

COURSE SYLLABUS

CIS4930

ST: Web Dev Frameworks (CRN: 13555)

University of North Florida

School of Computing

Spring 2021

MW, 6:00 – 7:15 PM

Remote Instruction

INSTRUCTOR:

Jose C Gomez, M.S

EMAIL:

jose.gomez@unf.edu

OFFICE HOURS:

MW after class or by appointment

PREREQUISITES:

COP 3855, COP3503 or Instructor Override

COURSE DESCRIPTION

This course will cover emergent and current technologies in web frameworks and web development. Specifically, we will survey the field and get to learn about and be exposed to a variety of frameworks that can be used to develop rich and interactive web applications.

A Web Development Framework is a software framework that is designed to support the development of web applications including web services, web resources, and web APIs. Web frameworks provide a standard way to build and deploy web applications on the World Wide Web.

REQUIRED TEXTBOOK

None; we aren't requiring a textbook for this course. We will be taking advantage of the plethora of information available online.

COURSE OBJECTIVES & EXPECTED OUTCOMES

At the end of this course the student should be able to:

- Demonstrate proficiency in TypeScript / Java-Script and DOM manipulation
- Understand the REST (Representational State Transfer) architectural style for creating and consuming web services and applications
- Define and understand what a Web Framework is and what its use is in the overall landscape of computing
- Gain exposure and hands-on experience to an array of frameworks tools and technologies related to web development
- Demonstrate a basic understanding of Node.js and be able to apply and use it to develop simple web applications and utilities

- Demonstrate a basic understanding of Angular and be able to apply and use it to develop simple web applications
- Demonstrate a basic understanding of React and be able to apply and use it to develop simple web applications
- Demonstrate a basic understanding of No SQL document-oriented database systems like Mongo DB
- Gain exposure to several additional web and emerging web technologies such as (Deno, GraphQL etc)
- Be familiar with git and its basic functions which will be used to share code and co-work during the course

ATTENDANCE POLICY

Since this class is going to be Remote Instruction, attendance and participation is of the utmost importance. In order for us to be able to interact and learn from each-other we need to be able to meet live via Zoom (or other technology) on a consistent schedule.

As such I will take attendance every class and attendance and participation will count as much as 10% toward your final grade. However, all lectures will be recorded and available to watch or re-watch as needed.

CAMERAS ARE REQUIRED TO BE ON DURING THE LECTURE. It is incredibly hard to teach to a room full of black squares, so please as much as possible... turn on your camera. This will count towards your participation grade

HOMEWORK and ASSIGNMENTS

We are relying heavily on online resources for learning therefore I will often assign “Homework” in the form of following tutorials and practice problems or reading and learning about concepts in more detail than covered in class.

There will be several assignments in this course which will allow you to practice what we learn and some of the assignments will build on each other. The goal is to be able to create some real-world web applications by the end of the course which can encompass the myriad of technologies we will cover.

EMERGING TECHNOLOGIES PROJECT

Public speaking and research are an essential part of any computing professional in the real world. You spend a lot of time researching a problem and which tool at your disposal is the best to solve it. As they say, “to a hammer everything looks like a nail”, but in computing not all problems can or should be solved in the exact same way or with the exact same tech stack (no matter how proficient you may be at it.)

In lieu of exams there will be an individual or team project which will consist of you researching and presenting your findings regarding additional related technologies which are not covered in the course. More details to be provided at a later date

EXAMS

There will not be any exams in this course, grading will consist of Participation / Attendance, Individual Assignments, and the Emerging Technologies Project

POLICY ON MISSED ASSIGNMENTS & EXAMS

No makeup assignments will be given, except in extenuating circumstances. If you plan on missing a deadline or need to miss class it is your responsibility to inform the instructor ahead of time. (Exceptions will be handled on an individual basis).

Otherwise, you will receive 0 points for the missed exam or assignment. Student athletes are permitted to make up any missed work as a result of attending a university sponsored event (such as an away sporting event) and any missed work as a result of these events cannot reduce the student's access to all course workload.

GRADING

Your course grade will be determined based the below weighted schedule:

Component	Weight
Attendance	5%
Participation	5%
Assignments	75%
Project	15%
Total	100%

COURSE GRADES

Your final letter grade for the course will be assigned according to the percentage of points you obtain in the course. Your percentage may be calculated by dividing the total number of points you obtained by the total number of points possible. Percentages are rounded up or down to the nearest whole number. Use the scale below to determine your letter grade.

Percentage	100-90	89-80	79-70	69-60	59-0
Grade	A	B	C	D	F

Violations of Academic Integrity: Under this heading the University of North Florida Student Handbook identifies several types of violations; these include but are not limited to: cheating; fabricating and falsifying information or citations; submitting the same work for credit in more than one course; plagiarizing; providing another student with access to one's own work to submit under this person's name or signature; destroying, stealing, or making inaccessible library or other academic resource material; and helping or attempting to help another person commit an act of academic dishonesty. The University of North Florida authorizes any instructor who finds evidence of cheating, plagiarism, or other wrongful behavior that violates the University of North Florida Academic Integrity Code to take appropriate action. Possible action includes, but is not limited to, failing the student on the work in

question, failing the student for the course, notifying the appropriate academic dean or Vice President for Student Affairs, and requesting additional action be taken. The consequences of a breach of academic integrity may result in an F, which is unforgivable, regardless of withdrawal status.