# CIS A227: JAVASCRIPT 3

ItemValueCurriculum Committee Approval03/13/2019

Date

Top Code 070900 - World Wide Web

Administration

Units 2 Total Units

Hours 36 Total Hours (Lecture Hours 36)

Total Outside of Class Hours

Course Credit Status Credit: Degree Applicable (D)

Material Fee No

Basic Skills Not Basic Skills (N)

Repeatable No

Grading Policy Standard Letter (S)

#### **Course Description**

For students with advanced Javascript knowledge. The course will cover the latest technology to build complex Web apps. Topics include TypeScript foundations and AngularJS 2. ADVISORY: CIS A223. Transfer Credit: CSU.

#### **Course Level Student Learning Outcome(s)**

- Students will understand advanced Javascript and apply advanced knowledge of Javascript framework to build complex Web application.
- 2. Students will be able to create their own Angular app with latest frontend technology.

## **Course Objectives**

- 1. Understand TypeScript and its syntax.
- 2. Set up an Angular template.
- 3. Create a component.
- · 4. Display data.
- · 5. Work with events.
- · 6. Use 2-way data binding.
- 7. Create sub-components.
- 8. Use built-in HTTP module.
- · 9. Use built-in router module.

#### **Lecture Content**

Introduction to TypeScript 2.0 and AngularJS Installation Compiling first script Type annotations Interfaces Running your TypeScript Web app Why use Angular JS 2. AngularJS 2 Architecture Overview Components, Bootstrap and the DOM Directives and pipes Data binding Dependency Injection Services and other business logic Data persistence Routing Components Metadata Component selector Component Template Using other components Interpolation and the expression context Property binding Event binding Getting data to the component with input Subscribing to component events with output

## Method(s) of Instruction

- · Lecture (02)
- DE Online Lecture (02X)

#### **Instructional Techniques**

Lecture/discussion of covered topics.

#### **Reading Assignments**

Students should spend a minimum of two hours per week reading assigned material.

#### **Writing Assignments**

Students will spend a minimum of two hours per week writing codes to create dynamic Web pages.

#### **Out-of-class Assignments**

Students will spend a minimum of two hours per week writing codes to create dynamic Web pages.

## **Demonstration of Critical Thinking**

Quizzes, computer projects, and exams.

#### **Required Writing, Problem Solving, Skills Demonstration**

Student performance on quizzes and Web page design projects will be used to determine proficiency.

#### **Eligible Disciplines**

Computer information systems (computer network installation, microcomputer ...: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

#### **Textbooks Resources**

1. Required Fenton, Steve. Pro TypeScript: Application-Scale JavaScript Development, ed. New York: Apress, 2014