STUDENT WARNING: This course syllabus is from a previous semester archive and serves only as a preparatory reference. Please use this syllabus as a reference only until the professor opens the classroom and you have access to the updated course syllabus. Please do NOT purchase any books or start any work based on this syllabus; this syllabus may NOT be the one that your individual instructor uses for a course that has not yet started. If you need to verify course textbooks, please refer to the online course description through your student portal. This syllabus is proprietary material of APUS.

Course Summary

Description

Course Description: This course builds upon principles covered in Fundamentals of GIS I and will provide students an emphasis of hands-on Geographic Information Systems (GIS) experience while solidifying the foundation of the concepts learned in Fundamentals of GIS I. The objectives of this course are to begin establishing a solid foundation in the operation of GIS systems and to teach organizational skills needed for successful GIS project management. Overall this course prepares the student for learning beginning and intermediate functional applications of GIS as well as spatial data analysis. Prerequisite: GEOG200

Course Scope:

A Geographic Information System (GIS) is unique in that it enables the examination of data which have geographic location as an inherent property. A GIS is much more than just a mapping software program. Providing a suite of tools for manipulating, analyzing, visualizing and illustrating geographic (spatial) data, the utilization of a GIS reveals relationships, trends and patterns that are not apparent in written or tabular format. Analysis with a GIS generates answers for simple to complex questions such as: where is the best location for a new development? Which residents would be impacted by a change in local zoning? Where has the incidence of Lyme disease increased over time?

Objectives

The successful student will fulfill the following learning objectives:

CO-1 Identify best techniques for analytic data display.
CO-2 Discuss methods for quantitative data display.
CO-3 Explain density mapping techniques.
CO-4 Apply overlay analysis appropriately.
CO-5 Demonstrate knowledge of proximity analysis.
CO-6 Execute analyses of geographic change.
CO-7 Implement appropriate measures of geographic distribution.
CO-8 Solve spatial analysis problems using appropriate analytical techniques

Outline
Week 1: Install ArcGIS software, Mapping Where Things Are

Learning Objectives(s)

CO-1

Reading(s)

Tutorial – Chapter 1

Other: Install the software

Assignment(s)

Forum: Introduce yourself to the course.

Assignment: Chapter 1

Week 2: Mapping Most and Least

Learning Objectives(s)

CO-2

Reading(s)

Tutorial – Chapter 2

Assignment(s)

Quiz #1: Covering Chapter 1

Forum 2.

Assignment: Chapter 2

Week 3: Mapping Density

Learning Objectives(s)

CO-3

Reading(s)

Tutorial – Chapter 3

Assignment(s)

Forum 3

Assignment: Chapter 3

Week 4: Finding What’s Inside

Learning Objectives(s)
CO-4
Reading(s)
Tutorial – Chapter 4
Assignment(s)
Mid Term Exam: Covers Ch. 2 - 3
Forum 4
Assignment: Chapter 4
Week 5: Finding What's Nearby

Learning Objectives(s)

CO-5
Reading(s)
Tutorial – Chapter 5
Assignment(s)
Forum 5
Assignment: Chapter 5
Week 6: Mapping Change

Learning Objectives(s)

CO-6
Reading(s)
Tutorial – Chapter 6
Assignment(s)
Quiz #2: covering Ch 4 and Ch 5
Forum 6
Assignment: Chapter 6
Week 7: Measuring Geographic Distributions

Learning Objectives(s)

CO-7
Reading(s)
Tutorial – Chapter 7
Assignment(s)

Forum 7

Assignment: Chapter 7

Week 8: Analyzing Patterns

Learning Objectives(s)

CO-8

Reading(s)

None

Assignment(s)

Forum 8

Final Exam – in Assignments

Evaluation

Instructional Approach and Course Requirements

GIS is best learned in a hands-on manner. To this end, we will spend our time working through the tutorials in the textbook. It is important that you pay careful attention to the instructions in the book, and that you complete all the assignments as assigned in the order they are assigned. The software we use is very complex, and the lessons build upon the previous ones. Failure to complete assignments as assigned will reduce your ability to use the software and complete future assignments.

