September 11, 2013

RE: Curriculum Forms for PUBA 614 Urban Applications of Geographic Information Systems

I am requesting to have a new course, PUBA 614 Urban Applications of GIS, added to the MPA Program and to the graduate Urban and Regional Planning certificate Program. Please find attached the following forms:

- Graduate Course Proposal Form for MPA Program
- Graduate Course Proposal Form for Urban and Regional Planning Certificate program
- Graduate Program Proposal Form for MPA Program
- Graduate Program Proposal Form for Urban and Regional Planning Certificate program
- Syllabus for PUBA 614

Kristen Hua has confirmed that course number is available.

Please do not hesitate to contact me with any questions. My phone number is 3-6697.

Sincerely,

[Signature]

Jo Ann Ewalt

- HSS Dean
- Provost
- Graduate School
Contact Name: Jo Ann Ewalt    Email: ewaltjg@cofc.edu    Phone: 953-6697

Department Name: MPA  Graduate Program name: Master of Public Administration

Course Prefix, Number, and Title: PUBA 614 Urban Applications of Geographic Information Systems

I. CATEGORY OF REVIEW (Check all that apply)

<table>
<thead>
<tr>
<th>NEW COURSE</th>
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☐ Approve for Cross-listing (attach Graduate Permission to Cross-list Form)

Date (Semester/Year) the course will first be offered, course changes or deletion will go into effect: Fall 2014

NEW COURSE:

*ATTACH THE SYLLABUS FOR A NEW GRADUATE COURSE to include:

- Course description and objectives
- Method of teaching (e.g., lecture, seminar, on-line, hybrid)
- Required and optional texts and materials
- Graduate School Grading Scale
- Assignments, student learning outcomes and assessment components
- Policies to include attendance, Honor Code, American Disabilities Act statement
- Tentative course schedule with specific topics
List prerequisites and/or other restrictions below

Students must be enrolled at the graduate level.

Will this course be added to the Degree Requirements?

a) ☐ Yes ☒ No

b) If yes, explain

This course will be added to approved electives for the MPA degree and for the certificate in Urban and Regional Planning.

II. NUMBER OF CREDITS and CONTACT HOURS per week

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<td>A. Contact Hours</td>
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B. Credit Hours | 3 |

Is this course repeatable? ☐ yes ☒ no If so, how many credit hours may the student earn in this course?

III. CATALOG DESCRIPTION Limit to 50 words EXACTLY as you want it to appear in the catalog: include prerequisites, co-requisites, and other restrictions. If changing course description, please include both old and new course descriptions.

This course provides an overview of geographic information systems applied to the study of cities and urban policy issues. It introduces students to foundational concepts and applications of Geographic Information Systems (GIS), and it asks students to use this software to explore and solve real-world urban problems.
IV. RATIONALE / JUSTIFICATION: If course change – please indicate the course change details. If course change or deletion—please provide reasons for change(s) to or deletion of a course. If a new course—briefly address the goals/objectives for the course and the relationship to the strategic plan.

Kevin Keenan (roster faculty in Political Science, with teaching responsibility in the MPA program and the Urban and Regional Planning certificate program) has taught, for the past 3 years, a special topics course titled “Urban Applications of GIS.” This proposal requests the creation of a new course so that the MPA program and the Urban and Regional Planning certificate program will no longer have to use PUBA 502 (the special topics course) designation. Adding the new course will also obviate contacting the registrar’s office to have the special topics course applied as fulfilling a requirement in the urban and regional planning certificate program (which ‘sits underneath’ the MPA program).

V. STUDENT LEARNING OUTCOMES and ASSESSMENT

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September 2011
How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The PUBA 614 Urban Applications of GIS Course supports the following NASPAA competency and associated student learning outcomes:

To analyze, synthesize, think critically, solve problems, and make decisions
The competency is defined, overall, as follows:

• Ability to select and use methodologies appropriate to support research objectives
• Knowledge of how to design and employ a variety of data-collection and analysis techniques
• Ability to analyze, describe, and communicate the results of data analysis

We map specific courses to the following specific knowledge, skills, and abilities:

Ability to analyze public problems, formulate relevant research questions, and employ appropriate methods for addressing those problems.

