Applied Data Science

INFO-I590-FA17-9903/11899 (hybrid) and 11892 (online) Spring 2018
Joanne S. Luciano, Visiting Associate Professor
Condensed Syllabus

Introduction, Overview of Data Science and Data Communication

Mon Jan 8, 2018	**Module 1**: Talking About Data – Data Science Overview	
	Assignment 1: Data Science Overview	Due Jan 21, 2018
Mon Jan 15, 2018	**Module 2**: Data Exploration	
	Assignment 2: Interpreting Graphics	Due Jan 28, 2018
Mon Jan 22, 2018	**Module 3**: Data Visualizations, Talking about Results, Creating Visualizations	
	Assignment 3 Creating Graphical Representations of Data	Due Feb 4, 2018
Mon Jan 29, 2018	**Module 4**: Data Access and Data Protection	
	Assignment 4: Data Use Agreements and Classifications	Due Feb 11, 2018

Data Cleaning & Enhancing: Munging, Wrangling, and Management

Mon Feb 5, 2018	**Module 5**: CSV, JSON and SQL	
	Assignment 5: CSV, JSON and SQL	Due Feb 18, 2018
Mon Feb 12, 2018	**Module 6**: XML, RDF and NoSQL	
	Assignment 6: XML, RDF/OWL and NoSQL	Due Feb 25, 2018
Mon Feb 19, 2018	**Module 7**: Linked Data and Ontologies	
	Assignment 7: Linked Data and Ontologies	Due Mar 11, 2018

Data Manipulations

Mon Feb 26, 2018	**Module 8**: Linear regression, Decision trees	
	Assignment 8: Algorithms: Linear Regression, KNN, Decision Trees	Due Mar 25, 2018
Mon Mar 26, 2018	**Module 9**: Naive Bayes, SVM, Neural Networks	
	Assignment 9: Algorithms: Naive Bayes, SVM, Neural Networks	Due Apr 22, 2018

Data Science Final Report Due May 2, 2018

ADS Assignment Summary:

Date Due	Details
Sun Jan 21, 2018	A1_Data Science Overview
Sun Jan 28, 2018	A2_Interpreting Graphics
Sun Feb 4, 2018	A3_Creating Graphical Representations of Data
Sun Feb 11, 2018	A4_Data Use Agreements and Classification
Sun Feb 18, 2018	A5_CSV, JSON and SQL
Sun Feb 25, 2018	A6_XML and NoSQL
Sun Mar 11, 2018	A7_Linked Data and Ontologies
Sun Mar 25, 2018	A8_Algorithms: Linear Regression, KNN, Decision Trees
Sun Apr 22, 2018	A9_Algorithms: Naive Bayes, SVM, Neural Networks
Wed May 2, 2018	Data Science Final Report