Course syllabus for: Geog 379 - Introduction to GIS
Spring, 2008

Instructor:
Dr. Shaowen Wang
330 Davenport Hall
Office phone: 333-7608
shaowen@uiuc.edu

Office Hours:
9:40 - 11:00AM Monday and Tuesday or by appointment

Teaching Assistant (TA):
Ms. Miriam Cope
237L Davenport Hall
mcope2@uiuc.edu

TA Office Hours:
11AM - 12:00PM Monday and Wednesday or by appointment
Students are encouraged to meet at other times by appointment with the instructor or teaching assistant.

Meeting Times:
2:00 - 3:20PM Monday (Lecture) and Wednesday (Lab)

Meeting Locations:
338 Davenport Hall

Course Goals:
The intent of this course is to introduce students to the basic principles and applications of Geographic Information Systems (GIS). The principles presented in lectures are designed to give you the basic knowledge needed to use GIS software effectively and correctly. Principles to be covered include: map projections, GPS, spatial representation, visualization and spatial analysis. Laboratory exercises are designed to familiarize students with GIS software and ground the more theoretical classroom discussions in practical applications.

Text Book:
Course Outline (Subject to Change):

<table>
<thead>
<tr>
<th>Week</th>
<th>Monday (Lecture)</th>
<th>Wednesday (Lab)</th>
<th>Chapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (1/14)</td>
<td>Introduction &amp; Background</td>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>2 (1/21)</td>
<td>Background &amp; Geodetic Science</td>
<td>Projections</td>
<td>1/2</td>
</tr>
<tr>
<td>3 (1/28)</td>
<td>Projections &amp; Data representation</td>
<td>Projections</td>
<td>2/3</td>
</tr>
<tr>
<td>4 (2/4)</td>
<td>Data representation, Sources, and Entry</td>
<td>Digitizing</td>
<td>3/4</td>
</tr>
<tr>
<td>5 (2/11)</td>
<td>GPS</td>
<td>Digitizing</td>
<td>4/S</td>
</tr>
<tr>
<td>6 (2/18)</td>
<td>Remote Sensing</td>
<td>GPS</td>
<td>S</td>
</tr>
<tr>
<td>7 (2/25)</td>
<td>Remote Sensing &amp; Making maps</td>
<td>GPS</td>
<td>S</td>
</tr>
<tr>
<td>8 (3/3)</td>
<td><strong>EXAM I</strong></td>
<td>Choropleth Map</td>
<td>7</td>
</tr>
<tr>
<td>9 (3/10)</td>
<td>Attribute data</td>
<td>Database management</td>
<td>5</td>
</tr>
<tr>
<td>10 (3/17)</td>
<td><strong>SPRING BREAK</strong></td>
<td>Database management</td>
<td>5</td>
</tr>
<tr>
<td>11 (3/24)</td>
<td>Attribute data</td>
<td>Point map</td>
<td>6</td>
</tr>
<tr>
<td>12 (3/31)</td>
<td>Spatial Analysis</td>
<td>Map algebra</td>
<td>6</td>
</tr>
<tr>
<td>13 (4/7)</td>
<td>Raster analysis</td>
<td>Interpolation</td>
<td>4/S</td>
</tr>
<tr>
<td>14 (4/14)</td>
<td>Interpolation &amp; Data Quality</td>
<td>Overlay</td>
<td>6</td>
</tr>
<tr>
<td>15 (4/21)</td>
<td>Data Quality &amp; Spatial models</td>
<td>Project</td>
<td>S</td>
</tr>
<tr>
<td>16 (4/28)</td>
<td>Terrain analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17 (5/2)</td>
<td><strong>EXAM II</strong> - Time and Location TBD.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluation

Examinations
Exam I  30%
Exam II 30% (not cumulative)
Laboratory Exercises 40%

Laboratory Exercises (Approximate)  40
- Projection  6
- Data Input / Digitizing  6
- GPS  4
- Database  6
- Choropleth map  4
- Point Symbol map  4
- Surfacing (interpolation)  4
- Map algebra  6

Plus/minus grades will be given. Minimum guaranteed grade based on percentage.
A  >90%
B - 80%
C - 70%
D - 60%
F  <60%