Course Description
This graduate level course introduces topics for categorical data analysis such as contingency tables, logistic regression, generalized linear models for count data, multi-category logit models, log-linear models for contingency tables, analysis of variance and randomized block designs.

Intended Learning Outcomes
• To develop capacity to formulate problems within a statistical framework
• To develop essential knowledge and skills for statistical analysis
• To develop SAS programming skills for analyzing data
• To develop experience with statistical problems arising in real world applications
• To prepare for careers, including entry into graduate programs that require statistical knowledge

Student Assessment
The course evaluations include participation, 6 homework, 3 exams and a final project. The dates for the homes and exams will be announced during classes or on the blackboard.

The distribution of the possible points is as follows.

<table>
<thead>
<tr>
<th>Elements</th>
<th>% of final grade</th>
<th>Possible points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
<td>75</td>
</tr>
<tr>
<td>Participation</td>
<td>10%</td>
<td>50</td>
</tr>
<tr>
<td>Exams</td>
<td>45%</td>
<td>225</td>
</tr>
<tr>
<td>Final project</td>
<td>30%</td>
<td>150</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>500</td>
</tr>
</tbody>
</table>

The minimum points needed for each grade category are:

<table>
<thead>
<tr>
<th>Points</th>
<th>450</th>
<th>425</th>
<th>400</th>
<th>375</th>
<th>350</th>
<th>325</th>
<th>300</th>
<th>275</th>
<th>250</th>
<th>200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>A</td>
<td>A-</td>
<td>B+</td>
<td>B</td>
<td>B-</td>
<td>C+</td>
<td>C</td>
<td>C-</td>
<td>D</td>
<td>F</td>
</tr>
</tbody>
</table>

Note: STAT 574 has an additional grade category of C- based on the NIU grading system.
1. Text book (not mandatory)


**Course Policies**
Generally students are expected to attend the lectures, as the covered materials may not be chosen straightforwardly from the text book. In the case of an absence, please be advised that the student assumes the responsibility for anything that (s)he fails to receive from the lecture.

For the courtesy of others, please mute your cell phone and avoid disturbing the class with other behaviors. No electronic device or cheat paper will be allowed in the closed book exams. The students are expected to work on the exams independently. Violations of the rules will be handled according to NIU policies.

Late assignments are subject to a late penalty of 10% of your score for each day the assignment is late for. A make-up exam will not be allowed in any occasion. In cases where there is a legitimate reason such as a medical emergency, the available points will be carried over to the next exam or the individual part of the final project. Under such a situation, please contact the instructor as soon as possible to make the arrangement. The acceptance of a late assignment or carry-over points will be determined based on each individual case. The proof of the event will be required. Without the proof of a legitimate reason, there will be a multiplicative penalty of 15% for the carry-over points.

**Americans with Disabilities Statement**
Northern Illinois University is committed to providing an accessible educational environment in collaboration with the Disability Resource Center (DRC). Any student requiring an academic accommodation due to a disability should let his or her faculty member know as soon as possible. Students who need academic accommodations based on the impact of a disability will be encouraged to contact the DRC if they have not done so already. The DRC is located on the 4th floor of the Health Services Building, and can be reached at 815-753-1303 (V) or drc@niu.edu.

**Academic Integrity Statement**
NIU's updated policies on Academic Integrity, Attendance and Accommodations for Students with Disabilities are now available in a pdf document at http://www.niu.edu/stat/courses/pdfs/Accessibility_Statement.pdf.

**Proposed Course Schedule**
DU 322, MW 2:00-3:15PM.

**Note:** The syllabus may be further modified in ways that may facilitate student learning.