Also, if you get too far behind then you risk the chance of not being able to complete the exams. The information in the exams will come directly from the tutorial, my notes within the lessons, forums, or other readings as assigned. You may use the tutorial and software to assist you in these exams.

If you require assistance with an assignment, you can post your question to the Assignment Q&A Forum or contact me directly through the messages tool. Students helping other students is an important component of face-to-face GIS classes, so I encourage you to try this (I will also be monitoring this forum). If you have a question about anything else, please contact me through messages.

Other Important Class Notes

This course will offer the student an interactive, asynchronous virtual classroom. Each week’s lesson will have a course announcement, assigned readings, a project or homework, and other guidance provided by the instructor. Since the student is expected to fully participate in discussions and interact with the instructor and other students, reading assignments and assigned projects should be completed in a timely manner.

“Asynchronous” is not the same as “independent study” – all students are to participate in the weekly assignments and topics together, it is within that week where each individual has flexibility on completing the week’s tasks.

The nature of an online course requires a significant amount of discipline and independent work. The student is responsible for managing time, completing assignments and notifying the Professor immediately of any difficulties. All assignments will have several days to weeks to complete therefore, extensions are not anticipated.
Each week begins on Monday and ends on Sunday, and all posted times are Eastern Time. Students are encouraged to carefully check due dates and times on exams so as not to miss a submission.

**Forums**

We can learn as much from each other as we will from the text or the assignments. The Forum is to facilitate our getting to know one another and sharing our thoughts about the weekly readings and assignments. The purpose for the forum is to discuss important aspects of GIS while interacting with your instructor and your fellow students. You’re welcome to ask questions of me on the forums, but if they are time sensitive and related to the assignments, it’s best to contact me through the messages tool.

For the first forum, all work must be completed by 11:55 PM ET Sunday of the first week. For the remaining forums, all initial posts are due by 11:55 PM ET Wednesday of the week assigned. All replies must be completed by 11:55 PM Sunday of the week assigned.

**Assignments**

Assignments will consist of working through the tutorials in the text and completing one or more of the independent exercises in each chapter. Each week’s assignment will specify which tutorials you should complete, which independent exercises you should do, and what you should submit. Please try to begin the assignments as early in the week as possible. You may require assistance during the assignment, and starting early will give you enough time to get the assistance you need and still hand in the assignment in on time.

**Tests**

There will be two quizzes and two exams. These tests are meant to capture your understanding of the material progressively and while it is fresh in your mind. Pace yourself based upon your knowledge of your lifestyle and work requirements. Keep me apprised of special situations.

All tests but the final exam can be found in the Test and Quizzes section of the classroom. These test may have multiple choice, true/false, essay questions and exercises (that need to be submitted via attachment). Read the questions slowly and thoughtfully, they are meant to measure your understanding of concepts, ideas, and terms that are complex in their shades of meaning. The final exam is can be found in the Assignment section.

Please Note: If you copy the test before submission as a study guide, you must be aware that the order of the all questions will scrambled each time you re-open the short exam or exam. This includes matching questions and answers if applicable. *Do not* just blindly paste or post the answers you have determined during your study preparation. Verify you are answering the right question!

**Grading:**

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<thead>
<tr>
<th>Name</th>
<th>Grade %</th>
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<tbody>
<tr>
<td>Forums</td>
<td>20.00 %</td>
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<tr>
<td>Forum - Week 1</td>
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<td>Week 1 - Mapping Where Things Are</td>
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<td>Week 2 - Mapping Least/Most</td>
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<td>Week 3 - Mapping Density</td>
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Week 4 - What's Inside 2.86 %  
Week 5 - What's Nearby 2.86 %  
Week 6 - Mapping Change 2.86 %  
Week 7 - Measuring Geographic Distribution 2.86 %  
Quiz/Exams 60.00 %  
Quiz #1 - Week 2 8.57 %  
Mid-term 17.14 %  
Quiz #2 - Week 6 17.14 %  
Final Exam 17.14 %  

