STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Course: ENTD600  Title: Object Oriented Analysis and Design (OOAD)
Length of Course: 8
Prerequisites: Credit Hours: 3

Description

Course Description: Object oriented analysis and design is an essential precursor to developing the new generation of information systems. This course uses sound academic principles coupled with a pragmatic methodology to perform object-oriented analysis and design (OOAD). This course appraises and applies the widely adapted Unified Process framework, the Unified Modeling Language (UML), and various analysis and design methodologies subscribed to by acknowledged modeling experts. This course examines various OOAD technologies, performance analysis techniques to optimize performance, and methods to correct performance deficiencies. The course also assesses the principles and processes for gathering, defining, and analyzing the requirements (including the stakeholders' interviews), system architecture, and software design.

Course Scope:

This course introduces the early phases of Object Oriented Software Engineering to students. It starts with gathering requirements & requirements analysis. Then, the focus shifts to object oriented analysis and high level design. ENTD610 course continues with detailed object oriented design and software implementation phases of software engineering.

Objectives

1. Assess the phases, processes, deliverables, workflows, and methodologies used in object-oriented software development.
2. Examine software project management principles and techniques.
3. Create a system design (the Solution model) that supports the functional requirements (FRs).
4. Analyze system requirements to determine Structural Modeling.
5. Apply the principles behavioral modeling software design.
6. Examine the principles of class diagrams and data management.
7. Assess the relationship between real use cases and use scenarios.
8. Analyze various object-oriented analysis and design (OOAD) technologies.

Outline
Week 1: Introduction to Systems Analysis and Design

Learning Objectives

**CO1**: Assess the phases, processes, deliverables, workflows, and methodologies used in object-oriented software development

Readings

Chapter 1 – Textbook

Assignments

Week 1 Discussion introduction

Week 2: Software Project Management

Learning Objective(s)

**CO2**: Examine software project management principles and techniques.

Reading(s)

Chapter 2 – Textbook

Assignments

Week 2 Discussion

Assignment-1

Week 3: Software Project Management

Learning Outcomes

Required Readings

Assignments

Recommended Optional Reading

Recommended Media

Week 4:

Learning Outcomes

Required Readings

Assignments

Recommended Optional Reading

Recommended Media

Week 5:

Learning Outcomes

Required Readings

Assignments

Recommended Optional Reading

Recommended Media
Week 6:

Learning Outcomes
Required Readings
Assignments
Recommended Optional Reading
Recommended Media

Week 7:

Learning Outcomes
Required Readings
Assignments
Recommended Optional Reading
Recommended Media

Week 8:

Learning Outcomes
Required Readings
Assignments
Recommended Optional Reading
Recommended Media

Evaluation

Grading:

<table>
<thead>
<tr>
<th>Name</th>
<th>Grade %</th>
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Materials

Author: Dennis, Haley Wixom and Tegarden
Publication Info: Wiley
ISBN: 9781118804674

Course Guidelines

Citation and Reference Style

- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.
Tutoring

- **Tutor.com** offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for ‘Tutor’ to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 20% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- “Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting viewpoints, we must respect each individual’s own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.
University Policies

Student Handbook

- Drop/Withdrawal policy
- Extension Requests
- Academic Probation
- Appeals
- Disability Accommodations

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation’s military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

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