Employing analytical tools for collecting, analyzing, presenting, and interpreting data, including appropriate statistical concepts and techniques.

Understanding and applying appropriate statistical and decision tools for public management.

Understanding and effective use of information systems, e-government and technology for decision making.

Ability to communicate, orally and in writing, with accuracy, clarity, and discernment.

VII. IMPACT ON EXISTING PROGRAMS and COURSES: Please briefly document the impact and expected changes of this new/changed/deleted course on other departments, programs and courses; if deleting a course—list all departments and programs that include the course; if adding/changing a course—explain any overlap with existing courses in the same or different departments; if adding or deleting a course that will be part of a joint program identify the partner institution.

There is no foreseeable impact, as this course is currently taught as a special topics course.
VIII. COSTS ASSOCIATED WITH THE ACTION REQUESTED: List all of the new costs or cost savings, (including new faculty/staff requests, library or equipment, etc.) associated with the action requested. New courses requiring additional resources will need special justification.

No new costs are anticipated as this course is already being taught as a special topics course.
IX. APPROVAL AND SIGNATURES

Signature of Program Director:  

[Signature] Date: 9/11/2013

Signature of Department Chair:  

[Signature] Date: 9/11/2013

Signature of Additional Chair*:  

[Signature] Date: 9/16/13

Signature of Schools’ Dean:  

[Signature] Date: 

Signature of Additional Schools’ Dean*:  

[Signature] Date: 

Signature of the Provost:  

[Signature] Date: 11/4/13

Signature of Budget Director/Business Affairs Office:  

[Signature] Date: 

*For interdisciplinary courses

Return form to the Graduate School Office for Further Processing

Signature of Chair of the Faculty Committee on Graduate Education, Continuing Education & Special Programs:  

[Signature] Date: 

Signature of Chair of the Graduate Council:  

[Signature] Date: 

Signature of Faculty Senate Secretary:  

[Signature] Date: 

Date Approved by Faculty Senate: 

September 2011
CHANGE/DELETE GRADUATE PROGRAM PROPOSAL FORM

Contact Name: Jo Ann Ewalt  Email: ewaltjg@cofc.edu  Phone: 953-6697

Department and School Name: MPA, Humanities and Social Sciences  Name and Acronym of Graduate
Program: PUBA Public Administration

Date (Semester/Year) changed/deleted program will take effect: Fall 2014

I. CATEGORY OF REVIEW (Check all that apply)

☒ Change Request (attach details):
  ☐ Add existing course or courses to requirements or electives
  ☒ Add new course(s) to requirements or electives (complete and attach COURSE FORM for each)
  ☐ Delete courses from requirements or electives
  ☐ Add new emphasis (check one):  ☐ concentration  ☐ track  Total # of hours:
    (note: any emphasis involving more than 18 credit hours will also require CHE approval)

☐ Terminate Program (check one):  ☐ Degree  ☐ Certificate  ☐ Emphasis (concentration/track)
  (if checked, skip section II, IV, V, and VII below)

Are students currently enrolled in the program?  ☐ Yes  ☐ No
If yes, what semester will students complete the program?

If the program termination includes deleting courses from the inventory, a COURSE FORM must be included
with this form for each course deletion.

☐ Interdisciplinary (attach evidence of acknowledgement from relevant departments)

II. DESCRIPTION OF CHANGES: If a changed program—please explain changes below; if a new
emphasis—please provide the details below.

We are adding PUBA 614 Urban Applications of Geographic Information Systems to the list of approved
electives for the MPA degree. This course is currently being taught as a PUBA 502 special topics course.
III. RATIONALE or JUSTIFICATION

For changes or termination, please provide a detailed justification. For a new emphasis, briefly address the goals/objectives for the new emphasis, provide evidence of student interest (i.e., has the program offered special topics courses in this area? has the program interviewed student focus groups as part of an internal assessment? etc.), and explain how the emphasis supports the liberal arts tradition and the mission of the institution.

Kevin Keenan (roster faculty in Political Science, with teaching responsibility to the Graduate School) has taught, for the past 3 years, a special topics course titled “Urban Applications of GIS.” This proposal requests the creation of a new course so that the MPA program and the Urban and Regional Planning certificate program will no longer have to use PUBA 502 (the special topics course) designation. Adding the new course will also obviate contacting the registrar’s office to have the special topics course applied as fulfilling a requirement in the urban and regional planning certificate program (which ‘sits underneath’ the MPA program).

