Course Syllabus for DS 785: Capstone

NOTE: This syllabus document contains the basic information of this course. The most current syllabus is available in the full course.

Course Description

This course describes the premise of the capstone—what it entails, its purpose, and an outline of work required to fulfill the capstone project requirements.

Students are provided with an overview of the capstone course objectives—how to prepare and organize for a semester-long project, the methods used to develop a project, descriptions of project options, and the supporting work that culminates in a final project.

This course provides the information and steps needed to select a topic and a format and then prepare the project proposal that is required in the second week of enrollment.

There are formal assignments within the capstone to keep you and the instructor aware of your progress. Students can contact the instructor if clarification is needed, questions arise, or there is an interest in project topic discussion and refinement.

Course Objectives

By the end of this course, you will be able to:

- Identify and assess the needs of an organization for a data science action.
- Collect and manage data to devise solutions for data science tasks.
- Select, apply, and evaluate models to devise solutions for data science tasks.
- Interpret data science analysis outcomes.
- Effectively communicate data science information effectively in various formats to appropriate audiences.
- Transform findings from data resources into recommended future steps.

Grading Policy

Your mastery of course content is assessed using a variety of methods:

Introduction Discussion	10 points
Project Updates (4 @20 points)	80 points
Chapter Reviews (4 @10 points each)	40 points

Project Idea Submission	10 points
Project Discussion Board	20 points
Project Proposal and Timeline	30 points
Self Reflection	10 points
Final Paper	400 points
TOTAL	**600 points**

Final grades are assigned using the following scale:

90–100%	A
80–89%	B
60–79%	C
0–59%	F