Materials  
Book Title: GIS Tutorial 2: Spatial Analysis Workbook, 10.1 edition  
Author: Allen, David  
Publication Info: ESRI  
ISBN: 9781589483378  

Book Title: You must validate your cart to get access to your hard copy book(s). If needed, instructions are available here - http://apus.libguides.com/bookstore/undergraduate  
Author: N/A  
Publication Info: N/A  
ISBN: N/A  

Required Technology  
- See the Technology Requirements section of the undergraduate catalog for the minimum hardware and software requirements.  
- Microsoft Office 365 is available to APUS students for free. To sign up, visit http://products.office.com/en-us/student. If you have questions about accessing the software, please contact Classroom support at classroomsupport@apus.edu.  

Course Guidelines  
Citation and Reference Style  
- Attention Please: Students will follow the APA Format as the sole citation and reference style used in written work submitted as part of coursework to the University. Assignments completed in a narrative essay or composition format must follow the citation style cited in the APA Format.  

Tutoring  
- Tutor.com offers online homework help and learning resources by connecting students to certified tutors for one-on-one help. AMU and APU students are eligible for 10 free hours* of tutoring provided by APUS. Tutors are available 24/7 unless otherwise noted. Tutor.com also has a SkillCenter
Resource Library offering educational resources, worksheets, videos, websites and career help. Accessing these resources does not count against tutoring hours and is also available 24/7. Please visit the APUS Library and search for 'Tutor' to create an account.

Late Assignments

- Students are expected to submit classroom assignments by the posted due date and to complete the course according to the published class schedule. The due date for each assignment is listed under each Assignment.
- Generally speaking, late work may result in a deduction up to 15% of the grade for each day late, not to exceed 5 days.
- As a working adult I know your time is limited and often out of your control. Faculty may be more flexible if they know ahead of time of any potential late assignments.

Turn It In

- Faculty may require assignments be submitted to Turnitin.com. Turnitin.com will analyze a paper and report instances of potential plagiarism for the student to edit before submitting it for a grade. In some cases professors may require students to use Turnitin.com. This is automatically processed through the Assignments area of the course.

Academic Dishonesty

- Academic Dishonesty incorporates more than plagiarism, which is using the work of others without citation. Academic dishonesty includes any use of content purchased or retrieved from web services such as CourseHero.com. Additionally, allowing your work to be placed on such web services is academic dishonesty, as it is enabling the dishonesty of others. The copy and pasting of content from any web page, without citation as a direct quote, is academic dishonesty. When in doubt, do not copy/paste, and always cite.

Submission Guidelines

- Some assignments may have very specific requirements for formatting (such as font, margins, etc) and submission file type (such as .docx, .pdf, etc) See the assignment instructions for details. In general, standard file types such as those associated with Microsoft Office are preferred, unless otherwise specified.

Disclaimer Statement

- Course content may vary from the outline to meet the needs of this particular group.

Communicating on the Forum

- Forums are the heart of the interaction in this course. The more engaged and lively the exchanges, the more interesting and fun the course will be. Only substantive comments will receive credit. Although there is a final posting time after which the instructor will grade comments, it is not sufficient to wait until the last day to contribute your comments/questions on the forum. The purpose of the forums is to actively participate in an on-going discussion about the assigned content.
- “Substantive” means comments that contribute something new and hopefully important to the discussion. Thus a message that simply says “I agree” is not substantive. A substantive comment contributes a new idea or perspective, a good follow-up question to a point made, offers a response to a question, provides an example or illustration of a key point, points out an inconsistency in an argument, etc.
- As a class, if we run into conflicting view points, we must respect each individual's own opinion. Hateful and hurtful comments towards other individuals, students, groups, peoples, and/or societies will not be tolerated.
University Policies

**Student Handbook**

- Drop/Withdrawal policy
- Extension Requests
- Academic Probation
- Appeals
- Disability Accommodations

The mission of American Public University System is to provide high quality higher education with emphasis on educating the nation's military and public service communities by offering respected, relevant, accessible, affordable, and student-focused online programs that prepare students for service and leadership in a diverse, global society.

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