

Course Syllabus Part II
DSC 540 – Data Preparation
3 Credit Hours

Course Resources

Course Text(s):

Python for Data Analysis: Data Wrangling with Pandas, NumPy, and Jupyter - 3rd Edition

Wes McKinney

O'Reilly Media

ISBN-13: 978-1098104030

ISBN-10: 109810403X

Data Wrangling with Python: Creating actionable data from raw sources

Dr. Tirthajyoti Sarkar

Packt Publishing

ISBN-13: 978-1789800111

ISBN-10: 1789800110

Required Resources:

In this course, you will need to be able to:

- Access the Internet.
- Access Cyberactive.
- Collaborate Online via Video and Voice.
- Collaborate while writing a single document.
- Submit a Word Document.
- Access to GitHub account.
- Python programming environment using PyCharm, Anaconda, and Jupyter Notebook.

Course Schedule

Weeks	Topic
1 & 2	<i>Data Wrangling with Python:</i> Preface, Chapters 1-2; <i>Python for Data Analysis:</i> Chapters 1-3
3 & 4	<i>Data Wrangling with Python:</i> Chapters 3-6; <i>Python for Data Analysis:</i> Chapter 5-6
5 & 6	<i>Python for Data Analysis:</i> Chapters 7-8, 10-11 – Chapter 12 is optional
7 & 8	<i>Data Wrangling with Python:</i> Chapter 7; <i>Python for Data Analysis:</i> Chapter 9
9 & 10	<i>Data Wrangling with Python:</i> Chapter 8, Chapter 9 is optional

Course Activities

In this section of the syllabus, I will describe what we will be doing in each of the activities for each week. Specifically, I will be describing your deliverables – those items you need to submit at or before the deadline. You can find more detail on grading criteria for each category by viewing its detailed rubric.

Exercises

Every two weeks, you will be assigned an exercise or series of exercises based on the weekly topic to complete and submit to the assignment link. These are not group assignments to complete and should be done on your own. However, if you have questions about a specific method or function, you are encouraged to use the discussion board to discuss with your classmates, without completing the assignment together.

Discussion/Participation

Every two weeks you will be required to make 20 posts via an online platform, and be active a minimum of 4 days in a two week period. The goal is to simulate real world discussion and participation – there will not be formal posts required or required topics to discuss. There may be optional topics provided to start discussion, however, sharing information, troubleshooting, asking questions/feedback, etc. will be the primary focus for discussion/participation. Discussion/Participation will be graded as follows:

# of Posts	Percentage
0	0%
10	50%
20	100%

Term Project

Over the course of the term, you will be working on a term project, that has bi-weekly milestones, due at the end of the course.

Grade and Point Breakdown

<u>Component:</u>	<u>Percentage</u>	<u>Point Value Each Week</u>	<u>Number of Times</u>	<u>Total</u>
Discussion/Participation	20%	48 Points	20 Times per week for every 2 weeks	240
Exercises	35%	84 Points	1 Submission per every 2 weeks	420
Term Project	45%	108 Points	5 Submissions per every 2 weeks	540
			Total Points	1200

Late Work

Late work is not accepted unless arrangements are made with the instructor for *very* special,

unavoidable circumstances. If you do not alert the professor before or shortly after something that will make you late, the chances of special arrangements are much lower. If in doubt, please email as soon as possible.

Participation

Students are required to login often and contribute to the class on a regular basis, including posting in the online platform, submitting assignments, and participating in group activities as required. If you have specific participation requirements related to your educational funding or student status, you are expected to monitor your own participation to ensure you are in compliance with those requirements.

Expectations for Students

- Students should expect to spend approximately 5-10 hours per week to complete the activities and assignments in this course.
- Students will log in as often as needed to complete their assignments and progress through the course.
- Students will treat their classmates and the instructor with respect and courtesy.
- Students are responsible for keeping current with the reading assignments and coming to class prepared to discuss the work assigned.
- Students are responsible for knowing what assignments are due and when.
- Students will submit only their own work and will not commit plagiarism or other acts of academic dishonesty.
- Students will contact the instructor as soon as personal problems arise that may affect the student's ability to complete assignments on time.

Expectations for Faculty

- The instructor will treat all students with respect and courtesy.
- The instructor will make grading criteria clear and follow the criteria scrupulously in evaluating student work.
- The instructor will provide feedback about student work within 6 days of due dates (or 24 hours prior to the next due date)—feedback that helps the student learn and improve.
- The instructor will respond to all student messages within 48 hours.