# ENTD211

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**

# **Description**

**Course Description:** This course will introduce standard patterns used in software design, so that the learner becomes familiar with reading and interpreting design documents. Familiarity with design patterns and modeling notations allows software developers, even those who do not actively participate in producing design documents, for better understanding software documentation, before, during, and after system implementation. Familiarity with object-oriented programming languages is strongly encouraged.

## **Course Scope:**

This course will cover the area of design patterns. Familiarity with *design patterns* and *modeling allows* software developers – even those who do not actively participate in producing design documents – to better understand software documentation before, during and after system implementation. This course introduces standard patterns used in software design to familiarize the learner with reading and interpreting design documents.

# **Objectives**

After successfully completing this course, you will be able to

- Identify standard design patterns.
- Interpret design requirements.
- Explain the primary functions of class and object diagrams.
- Apply appropriate design patterns to proposed solutions.

# **Outline**

## Week 1:

**Topics** 

Object-Oriented JavaScript

Learning Objectives

 Identify classes and objects in JavaScript Readings CHAPTER 1, and optionally CHAPTER 16 Assignments Week 1 Forum Week 2: **Topics Documenting JavaScript** Learning Objectives • Explain the primary functions of class, object diagrams, and code documentation. Readings CHAPTER 2,3,and 4 Assignments Week 2 Assignment • Week 2 Forum Week 3: **Topics** Design Patterns: Creational Learning Objectives • Apply appropriate design patterns to proposed solutions. Readings **CHAPTER 5** Assignments • Week 3 Assignment: Creational Design Patterns Week 3 Forum Week 4: **Topics** 

Design Patterns: Structural

Learning Objectives

- Identify standard design patterns.
- Apply appropriate design patterns to proposed solutions.

# Readings

## **CHAPTER 6**

## Assignments

- Week 4 Assignment: Structure Design Pattern
- Week 4 Forum

## Week 5:

**Topics** 

Design Patterns: Behavioral

Learning Objectives

• Apply appropriate design patterns to proposed solutions.

Readings

**CHAPTER 7** 

Assignments

- Week 5 Assignment: Behavioral Design Patterns
- Week 5 Forum

## Week 6:

**Topics** 

Design Patterns: Architectural

Learning Objectives

- Interpret design requirements.
- Explain the primary functions of class and object diagrams.

Readings

**CHAPTER 8** 

Assignments

- Week 6 Assignment: Design Patterns: Architectural
- Week 6 Forum

## Week 7:

**Topics** 

Node.js Frameworks for Web Applications Express

Learning Objectives

• Apply appropriate design patterns to proposed solutions.

## Readings

### CHAPTERS 13-14

## Assignments

- Week 7 Assignment
- Week 7 Forum

## Week 8:

**Topics** 

**Project Presentation** 

Learning Objectives

- Interpret design requirements.
- Apply appropriate design patterns to proposed solutions.

## Readings

http://www.wikihow.com/Create-a-PowerPoint-Presentation

## Assignments

- Week 8 Assignment: Present 5 Pages power point (Architecture Diagram, what problem you are solving, and benefits from the solution)
- Week 8 Forum

# **Evaluation**

Students are expected to maintain routine contact with the instructor throughout the course. While the number of contacts may vary according to the specific course and individual student need, the University requires periodic weekly contacts during the semester. Contact will consist of professor notes, forum interaction, and email feedback. The method of discussion will be on-line related to issues concerning forum assignments, quizzes, assignments, the midterm project and final project.

#### **TEXTBOOK READINGS**

Review the assigned textbook and support materials for this course! Review the table at the end of the syllabus to see assigned readings for each week.

## **PROJECTS**

The projects for this course are located throughout each Lesson. The projects that are required for grading with this course are created from scratch.

#### **FORUM**

The Forum assignments for this course are designed to promote interactivity among students and enhance the online learning process. The Forum provides maximum flexibility because you do not have to be online at the same time as another person and you can read what other students have written.

Forum Timing: For the forum, you must post your work by midnight on **Thursday**, continue to follow your classmates' posts for the remainder of the week, and post the follow-up peer responses prior to midnight on **Sunday**, **except for week one**. Your follow-up posts can add additional insight to a classmate's opinions or can challenge their opinions. Use examples from the readings, or from your own research, to support your views, as appropriate. Be sure to read the follow-up posts to your own posts and reply to any questions or requests for clarification. You are encouraged to conduct research and use other sources to support your

#### answers.

Required Participation: Please keep in mind that the forum assignments require you to make at least 1 post to the forum with at least 250 words about the topic and also respond to at least 2 peers' posts with at least 150 words. Please be advised that there will be point deductions if you do not comply with these requirements of the assignment. Each one of you will have a different and unique experience that we can all learn from. Your participation in the Forums unleashes the power of synergy in our classroom. To facilitate this interaction, please be prompt when posting your forum work for each week; this provides time for the others to actively engage in the dialogue. For practical reasons, when you respond to other learners' posts, please start your response by referencing their name. I will read and grade your participation by reading the forum. There is no need to also post your forum work in the assignments area of the classroom. Refer to the forum and the syllabus for more details on grading.

## **FINAL PROJECT**

The Final Project requires you to use your knowledge gained through-out the course apply what you learned.

## **Grading:**

| Name                     | Grade % |
|--------------------------|---------|
| Assignments              | 50.00 % |
| Week 2 Assignment        | 8.33 %  |
| Week 3 Assignment        | 8.33 %  |
| Week 4 Assignment        | 8.33 %  |
| Week 5 Assignment        | 8.33 %  |
| Week 6 Assignment        | 8.33 %  |
| Week 7 Assignment        | 8.33 %  |
| Forums                   | 30.00 % |
| Introduction Forum       | 3.75 %  |
| Week 2 Forum             | 3.75 %  |
| Week 3 Forum             | 3.75 %  |
| Week 4 Forum             | 3.75 %  |
| Week 5 Forum             | 3.75 %  |
| Week 6 Forum             | 3.75 %  |
| Week 7 Forum             | 3.75 %  |
| Week 8 Forum             | 3.75 %  |
| Final Project            | 20.00 % |
| Final Project/Assignment | 20.00 % |

## **Materials**

Book Title: Pro JavaScript Development: Coding, Capabilities, and Tooling - Available through the APUS

Online Library.

Author: Odell, Den

**Publication Info:** Apress

ISBN: 9781430262688

**Book Title:** To find the library e-book(s) req'd for your course, please visit http://apus.libguides.com/er.php

to locate the eReserve by course #. You must be logged in to eCampus first to access the links.

Author: N/A

**Publication Info: N/A** 

ISBN: N/A

Additional references are found in the Lessons Page of the classroom.

# **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**

• <u>Tutor.com</u> 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 ongoing 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 view points, 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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