IV. CURRICULUM

Provide the COMPLETE curriculum for the changed program and/or new emphasis distinguishing between required and elective courses. Note pre-requisite courses where appropriate. Note any sequencing of courses or requirements in the program, listed exactly as it should appear in the catalog.

The core curriculum consists of 21 semester hours of coursework and a three hour internship:
- PUBA 600 Public Service Roles and Responsibilities
- PUBA 601 Research and Quantitative Methods for Public Administration
- PUBA 602 Public Policy
- PUBA 603 Managing Public Organizations
- PUBA 604 Managing Human Resources
- PUBA 605 Managing Financial Resources
- PUBA 701 Capstone Seminar
- PUBA 777 Internship (The internship can be waived for students with extensive employment experience in public administration.)
Elective Courses Aligned with Areas of Specialized Study

Nonprofit Administration
PUBA 650 Essential Elements of Nonprofit Administration
PUBA 654 Human Resource Management for Nonprofit Organizations
PUBA 655 Nonprofit Capacity Building
PUBA 656 Fundraising and Marketing for Nonprofits
PUBA 705 Managing Public/Private Partnerships
PUBA 502 Special Topics: Legal Aspects of Nonprofits
PUBA 502 Special Topics: Finance and Accounting for Non-Profits

Arts Management
PUBA 660 Contemporary Perspectives on Arts Management
PUBA 661 Advanced Arts Management
PUBA 662 Cultural Administration and Applied Research at the Avery
PUBA 663 Arts and Technology
PUBA 664 Arts Education

Environmental Policy and Administration
PUBA 613 Planning Law
PUBA 632 Environmental Policy
PUBA 634 Environmental Law and Regulatory Policy
PUBA 637 Wetlands Protection

Municipal Government and Urban Planning
PUBA 611 Urban Policy
PUBA 612 History and Theory of American Urban Planning
PUBA 613 Planning Law
PUBA 614 Urban Applications of Geographical Information Systems
PUBA 615 Theories of Urban and Regional Development
PUBA 616 Local and Regional Economic Development: Policy and Practice
PUBA 620 Local Government Politics and Administration
PUBA 622 Intergovernmental Relations
PUBA 631 Administrative Law
PUBA 635 Land Use Law
PUBA 502 Special Topics in Public Affairs Seminars

General Electives
PUBA 512 Females/Minorities in Public Administration
PUBA 623 South Carolina Government and Policy
PUBA 631 Administrative Law
PUBA 640 Leadership and Decision Making
PUBA 706 Economic Theory for Policy Analysis
PUBA 720 The Practice of Public Administration
PUBA 722 Information Systems and Public Administration
PUBA 502 Special Topics in Public Affairs Seminars
Attach the completed COURSE FORM and a sample syllabus for each new course.

Is a syllabus for each new course attached?   ☑ Yes   ☐ No

V. STUDENT LEARNING OUTCOMES and ASSESSMENT

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Additional Outcomes or Comments:
VI. IMPACT ON EXISTING PROGRAMS and COURSES Please briefly document the impact of this changed/deleted program or new emphasis on other programs and courses; if changing/deleting a program—list all programs that will be impacted (and how); if adding a new emphasis—explain any overlap with existing programs or courses in the same or different departments.

This course will add a relevant class to the list of approved electives for students in the MPA Program who are interested in the local government and urban planning specialization. Formerly offered as a special topics course, once approved this course will also be appropriate for students in the Urban and Regional Planning certificate program.

Is this changed/deleted program used by others? □ Yes □ No
If yes, please provide a letter of support in each case.

The submission of curriculum forms for the Urban and Regional Certificate program by Kevin Keenan should be viewed as support for this request.

VII. COSTS ASSOCIATED WITH THE ACTION REQUESTED List all of the new costs or cost savings, (including new faculty/staff requests, library or equipment, etc.) associated with the action requested.

