

exam.

Instructional methods: Class time will consist primarily of lecture, hands on project work, and student discussion about course topics, with time allotted for individual or group work on projects and homework.

Graded course requirements: This course is primarily a project based course. Students will be graded on their implementation and presentation of their results as well as the conclusions they can draw from their projects.

Category	Weight
Mini Projects/Homework	20%
Quizzes	5%
Projects	40%
Midterm	15%
Final	15%
Attendance/Participation	5%
Total	100%

Projects: Students will explore various aspects of the Internet through programming projects. Students will have some latitude in determining what question they want to answer using the techniques and resources made available in this class. Graduate students will be required to do an additional project during the semester.

Final Exam: The final exam activity will be given during the time specified by the registrar at <https://www.nwmissouri.edu/registrar/finals.htm>. Refer to Syllabus Addendum for additional information.

Posters: Students will be asked to design and present posters about the work they do in this course.

Quizzes and Homework: You may be assigned exercises to do on your own time. At any time, the instructor may choose to give a quiz in lieu of collecting an assigned worksheet.

Late Policy: Unless otherwise instructed, assignments may be turned in late up to 24 hours after the due date with a 10% penalty.

Grading scale:

Percent Range	Grade
90-100%	A
>= 80% and < 90%	B
>= 70% and < 80%	C
>= 60% and < 70%	D
below 60%	F

Office Hours:

I will be in my office during office hours, but a zoom session can be arranged as well.

Course outline/major topics studied:

1. (Re)Introduction to Python
 - a. Python Basics (using Jupyter/iPython)
 - b. Functional Python
 - c. Visualization
2. Web APIs and Basic Natural Language
 - a. Python API Modules
 - b. Frequency Analysis
 - c. Lexical Diversity
 - d. Visualization of Data/Results
3. Graphs and Connections
 - a. Basic graph theory concepts
4. Mining GitHub
5. Web Scraping and Natural Language Processing
 - a. Natural Language Processing
 - b. Automatic Summarization
6. Clustering and Recommender Systems

Note: Course topics are tentative and expected to change based on availability of tools and obtainable data.

Note: Course schedule is subject to change with instructor notification and students will be responsible for abiding by these changes.

Academic Calendar: <http://www.nwmissouri.edu/academics/calendar.htm>

Final Exam Schedule: <http://www.nwmissouri.edu/registrar/finals.htm>

Attendance

You are expected to attend class each day AND BE ON TIME. Attendance will be a factor in your grade. If you must miss class due to a university sponsored event (documented with an excuse signed by the university sponsor prior to the event) or by circumstances considered extenuating by the course instructor, it is your responsibility to inform the instructor/TA BEFORE class time via email. If the instructor/TA was not notified before class time, the absence will be unexcused. Please refer to the general university policy on attendance at <https://www.nwmissouri.edu/policies/academics/Attendance.pdf>

Classroom Decorum

Students are required to come to class prepared for the day's activities. That means be in your seat before the class starts, with the textbook, notepaper or notebook and writing instrument. We will start class promptly at the designated time.

Cell phones and pagers must be turned off during class time and are not allowed during exams. Laptop computers and handhelds may be used during class time if they are being used for a class activity, such as taking notes. Students are not to read or send e-mails, text messages, or surf the web during class time. Anyone using an electronic device to give or receive assistance during exams will be in violation of the "Academic Integrity" section of the catalog.

Refer to Syllabus Addendum for additional information.