Course Syllabus for DS 775: Prescriptive Analytics

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 covers procedures and techniques for using data to inform the decision-making process. Topics include optimization, decision analysis, game theory, and simulation. Computer implementation and applications will be emphasized.

Course Objectives

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

- Use data and prescriptive analytics to inform the decision-making process.
- Select and apply appropriate models depending on the nature of the objectives, constraints, data, and the decision to be made.
- Assess model feedback and make adjustments to produce desired outcomes.

Grading Policy

You will have homework sets for each lesson to complete. Your mastery of course content is assessed using a variety of methods:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Possible Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework (14)</td>
<td>700 points</td>
</tr>
<tr>
<td>Total</td>
<td>700 points</td>
</tr>
</tbody>
</table>

Final grades are assigned using the following scale:

- A  90-100%
- B  80-89%
- C  70-79%
D 60-69%

F At or below 59%