No new costs are anticipated. Current faculty can teach the course (and have already done so as a special topics course). The library resources are adequate for the needs of students and faculty for this course. GIS lab requirements are also adequate.
VIII. APPROVAL and SIGNATURES

Signature of Program Director:

______________________________ Date: 9/11/2013

Signature of Department Chair:

______________________________ Date: 9/11/2013

Signature of School Dean:

______________________________ Date: 9/14/13

Signature of the Provost:

______________________________ Date: 11/6/13

Return form to the Graduate School Office for Further Processing

Signature of Chair of the Faculty Committee on Graduate Education, Continuing Education & Special Programs:

______________________________ Date: 

Signature of Chair of the Graduate Council:

______________________________ Date: 

Signature of Faculty Senate Secretary:

______________________________ Date: 

Date Approved by Faculty Senate: __________________________

September 2011
FACULTY COMMITTEE ON GRADUATE EDUCATION, CONTINUING EDUCATION AND SPECIAL PROGRAMS

CHANGE/DELETE GRADUATE PROGRAM PROPOSAL FORM

Contact Name: Kevin Keenan  Email: keenank@cofc.edu  Phone: 953-5679

Department and School Name: Urban and Regional Planning Certificate Program, Graduate School
Name and Acronym of Graduate Program: PUBA Public Administration

Date (Semester/Year) changed/deleted program will take effect: Fall 2014

I. CATEGORY OF REVIEW (Check all that apply)

☒ Change Request (attach details):
  ☐ Add existing course or courses to requirements or electives
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  ☐ Delete courses from requirements or electives
  ☐ Add new emphasis (check one): ☐ concentration ☐ track  Total # of hours:
    (note: any emphasis involving more than 18 credit hours will also require CHE approval)

☐ Terminate Program (check one): ☐ Degree ☐ Certificate ☐ Emphasis (concentration/track)
  (if checked, skip section II, IV, V, and VII below)

Are students currently enrolled in the program? ☐ Yes ☐ No
If yes, what semester will students complete the program?

If the program termination includes deleting courses from the inventory, a COURSE FORM must be included with this form for each course deletion.

☐ Interdisciplinary (attach evidence of acknowledgement from relevant departments)

II. DESCRIPTION OF CHANGES: If a changed program—please explain changes below; if a new emphasis—please provide the details below.

We are adding PUBA 614 Urban Applications of Geographic Information Systems to the list of approved courses for the Urban and Regional Planning Certificate program. This course is currently being taught as a PUBA 502 special topics course.
III. RATIONALE or JUSTIFICATION

For changes or termination, please provide a detailed justification. For a new emphasis, briefly address the goals/objectives for the new emphasis, provide evidence of student interest (i.e., has the program offered special topics courses in this area? has the program interviewed student focus groups as part of an internal assessment? etc.), and explain how the emphasis supports the liberal arts tradition and the mission of the institution.

Kevin Keenan (roster faculty in Political Science, with teaching responsibility to the Graduate School) has taught, for the past 3 years, a special topics course titled “Urban Applications of GIS.” This proposal requests the creation of a new course so that the MPA program and the Urban and Regional Planning certificate program will no longer have to use PUBA 502 (the special topics course) designation. Adding the new course will also obviate contacting the registrar’s office to have the special topics course applied as fulfilling a requirement in the urban and regional planning certificate program (which ‘sits underneath’ the MPA program).

IV. CURRICULUM

Provide the COMPLETE curriculum for the changed program and/or new emphasis distinguishing between required and elective courses. Note pre-requisite courses where appropriate. Note any sequencing of courses or requirements in the program, listed exactly as it should appear in the catalog.

**Core Course**

PUBA 612 History and Theory of American Urban Planning (required)

**Policy and Management (Complete 1 Course)**

PUBA 611 Urban Policy
PUBA 620 Local Government Politics and Administration

**Legal Issues (Complete 1 Course)**
Development Practice (Complete 1 Course)

PUBA 614 Urban Applications of GIS
PUBA 615 Theories of Urban and Regional Development
PUBA 616 Local and Regional Economic Development: Policy and Practice
PUBA 502 Applications in GIS (Geographic Information Systems)

Attach the completed COURSE FORM and a sample syllabus for each new course.

