

Department of Electrical Engineering & Computer Science COP 4331 001 – Process of Object Oriented Software Spring 2019

Lecturer: Rick Leinecker

Email: Richard.Leinecker@ucf.edu

Lecture Meetings: Monday and Wednesday 12:00PM-1:15PM in ENG2 102

Office Hours: Tuesday and Thursday 4:30PM-5:45PM in HEC 357

Prerequisites: COP 3503C, COT 3960 (Foundation Exam - for Computer Science students)

Credit Hours: 3

Teaching Assistant: Amlan Talukder amlan@knights.ucf.edu

For questions regarding assignment and test grading, contact TA

Recommended textbook:

Shari Lawrence Pfleeger and Joanne M. Atlee, "Software Engineering: Theory and Practice", 4th Edition, Prentice Hall, 2010

Reference Books:

- 1. Perdita Stevens and Rob Pooley, "Using UML, Software Engineering with Objects and Components", 2nd Edition, Addison-Wesley, 2006.
- 2. James Rumbaugh, Ivar Jacobson, and Grady Booch, "The Unified Modeling Language Reference Manual", 2nd Edition, 2005.
- 3. Martin Fowler, "UML Distilled: Applying the Standard Object Modeling Language", 2nd Edition, Addison-Wesley, 2000.
- 4. Readings from classical and current software engineering literature (software engineering journals available via UCF electronic library resources)

Course Assessment Outcomes:

This course is designed for undergraduate computer science and computer engineering students.

- 1. The students shall be able to construct UML diagrams of the following types: Use Case Diagram, Class Diagram, Activity Diagram, Collaboration Diagram, State Transition Diagram, Sequence Diagram and Data Flow Diagram
- 2. The students shall be able to work in a group environment.
- 3. The students shall be able to work on a project for a client, performing all the steps associated with the object-oriented software development life cycle including elicitation of the requirements from a client, preparation of software requirements specification, project management plan and test plan of a software system.
- 4. The students shall be able to write technical high-level design and detailed design of a software system.
- 5. The student shall be able to produce implementation of design and write user's manual including build instructions of a software system.
- 6. The students shall be able to prepare and successfully give oral presentation of a software system design and operation of the class project deliverables.

Proposed Schedule:

Topic

Intro to Software Engineering / Stacks Part 1

Stacks and Databases / Modeling the Process and Life Cycle

Holiday / UML Part 1

UML Part 2 / Test 1

Presentations

Presentations / Agile

Project Management / Design Patterns Part 1

Design Patterns Part 2 / Test 2

Unit Testing / Localization and Globalization

Large Pitches

Large Pitches / Planning and Managing the Project

Capturing the Requirements / Test 3

Group Work

Attendance:

Group Work / Project Presentations

Project Presentations

Grading will be as follows: 3 Tests - 30% total

Assignments – 11% total Discussions – 11% total Small Project – 7% Large Project Pitch – 7% Large Project – 20%

Required recitation attendance – 14%

Test Schedule: 1. January 30-2019

February 27, 2019
April 3, 2019

Final Exam Time (Large Project Presentations): 4-24-2019

Attendance is not required but is highly recommended. Lab attendance counts

1 point per lab.

Grading Scale: 94-100 A

90-93.99 A-87-89.99 B+84-86.99 В 80-83.99 B-77-79.99 C+74-76.99 C 70-73.99 C-67-69.99 D+64-66.99 D D-60-63.99

0-59.99 F

Academic Dishonesty: UCF's Golden Rule http://goldenrule.sdes.ucf.edu/ will be strictly applied.

Important Dates:

Classes Begin: January 7, 2017 Martin Luther King Holiday: January 21, 2019

Spring Break: March 11, 2019 through March 15, 2019

Last Day of Class: April 22, 2019

Makeups:

Projects and discussions are not accepted late since you have them in advance Tests can only be made up under hardships with the permission of the instructor If you miss any presentation without prior approval, you will receive a zero for that presentation