MAPS and GRAPHS Syllabus
GIS4001C

Instructor: Qiuyin (Julie) Qi
Meeting times: Mon, Wed & Fri, Period 4 (12:30pm-1:45pm);
                Tue & Thurs, Period 4- 5(12:30pm –3:15pm)
Classroom Location: Turlington Hall 3006
Office Location: Turlington Hall 3126
Office Hours: Tue & Thurs 3:15pm – 4:30pm or by appointment.
Phone: (352)-392-3198 ext. 219
E-mail: qiuyinqi@ufl.edu

++ E-mail is the best way to contact me. Please allow me 24-48 hours to respond.

Course Objectives:

● Understand major principles of good cartographic design (symbolization, map elements, generalization, map projection, color use, visualization, etc.)
● Understand major techniques for data classification.
● Understand characteristics of the major types of thematic maps (qualitative, choropleth, proportional symbol, dot, cartogram, etc.)
● Be able to use GIS software to construct maps both professionally (for a publication, presentation, or research project, etc.) and in their daily lives (for a web site, etc.)
● Be able to manage a cartographic project from start to finish.
● Have a better appreciation for the maps that students encounter in their everyday lives and appreciate how they can use the skills learned in this class to enhance their own lives and of others.
● Understand ethical and social issues in the use and construction of maps and practice ethical cartographic design.
● Care more about maps and about creating maps of high quality design and accuracy.
● Learn about sources of data for cartography (census, data depositories, collecting one's own data, etc.) and become independent cartographers.

Tentative Course Outline:

● Current Technology in Cartography
  ○ Fundamentals of GIS
  ○ Internet GIS and Online Mapping
  ○ Online Data Resources
● Principles of Cartography
  ○ Coordinate system and map projection
  ○ Map elements and cartographic design
  ○ Color and Typography
• Data classification, symbolization and generalization

• Mapping techniques
  o Choropleth mapping, Dasymetric mapping and Isarithmic mapping
  o Proportional symbol and dot mapping
  o Multivariate mapping, Cartograms and flow maps

• Other topics
  o Misleading maps

Reference Text:


Course Evaluation

<table>
<thead>
<tr>
<th>Items</th>
<th>Undergraduate students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab assignments</td>
<td>50%</td>
</tr>
<tr>
<td>Class participation and attendance</td>
<td>10%</td>
</tr>
<tr>
<td>Exams</td>
<td>20%</td>
</tr>
<tr>
<td>Final project</td>
<td>20%</td>
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</tbody>
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General requirement
Format of homework and hand-in materials: double space, font size: 12px.
A 4-8 gig Flash drive is required for data storage and backup.

Labs (50%)
There will be 10 assignments for labs, with 100 to 150 pts for each assignment. All the Lab assignments need to be printed out in color and handed in when due. **Otherwise 2 pts will be deducted per day after due date.** If something unexpected happens, please inform the instructor in advance.

Class participation and attendance (10%)
You are responsible to come to class. Attendance will be taken randomly. Students not in class with the first 5 minutes will be marked absent. Students are also expected to be present in class to complete in-class assignments. For expected absence, students must provide at least two days advance notice of the absence. In-class assignments and homework cannot be made up without an official written documented excuse.
Exams (20%)

ONE in-class exams would be given. **Make-Up exams** will be given **ONLY** if an unavoidable event arises and causes you to miss an exam. Bring any formal documentation that supports the absence. For any anticipated missing of exams, you must inform me before you take any action to be absent from the exam.

Project (20%)

The final project is about your hometown’s largest challenge in development. The hometown could be referred to your town, city or county. The challenge could be on environment, economy or demography etc. Only requirement for this project is to use geographical analysis. You need to create at least 6 maps and give a 10 minute presentation with back ground knowledge supporting your information.

Below is a breakdown of how letter grades are assigned

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>93 – 100%</td>
</tr>
<tr>
<td>A-</td>
<td>90 – 92.9%</td>
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<tr>
<td>B+</td>
<td>86 – 89.9%</td>
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<tr>
<td>B</td>
<td>83 – 85.9%</td>
</tr>
<tr>
<td>B-</td>
<td>80 – 82.9%</td>
</tr>
<tr>
<td>C+</td>
<td>76 – 79.9%</td>
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<tr>
<td>C</td>
<td>73 – 75.9%</td>
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<tr>
<td>C-</td>
<td>70 – 72.9%</td>
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<tr>
<td>D+</td>
<td>66 – 69.9%</td>
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<tr>
<td>D</td>
<td>63 – 65.9%</td>
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<tr>
<td>D-</td>
<td>60 – 62.9%</td>
</tr>
<tr>
<td>E</td>
<td>59.9% and below</td>
</tr>
</tbody>
</table>

Please note: The grade of C or better is **required** to earn **general education credit**. For more information on minus grades, go to the following website: [http://www.isis.ufl.edu/minusgrades.html](http://www.isis.ufl.edu/minusgrades.html)

Extra Credit: TBA

**Course Website**

- All the course materials will be posted on the E-learning Sakai and announcement would be send by emails. Please check your ufl email at least twice a week.
- For latest class materials and grades, please visit [https://lss.at.ufl.edu/](https://lss.at.ufl.edu/). You will need your Gatorlink ID to login.
- The lab data is on S:/ drive.
- Make sure you have access to these materials!

**Software**

The software used in this course is ESRI ArcGIS 10. You will be doing all Lab assignments using this software.

**Important dates**

July 1: UF classes begin (Mon)
July 4: Independence Day; no classes (Thurs)
August 9: Classes End
Other Important Information

**Cell phones:** Turn them off, no exceptions. This is especially important when working in a shared lab where other students will be disturbed.

**Honor Code:** Students are expected to abide by the UF honor code and ethical conduct, listed on the following website: [http://www.registrar.ufl.edu/catalog/policies/students.html](http://www.registrar.ufl.edu/catalog/policies/students.html)

**Student Honor Code**
Preamble: In adopting this Honor Code, the students of the University of Florida recognize that academic honesty and integrity are fundamental values of the University community. Students who enroll at the University commit to holding themselves and their peers to the high standard of honor required by the Honor Code. Any individual who becomes aware of a violation of the Honor Code is bound by honor to take corrective action. The quality of a University of Florida education is dependent upon the community acceptance and enforcement of the Honor Code.

**The Honor Code**
We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment."

**Students with disabilities:** Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation. [http://www.dso.ufl.edu/drc/](http://www.dso.ufl.edu/drc/)

**Other Concerns:** Please be aware that the University Counseling Center (392-1575), the Student Health Care Center (392-1161) and Student Mental Health (392-1171) can assist students as they work through personal, academic and social issues.