Is a syllabus for each new course attached?  ☒ Yes  ☐ No

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V. STUDENT LEARNING OUTCOMES and ASSESSMENT

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This course will add a relevant class to the list of approved electives for students in the MPA Program who are interested in the local government and urban planning specialization. Formerly offered as a special topics course, once approved this course will also be approved for the “Development Practice” category for students in the Urban and Regional Planning certificate program.

Is this changed/deleted program used by others? ☒ Yes ☐ No
If yes, please provide a letter of support in each case.

The submission of curriculum forms for the MPA Program by Jo Ann Ewalt should be viewed as support for this request.

VII. COSTS ASSOCIATED WITH THE ACTION REQUESTED List all of the new costs or cost savings, (including new faculty/staff requests, library or equipment, etc.) associated with the action requested.

No new costs are anticipated. Current faculty can teach the course (and have already done so as a special topics course). The library resources are adequate for the needs of students and faculty for this course. GIS lab requirements are also adequate.
VIII. APPROVAL and SIGNATURES

Signature of Program Director:

[Signature] Date: 9/11/13

Signature of Department Chair:

[Signature] Date: 9/11/2013

Signature of School Dean:

[Signature] Date: 10/18/13

Signature of the Provost:

[Signature] Date: 11/6/13

Return form to the Graduate School Office for Further Processing

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[Signature] Date: __________________

Signature of Chair of the Graduate Council:

[Signature] Date: __________________

Signature of Faculty Senate Secretary:

[Signature] Date: __________________

Date Approved by Faculty Senate: __________________
Contact Name: Kevin Keenan        Email: keenank@cofc.edu        Phone: 953-5679

Department Name: MPA  Graduate Program name: Urban and Regional Planning Certificate Program

Course Prefix, Number, and Title: PUBA 614 Urban Applications of Geographic Information Systems

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- Tentative course schedule with specific topics
List prerequisites and / or other restrictions below

Students must be enrolled at the graduate level.

Will this course be added to the Degree Requirements?

a) ☐ Yes ☒ No

b) If yes, explain

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Is this course repeatable? ☐ yes ☒ no If so, how many credit hours may the student earn in this course?

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<td>2. apply the ArcGIS 10 software to explore real world urban problems</td>
<td>When the course is offered during either the fall or the spring semester, the students will collect and analyze data related to an urban policy problem occurring in Charleston. They will present their analysis and recommendations at the end of the semester, and they will be evaluated by a panel of faculty (when faculty are available to review them). The students must score at 80 percent or higher to maintain good standing in the graduate school.</td>
</tr>
<tr>
<td>3. critique the GIS as both a practice and a software system</td>
<td>The students are required to read critical GIS articles and lead the class in a presentation and discussion of the themes and critiques in these articles. Critical GIS refers to articles that point out the limitations and misuse of the GIS software, as well as new areas to apply the software.</td>
</tr>
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<td>4.</td>
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</tbody>
</table>

September 2011
How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

The PUBA 614 Urban Applications of GIS Course supports the following NASPAA competency and associated student learning outcomes:

To analyze, synthesize, think critically, solve problems, and make decisions
The competency is defined, overall, as follows:

- Ability to select and use methodologies appropriate to support research objectives
- Knowledge of how to design and employ a variety of data-collection and analysis techniques
- Ability to analyze, describe, and communicate the results of data analysis

We map specific courses to the following specific knowledge, skills, and abilities:

Ability to analyze public problems, formulate relevant research questions, and employ appropriate methods for addressing those problems.

Employing analytical tools for collecting, analyzing, presenting, and interpreting data, including appropriate statistical concepts and techniques.

Understanding and applying appropriate statistical and decision tools for public management.

Understanding and effective use of information systems, e-government and technology for decision making.

Ability to communicate, orally and in writing, with accuracy, clarity, and discernment.

VII. IMPACT ON EXISTING PROGRAMS and COURSES: Please briefly document the impact and expected changes of this new/changed/deleted course on other departments, programs and courses; if deleting a course—list all departments and programs that include the course; if adding/changing a course—explain any overlap with existing courses in the same or different departments; if adding or deleting a course that will be part of a joint program identify the partner institution.

