course focuses on the systems analysis tools and techniques that underlie the development of information systems. Object-oriented analysis is emphasized. The course examines approaches for establishing the scope of a system, capturing and modeling information gathered during analysis, and managing and controlling project development. Students will get a working understanding of the methods for developing and specifying application system requirements. CASE tools will be used to develop system models.

Course Outcomes

At the completion of this course, students should be able to apply an iterative, use case-driven process to developing requirements for a system; use the UML to represent models; understand the use of principles and patterns in developing problem solutions; and be able to develop a solution specification using object models.

Required Materials

Using your learning resources is critical to your success in this course. Please purchase directly through SNHU's online bookstore, MBS Direct, rather than any other vendor. Purchasing directly from the bookstore ensures that you will obtain the correct materials and that the Help Desk, your advisor, and the instructor can provide you with support if you have problems.

Software Modeling and Design: UML, Use Cases, Patterns, and Software Architectures
Hassan Gomaa
Cambridge University Press
2011
ISBN: 978-0-521-76414-8

Software requirement:

This course requires the use of Microsoft Visio. If you have trouble downloading and installing the software, please request access to the SNHU virtual desktop environment from your instructor.

Instructor Availability and Response Time

Your class interaction with your instructor and your classmates will take place in Blackboard on a regular, ongoing basis. Your instructor will be active in Blackboard at least five days a week, and you will normally communicate with your instructor in the open Blackboard discussion forum so that your questions and the instructor's answers benefit the entire class. You should send emails directly to your instructor only when you need to discuss something of a personal or sensitive nature, and in those cases your instructor will generally provide a response within 24 hours.

Grade Distribution

Assignment Category	Number of Graded Items	Point Value per Item	Total Points
Discussions	10	40	400
Short Papers	3	50	150
Final Project			
Milestone One	1	25	25
Milestone Two	1	25	25
Milestone Three	1	30	30
Milestone Four	1	30	30
Milestone Five	1	50	50
Milestone Six	1	50	50
Final Submission	1	240	240
		Total Course Points:	1,000

This course may also contain practice activities. The purpose of these non-graded activities is to assist you in mastering the learning outcomes in the graded activity items listed above.

University Grading System: Graduate

Total Points: 1000				
Grade	**Numerical Equivalent**	**Points**	**Points Equivalent**	
			Lower	*Upper*
A	93-100	4.00	930	1000
A-	90-92	3.67	900	929
B+	87-89	3.33	870	899
B	83-86	3.00	830	869
B-	80-82	2.67	800	829
C+	77-79	2.33	770	799
C	73-76	2.00	730	769
F	0-72	0.00	0	729
I	Incomplete			
IF	Incomplete/Failure*			
W	Withdrawn			

*Please refer to the policy page for information on the incomplete grade process.

Grading Guides

Specific activity directions, grading guides, posting requirements, and additional deadlines can be found in the Course Information area in the Assignment Guidelines and Rubrics folder.

Weekly Assignment Schedule

The Learning Modules area in Blackboard contains one module folder for each week of the course. All reading and assignment information can be found in the folders. All assignments are due by 11:59 p.m. Eastern Time on the last day of the module week.

In addition to the textbook readings that are listed, there may be additional required resources within each module in Blackboard.

Module	Topics and Assignments
1	Course Introduction and Requirements Reading: *Software Modeling and Design,* Chapter 1 1-1 Discussion: Getting Started 1-2 Discussion: Peter Rabbitt Activity 1-3 Short Paper: Peter Rabbitt Activtiy 1-4 Final Project Review
2	Applied Object Concepts Reading: *Software Modeling and Design,* Chapters 2, 7, & 8 2-1 Discussion: Unified Approach 2-2 Short Paper: Community Pool Association
3	Functional Requirements and Use Cases Reading: *Software Modeling and Design,* Chapters 3 & 6 3-1 Discussion: UML Tools 3-2 Final Project Milestone One: Project Vision and External Events
4	Domain Modeling Reading: *Software Modeling and Design,* Chapters 4 & 5 4-1 Discussion: Domain Modeling 4-2 Final Project Milestone Two: Use Cases (Functional Model)
5	System Behavior Requirements Reading: *Software Modeling and Design*, Chapter 9 5-1 Discussion: Events 5-2 Final Project Milestone Three: Class Diagram (Structural Model)
6	Assigning Responsibilities Reading: *Software Modeling and Design,* Chapter 11 6-1 Discussion: Interaction Diagrams 6-2 Final Project Milestone Four: System Sequence Diagrams (Behavioral Model)

7	Design Modeling – Use Case Realizations Reading: *Software Modeling and Design,* Chapters 21 & 22 7-1 Discussion: Design Modeling 7-2 Final Project Milestone Five: Use Case Realizations (Behavioral Model)
8	Expanding Analysis & Patterns Reading: *Software Modeling and Design,* Chapter 20 8-1 Discussion: External Systems 8-2 Final Project Milestone Six: Activity Diagram
9	Refining Models Reading: *Software Modeling and Design,* Chapter 14 9-1 Discussion: Inheritance 9-2 Short Paper: Activity Diagram
10	Project Completion Reading: *Software Modeling and Design,* Chapters 17 & 19 10-1 Discussion: Development 10-2 Final Project Submission 10-3 Group Member Evaluation Form

Attendance Policy

Online students are required to post to the Blackboard discussion board during the first week of class. If a student does not submit a posting to the discussion board during the first week of class, the student is automatically withdrawn from the course for non-participation. Review the full attendance policy.

Late Assignments Policy

Meeting assigned due dates is critical for demonstrating progress and ensuring appropriate time for instructor feedback on assignments. Students are expected to submit their assignments on or before the due date. Review the full late assignment policy.

SNHU College of Online and Continuing Education Guide to Student Success

Review the guide to student success.

Diversity and Disability Statement

The College of Online and Continuing Education (COCE) at SNHU values diversity and inclusion. SNHU strives to create inclusive and welcoming academic environments. If there are aspects of the instruction or design of this course that present barriers to your inclusion, please notify the Disability Resource Center (DRC) as soon as possible. We will work with you and your instructor to address needs and concerns.

We encourage all students with known or suspected physical, medical, sensory, psychiatric, and/or learning disabilities to register with the Disability Resource Center (DRC) in order to assess learning needs and take advantage of available academic accommodations and support services. We look forward to hearing from you. Our contact information is below.

Disability Resource Center (DRC)
(877) 591-4723 (select option 4)
(877) 520-8916 (fax)
drc@snhu.edu

We welcome COCE students, faculty, and staff to consult with the Disability Resource Center (DRC) on disability-related questions or concerns.

Academic Honesty Policy

Southern New Hampshire University requires all students to adhere to high standards of integrity in their academic work. Activities such as plagiarism and cheating are not condoned by the university. Review the full academic honesty policy.

Copyright Policy

Southern New Hampshire University abides by the provisions of United States Copyright Act (Title 17 of the United States Code). Any person who infringes the copyright law is liable. Review the full copyright policy.

SNHU College of Online and Continuing Education Withdrawal Policy

Review the full withdrawal policy.

Southern New Hampshire University Policies

More information about SNHU policies can be found on the policy page.

Assessment Calibration and Student Work Samples

For the purpose of continuous improvement of our educational training, Southern New Hampshire University's College of Online and Continuing Education may, on occasion, utilize anonymous student work samples for internal professional development and staff training. If you have any questions or concerns, contact your advisor. If you would like to withdraw permission for use of your work, please contact the assessment calibration administrator at assessmentcalibration@snhu.edu. See this document for more information.