

DEVPSU

Syllabus (Spring 2020)

What is DevPSU Learning?

DevPSU Learning is an 8 week learning program intended to teach core competencies of collaborative software development in a peer-driven environment.

This program gives students the opportunity to gain valuable experience and interactions outside of the classroom, in preparation for a career in industry or research.

After completion of DevPSU Learning, students continue on to DevPSU Startup where they create and implement software programs and systems in small, collaborative teams.

Extra Credit Requirements

To receive extra credit, students must:

- Attend **6 out of the 8** weekly meetings (no exceptions)
- Complete **3 out of the 4** assigned projects.

The amount and value of extra credit awarded is at the sole discretion of the Professor.

Registration

In order to be registered for DevPSU Learning you **MUST** attend one of the first meetings on the schedule. Once at this meeting you will give your name and email to the Instructors so they can add you to the canvas page. After that you are all signed up and can continue going to meetings!

Where/When

The first meeting will be 1/28/2020 in **Willard 362** from 7:00 - 8:00 pm.

The rest of the meetings will be every Tuesday in **Willard 362** from 7:00 - 8:00 pm.

Schedule

DevPSU Learning starts on January 28, 2020 and ends on March 31, 2020.

One hour meetings will occur every week of this 8 week period, totaling **8** meetings overall.

A practical project is assigned every other week. **(4)**

Learning Timeline

Week 1 (1/28/2020) - **Lesson 1: Intro to AI**

- Lay out the timeline, what we're going to do, how we're going to teach it, and what people can look forward to.
- Speaker from Nittany AI
- Introduction to AI, ML, and open the **first** project.

Week 2 (2/4) - **Project 1: Neural Network in Python**

- Short lesson on Neural Networks

- Explain the **first** project

Week 3 (2/11) - **Lesson 2: Intro to GIT**

- **First** project is due.
- Give a broad overview of Git, and open the **second** project.

Week 4 (2/18) - **Project 2: GIT project**

- Explain the **second** project and help students with it.

Week 5 (2/25) - **Lesson 3: AI Chatbot**

- **Second** project is due.
- Give a broad overview of chatbots and machine learning, and open the **third** project.

BREAK (3/3)

SPRING BREAK (3/10)

Week 6 (3/17) - **Project 3: AI Chatbot Project**

- Explain the **third** project and help students with it.

Week 7 (3/24) - **Lesson 4: Image Recognition**

- **Third** project is due.
- Give a broad overview of image recognition, and open the **fourth** project.

Week 8 (3/31) - **Project 4: Image Recognition Project**

- Explain the **fourth** project and help students with it.
- Wrap up

Projects due 4/7