There is no foreseeable impact, as this course is currently taught as a special topics course.
VIII. COSTS ASSOCIATED WITH THE ACTION REQUESTED: List all of the new costs or cost savings, (including new faculty/staff requests, library or equipment, etc.) associated with the action requested. New courses requiring additional resources will need special justification.

No new costs are anticipated as this course is already being taught as a special topics course.
IX. APPROVAL AND SIGNATURES

Signature of Program Director: 

_________________________ Date: 9/11/13

Signature of Department Chair: 

_________________________ Date: 9/11/2013

Signature of Additional Chair*: 

_________________________ Date: 9/11/13

Signature of Schools' Dean: 

_________________________ Date: 

Signature of Additional Schools' Dean*: 

_________________________ Date: 

Signature of the Provost: 

_________________________ Date: 11/4/13

Signature of Budget Director/Business Affairs Office: 

_________________________ Date: 

*For interdisciplinary courses

Return form to the Graduate School Office for Further Processing

Signature of Chair of the Faculty Committee on Graduate Education, Continuing Education & Special Programs: 

_________________________ Date: 

Signature of Chair of the Graduate Council: 

_________________________ Date: 

Signature of Faculty Senate Secretary: 

_________________________ Date: 

Date Approved by Faculty Senate: 

_________________________
Urban Applications of Geographic Information Systems (GIS)
PUBA 614

May Evening 2013
Tuesdays and Thursdays, 5:30 to 8:45 p.m.
Bell South Building, Room 219

Kevin Keenan, Ph.D.
Office: 26 Coming Street, Room 101
Phone: (843) 953-5679

Email: KeenanK@cofc.edu
Office hours: By appointment

Course Description

This course provides an overview of geographic information systems applied to the study of cities and urban policy issues. It introduces students to foundational concepts and applications of Geographic Information Systems (GIS), and it asks students to use this software to explore and solve real-world urban problems. Students will learn about the data and methodology for using GIS to solve urban problems in economic, social, planning, and political settings. Topics covered include an overview of GIS data, the spatial display of data, conducting queries on data, and geocoding among many others. The main software used for the course is ArcGIS 10.1, which is produced by the Environmental Systems Research Institute (ESRI). This course is conceptualized as one that bridges theoretical ideas with an applied skill. This means that your course readings are extremely important, as you will read about an urban theory and possible ways to study the applicability of this theory to an issue occurring in the world. We will then work directly with the software for most of the class session to study that issue.

Objectives

Students successfully completing Urban Applications of Geographic Information Systems will be able to define several foundational concepts in urban studies and applications of the ArcGIS software to explore these concepts. Students will be able to apply the ArcGIS 10 software to explore real world urban problems. Students will also be able to critique the GIS as both a practice and a software system.

Course Philosophy and the Culture of GIS

This course is both theoretical and applied, and it is offered at the advanced undergraduate level and at the graduate level. As such, there are two expectations from
students. First, it is expected that the bulk of student learning is going to come from independent work. Students are required to work independently to understand complex theoretical and conceptual ideas; class time will be used to clarify some of these ideas, but most time will be spent working directly with the software and concepts. This means that reading the course text before you come to class is required to fully achieve learning in this class. Second, learning of an applied skill is achieved by actually working with that skill directly. Again, this means that most of the class time will be used to work with the data and software. If you do not read the textbook, you will not be successful in this class and your learning will be quite limited.

Further, geographic information system work is typically conducted via team work, and that process will be mirrored in this class. That means that you are expected to share insights with your classmates regarding how to complete GIS tasks in the labs, and you are encouraged to ask each other if you have questions as you work independently. It is imperative that you realize that the content of this course is different from other courses, and so it necessitates a different mode of delivery. We will start lab assignments in class while I’m here to help make sure you begin correctly, but you will be expected to finish the labs on your own time in addition to reading the textbook. (This is part of the course structure. It is intentional.) It is expected that you will be in the lab during non-class hours, and that you will be talking with and learning from each other. Experiencing such a learning environment is part of the process of learning GIS and digital culture.

Please keep an open mind! You will be working with software that is onerous, frustrating, and sophisticated while also being practical, powerful, and easy to use at the same time. Please be aware that you will get frustrated; I will too. However, just take a deep breath and know that this is part of the process and is to be expected.

