

Catalog Num	Class Title	Description	Mtg Bldg & Room	Mtg Days	Mtg Time	Instructor Name	Knowledge and Duties Required
DS 1001	Foundation of Data Science		SDS 306	F	10:00AM-12:50PM	Rivera,Alexandra	<b>Class attendance required!</b> ; Strong understanding of foundational data science concepts and applications, and enjoys working with students. Responsibilities include facilitating weekly lab sessions - engaging in discussion with students to ensure understanding of key concepts, grading weekly assignments, and collaborating with the course instructors. Time commitment is estimated to be 10 hours/week. Excellent communication skills, a passion for teaching, and the ability to create an engaging and inclusive learning environment are essential.
DS 1002	Programming for Data Science	Will expose student to fundamental coding languages in data science. Python and R will be the primary focus of the course. Popular packages such as pandas and tidyverse will be covered in depth. Additionally, project management skills such as Git and Github will be covered.	SDS 305	TR	09:30AM-10:45AM	Xie,Jianxin	Knowledge of of python and R. <b>Duties include</b> grading, answer student questions, two in-class lab needs to attend.
DS 1002	Programming for Data Science		SDS 305	TR	12:30PM-01:45PM	Dahshan,Mai	<b>Class attendance preferred</b> ; Prior knowledge of programming in python. Duties include grading and answer student questions.
DS 2002	Data Science Systems	This course will center on exposing students to contemporary pipelines for data analysis through a series of steadily escalating use cases. The course will begin with simple local database construction such as SQLite and evolve to cloud base systems such as AWS or Google Cloud. This progression will include topics such as data lakes and other non-SQL applications as appropriate.	SDS 305	MW	03:30PM-04:45PM	Williamson,Jason	
DS 2002	Data Science Systems		SDS 205	TR	12:30PM-01:45PM	Tupitza,Jon	<b>Class attendance preferred</b> ; <b>Skills required</b> :Relational Database Management Systems (MySQL), SQL language, Python language with Pandas, MongoDB, Databricks, Microsoft Azure, Cloud and local storage systems. <b>Duties</b> : Grading and answering student questions
DS 2002	Data Science Systems		SDS 205	MW	03:30PM-04:45PM	Magee,Neal E	

DS 2003	Communicating with Data	The course is designed to not only teach students tools necessary to visualize data but also effective techniques for explaining data driven results with an emphasis on communicating statistical output in a manner that best represents the findings. Examples might include tailoring messages based on the audience or shaping visualizations to follow a story-line. Content on the development of interactive plots and dashboards will also be included.	SDS 205	MW	02:00PM-03:15PM	Faruqe,Farhana	<b>Class attendance preferred; Skills required:</b> "R" (coding); Interest or have experience in data visualization <b>Duties:</b> Communicate with students and grade
DS 2003	Communicating with Data		SDS 305	TR	03:30PM-04:45PM	Yildirim,Nur	<b>Skills required:</b> "R" (coding); Interest or have experience in data visualization <b>Duties:</b> Hold office hours and grade.
DS 2004	Data Ethics	Explores principles and applications of data ethics within a broader social framework that prioritizes conversations about policy, regulatory frameworks, accountability, transparency, and governance models. Will discuss who is responsible for doing responsible data science, question how our work shapes the world around us, and understand the impacts of big data on people and communities.	SDS 205	TR	02:00PM-03:15PM	Reia,Jess	<b>Class attendance required! Skills required:</b> Knowledge, experience and/or interest in data ethics, AI ethics, governance, policy, governance, regulation, and critical data studies are essential to contribute to discussions in-class. <b>Duties:</b> '- Hold office hours once a week. Co-lead discussion sections with me, helping students to participate more. Grades assignments.
DS 2004	Data Ethics		SDS 205	TR	03:30PM-04:45PM	Sloane,Mona	<b>Skills required:</b> Good writer and familiar with some of the data ethics concepts we will be teaching. Grading will be focused on grading essays and other qualitative assignments.
DS 4002	Data Science Project	The data science project course will allow students to take the knowledge gained in each of the four required courses and apply them to a data driven problem. Students will work in groups and can either choose a project provided by SDS faculty or can propose a project for approval. Upon completion of the course students will be required to present their results and publish project content to an open forum.	SDS 205	TR	11:00AM-12:15PM	Alonzi III,Loreto P	<b>Class attendance required!</b> Must be familiar with everything from data collection to data cleaning to data analysis. In addition the skills for presentation. Leadership and human skills (like empathy) are required. <b>Duties include</b> Grading assignments. Observing students in class and offering advice. Identification of obstacles that are impeding individual students ability to learn. Strategic conversation with professor about how to help students learn. Leadership of students to help them achieve the goals. Running the presentations days as the emcee.
DS 4002	Data Science Project		SDS 306	MWF	01:00PM-01:50PM	Rasero Daparte,Javier	<b>Class attendance required!</b> Must be familiar with everything from data collection to data cleaning to data analysis. In addition the skills for presentation. Leadership and human skills (like empathy) are required. <b>Duties include</b> Grading assignments. Observing students in class and offering advice. Identification of obstacles that are impeding individual students ability to learn. Strategic conversation with professor about how to help students learn. Leadership of students to help them achieve the goals.

DS 5100	Programming for Data Science	An introduction to essential programming concepts, structures, and techniques. Students will gain confidence in not only reading code, but learning what it means to write good quality code. Additionally, essential and complementary topics are taught, such as testing and debugging, exception handling, and an introduction to visualization. This course is project based, consisting of a semester project and final project presentations.	WWW	T	07:15PM-08:15PM	Alvarado,Rafael	Proficiency in Python and R. Knowledge of basic data science, including statistics. 10-20 hours/week of grading weekly homeworks and final projects. In addition, hold weekly peer to peer study groups via the Canvas Virtual Community to answer content related questions and build community for 1-2 hours/week.
DS 6001	Practice and App of Data Sci		WWW	W	07:15PM-08:15PM	Kropko,Jonathan Michael	<b>Class attendance preferred; Skills required:</b> General Python programming, and general data pipeline knowledge. <b>Duties:</b> Grading, answering student's questions. Hold weekly peer to peer study groups via the Canvas Virtual Community to answer content related questions and build community for 1-2 hours/week.
DS 6030	Statistical Learning	This course covers fundamentals of data mining and machine learning within a common statistical framework. Topics include regression, classification, clustering, resampling, regularization, tree-based methods, ensembles, boosting, and Support Vector Machines. Coursework is conducted in the R programming language.	WWW	T	07:15PM-08:15PM	Gedeck,Peter	<b>Skills required:</b> Understanding of machine learning using R (ideally tidymodels). <b>Duties:</b> Office hour, grading. Hold weekly peer to peer study groups via the Canvas Virtual Community to answer content related questions and build community for 1-2 hours/week.
STAT 6021	Linear Models for Data Science	An introduction to linear statistical models in the context of data science. Topics include simple and multiple linear regression, generalized linear models, time series, analysis of covariance, tree-based classification, and principal components. The primary software is R.	WWW	T	8:30PM-9:30PM	Woo, Jeffrey	Must have taken class before. Position entails primarily grading, also holding 1 hour office hour per week; anticipate ~20 hours/week. Hold weekly peer to peer study groups via the Canvas Virtual Community to answer content related questions and build community for 1-2 hours/week.