

# Course Syllabus Part I DSC 680 Applied Data Science

#### **3 Credit Hours**

#### **Course Description**

In the final course of the Data Science program, students will conduct several data science projects from origin-to-presentation. Students will gather data, then prepare, clean, analyze, and present their analysis to an audience.

#### **Course Prerequisites**

Completion of all other required DSC courses

#### **Course Objectives**

Students who successful complete this course should be able to:

- Organize existing portfolio of project work to demonstrate application of full data science process
- 2. Create or add-to portfolio of project work to fill in gaps that demonstrate application of full data science process
- 3. Critique peers' portfolios and resumes and provide suggestions to improve
- 4. Explore and recommend data sets to use for analysis and further processing
- 5. Solve hypothetical interview questions by applying data wrangling techniques
- 6. Generate reports of findings from exploratory data analysis
- 7. Design visualizations and presentations with findings from analysis
- 8. Role-Play summarizing information discovered during analysis to a client or audience

### **Grading Scale**

93 – 100% = A	87 - 89% = B+	77 – 79% = C+	67 – 69% = D+
90 - 92% = A-	83 - 86% = B	73 - 76% = C	63 - 66% = D
	80 - 82% = B-	70 – 72% = C-	60 - 62% = D-
			0 - 59% = F



## **Topic Outline**

- I. Building, Establishing, and Maintaining a Project Portfolio
- II. Finding Datasets
- III. Exploratory Data Analysis
- IV. Data Wrangling and Transformation
- V. Data Visualization and Presentation
- VI. Preparing for Interviews