Finally, this is a course that includes both graduate and undergraduate students. To justify advanced credit, the graduate students must demonstrate an advanced engagement with geographic information systems and the course content. This means that the graduate students in the class will be responsible for leading the class in a critique of geographic information systems.

Course Texts

There is one required textbook for this course; it is available for purchase at the campus bookstore. The main readings for the course will come from this book, as will the labs and data. It is essential that you purchase this book.

The cost of a new copy of this book is $156.15, a used copy is $117.10, and a rental copy is $76.40. You can also rent an ebook for $68.90 or buy an ebook for $103.35. The bookstore has each type of copy.

DO NOT purchase an earlier edition of this textbook. The data will not correspond to the data that we will be using, and the earlier versions are based on earlier versions of the software. We will be using ArcGIS 10.1.

IMPORTANT: Check to make sure the book you are purchasing has either a data CD in the back or provides you with a code and a web site where you might download the data.

There will also be several articles posted on OAKS that all students are required to read.

You will also need to bring a flash drive to each class period for storing data and your work.

Assignments & Evaluation
There are different percentage allocations for the undergraduate and graduate students because the graduate students have an additional assignment.

Class participation – The class participation grade will be determined by your attendance at each class, your engagement during the lectures and small group discussions, and your responses to questions and to other students’ comments. Sleeping or putting your head down during the course will adversely affect the grade. Lateness—both at the beginning of the course and after the break—as well as early departures, will adversely affect the grade. Chatting online using the class computers or other electronic device, or text messaging during class will also negatively affect your grade. The participation grade will be determined primarily by your willingness to speak up and share thoughts, questions, and concerns during the course.

Participation counts as 15% of your grade.

Please see Rubric #1 "Evaluating Student Participation," which is posted on OAKS, for more detailed information regarding how I will evaluate your participation.

Lab Exercises and Assignments – The bulk of your learning in this class will come from lab exercises found at the end of each chapter and those assigned by me that will ask you to think creatively about urban problems and to use GIS to solve those problems. During the first half of the semester, we will work primarily from the textbook. For the second half of the semester, the labs will require you to think creatively about using GIS to solve some real world problem. You are required to do all labs. You will be evaluated on organization, grammar, spelling, and presentation in addition to correct content.

Lab exercises and assignments count as 45% of your grade.
Midterm – There is a midterm exam in this class, which will be given on Thursday, 30 May during the second half of our scheduled class time. The midterm exam will be a mixture of multiple choice, short answer, and essay questions that cover both theory, application of theory, and use of the software.

The midterm counts as 10% of your grade.

Final Exam – There is a final exam in this class, which will be given on the last day of class (20 June) during our regularly scheduled class time. The final exam will be a mixture of multiple choice, short answer, and essay questions, as well as calculations using the ArcGIS software.

The final exam counts as 10% of your grade.

Graduate student presentation – This assignment is for graduate students only. Graduate students are required to sign up to lead a presentation on one article that critically explores GIS. There is a detailed rubric that explains how you will be graded on this assignment available on OAKS. The presentation will be worth 20% of your grade.

Please see Rubric #2 “Evaluating Graduate Student Presentations,” which is posted on OAKS, for more detailed information regarding how I will evaluate your presentation.

Your final grade for the course will be calculated using the following grade distribution (percentage of total score of all assignments).

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
</tr>
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<tr>
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<tr>
<td>F</td>
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General Policies and Procedures

- **Statement on Academic Integrity**: The College of Charleston regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the
Student Honor Code and the Code of Conduct. The College will pursue cases of academic dishonesty.

Complete information about the College of Charleston’s academic integrity policies is available through the Office of Student Services. Please see the following document, available online:
http://studentaffairs.cofc.edu/general_info/honor_system/index.html .

- **Student Email**: Students are required to have a College of Charleston email account and to check it at least once per day. All notices regarding the course will be sent to the College of Charleston account.

- **Faculty Email**: The professor uses KeenanK@cofc.edu and will check it at least once per day during the week. Immediate responses via email should not be expected, but can generally be expected within a 24-hour period.

- **Cell phones and pagers** may be left on, but they must be turned to silent mode.

