**Morgan**- I am so excited to be working with you this semester. My name is Morgan Cox and not only am I a proud Adjunct Professor from the Colorado School of Mines, I am also an alumni of Mines! I have been able to experience data science in real world applications during the last two years and understating and use of the massive amounts of data we collected was critical. I am dedicated to taking this journey with you and supporting you this semester as you expand your knowledge.

Video

LEARNING OUTCOMES

After completion of this course, students should expect to be able to:

1. Acquire, clean, and organize data from a variety of sources, including raw data files, SQL databases, and online repositories.
2. Run simple SQL queries to manipulate and analyze data in relational databases and other data stores implementing SQL front ends.
3. Apply toolkits to preprocess large datasets for input to statistical and machine learning algorithms, including methods of feature extraction and dimensionality reduction.
4. Apply statistical and machine learning toolkits to large datasets, including applications of regression, classification, and clustering.
5. Perform simple visualizations of data.
6. Conduct analysis of results and measure the predictive power of various machine learning techniques.
7. Recognize and address the ethical issues arising from data collection and statistical and machine learning.

 SYLLABUS

Click on the [Syllabus](https://elearning.mines.edu/courses/52392/assignments/syllabus) link in the course navigation menu to get access to the syllabus. The course syllabus will provide you with the course schedule, course objectives, explanations of assignments and assessments, grading policies, and instructor contact information. **Please read it carefully.** You should have a deep familiarity with the schedule and process of the course.

 MODULES

All the course content will be organized into **Modules**. Inside the modules you will find assignments, discussions, and quizzes to go along with the Jupyter notebook lecture slides. These are the things you need to complete to demonstrate your learning.

 NOTIFICATION PREFERENCES

You can decide how Canvas notifies you of course updates. It is your responsibility to ensure that you are set to receive notifications of course updates. [Review and edit your notification preferencesLinks to an external site.](https://community.canvaslms.com/docs/DOC-10624-4212710344) in your account settings area to ensure that you are receiving course notifications right away or daily. Be sure to double check the address you use.

Please go into your account settings and [add a profile picture of yourselfLinks to an external site.](https://community.canvaslms.com/docs/DOC-10599-4212710334). This picture will be shown when you make posts on the discussion board so it is important that it is an accurate representation of you. Your profile pictures helps us to connect the person to the comments and build our online classroom community.

Have a technical problem or a general question about the course? Check out [Mines Online](https://online.mines.edu/) for online resources/Canvas support or post to the [Course General Question and Answer Board](https://elearning.mines.edu/courses/52392/discussion_topics/256395). Odds are that you are not the only student with that question, so please share your thoughts in this open forum.