CS-401/501 - Programming for Data Science

Catalog Description

Intensive programming course with a focus on solving problems in data science, specifically focusing on big data and dealing with different data formats. Students are introduced to data mining and machine learning algorithms with a focus on being able to use programming packages. Data mining and machine learning focus on algorithms that automate the process of discovering patterns in, and devising models for, large datasets.

- **Instructor**: Mr. Luke B. May ([student interview](#))
- **Credit Hours**:
    - CS-501: 3.0
    - CS-401/L: 3.0 + 1.0 = 4.0
- **Prerequisites**: Graduate student or C or better in **CS 202**, **CS 303**, and **MATH 132**.

Course Syllabus

[CS-401/501 Syllabus](#)

Course Sections

Here at ISU, course section numbers starting with the number 3 (e.g. `3xx`: `301`, `302`, etc.) are generally online sections. There are 2 types of online sections, **synchronous online** and **asynchronous online**. Sections that are **synchronous** must be joined at the regularly scheduled time of the course, whereas sections that are **asynchronous** must keep up with the material independently without regularly scheduled meetings. In general **async** sections can be much more difficult, and require a great deal of self-discipline. This is a consequence of many factors including less class interaction. So if you are in one of these sections make sure you get off to a strong start, and ask for help sooner rather than later. Check your course schedule for course meeting times, and if you have a meeting time, then your section is synchronous, otherwise it is asynchronous (or there is an error in the system).

Canvas

Everything in this course will be run through this course website. The only responsibilities you have on Canvas will be:

1. Checking the grade book. You are responsible for making sure your returned assignments match the grade entered into Canvas to prevent clerical errors. Your grade is your responsibility.
2. Watching Zoom lectures. Zoom lectures will be recorded for anyone to re-watch.

Zoom

Zoom may be required for lectures (sync and async), meetings, and discussion. Follow the tutorial on installing Zoom below.

[Zoom Installation](#)

MS Teams

All sections will be using MS Teams to communicate via chat. If you have a questions about something, chances are someone else does too, so please ask questions in the main room so that everyone can benefit from the answer.

[MS Teams Installation](#)

MS Teams Join Code: Located on the Canvas Home screen for this course (to keep it private)..

Report Broken Links

Please contact your instructor if you find a link that is broken or pointing to the wrong content.