- **Texting in class** while lecture is in progress or while people are participating is rude. It also hinders your learning. Please do not do it.

- **Chatting online, or checking facebook** while lecture is in progress, while people are participating, or while you should be working on the lab is rude and distracting. It also hinders your learning. Please do not do it.

- **Appropriate use of computers is expected**. These computers have been purchased and made available to you for the purpose of studying geographic information systems and advancing your education. This means that you are not permitted to use these computers for non-academic purposes. It is your responsibility at all times to justify how your use of the computer is advancing your intellectual capabilities.

- **General lab etiquette**: We are the first people to be using this lab space. It is brand new, so any damage will be directly traceable to our class. Please do not bring beverages into the room that are in cups; please use only sealable bottles. Please discard any food that is brought into the lab in a hallway garbage can; do not discard stuff in the room and then leave, especially if working here late in the evening, as it will not be cleaned until the next day (and this will, eventually, result in bugs visiting us).
• **Special needs or concerns:** Any students who have special learning needs or concerns are urged to speak with me during the first week of the semester if accommodations are needed. The Center for Disability Services provides a comprehensive list of accessibility resources available at the College on the following website: [http://spinner.cofc.edu/~cds](http://spinner.cofc.edu/~cds).

• **Mutual respect for differing questions and ideas:** The College is a place for open inquiry and exchange of ideas. All members of the College should treat all other members of the College and members of society with mutual respect and appreciation.

---

**Schedule**

*All reading should be completed before the class period for the associated date.*

**Class 1 (Tuesday 5/14):** Introduction to ArcGIS

Reading: *The following readings are available on OAKS:*

- “What is GIS?”
- “Restaurants Optimize Site Locations”
- “Participatory GIS”
- “Mapping the Past”
- “Getting a Job in Geography and GIS”
- “Detroit Releases 50-Year Framework Plan”

Focus of lecture, discussion, and exercises

- Overview of GIS
- Ways that GIS is applied and used
- Define Shapefile
- Define Map Document
- Learn the user interface

**Class 2 (Thursday 5/16):** The Spatial Display of Urban Environments

Reading:
- Chapter 1 ~ lab is due at the start of the next class

Focus of lecture, discussion, and exercises

- Working with shapefiles
- Editing shapefiles

Class 3 (Tuesday 5/21): Defining the Metropolis

Reading:

- Chapter 2 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “GIS as tool or science” by Wright et al.

Focus of lecture, discussion, and exercises

- Overview of data sources
- Working with the census
- Queries

Class 4 (Thursday 5/23): Presentation by Tracy McKee

Systems of Cities

Reading

- Chapter 4 ~ lab is due at the start of the next class

Focus of lecture, discussion, and exercises

- Performing calculations within ArcGIS
- Classifications
- Symbolizations
Class 5 (Tuesday 5/28): Neighborhoods

Reading:

- Chapter 5 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “Feminist Visualization” by Kwan

Focus of lecture, discussion, and exercises

- Mapping neighborhood change
- Markov chains

Class 6 (Thursday 5/30): Migration and Residential Mobility

Reading:

- Chapter 6 ~ lab is due at the start of the next class

Mid-term exam

Class 7 (Tuesday 6/4): Race, Ethnicity, Gender, and Poverty

Reading:

- Chapter 7 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “Negotiating knowledge production: The everyday inclusions, exclusions, and contradictions of participatory GIS Research” by Elwood

Focus of lecture, discussion, and exercises

- Population potential and site locations
- Geocoding
Class 8 (Thursday 6/6): Industrial Location and Cities

Reading:

- Chapter 8
- Critical GIS article available on OAKS: “Mapping Environmental Injustices” by Maantay

Focus of lecture, discussion, and exercises

- Location quotient
- Joins and Relates

Class 9 (Tuesday 6/11): Urban Core and Edge City Contrasts

Reading:

- Chapter 9
- Critical GIS article available on OAKS: “Beyond Cooptation or Resistance” by Elwood

Class 10 (Thursday 6/13): No class; Keenan at 9TAD conference.

Class 11 (Tuesday 6/18): Environmental Problems

Reading:

- Chapter 10 - lab is due at the start of the next class
- Critical GIS article available on OAKS: “Social Power and GIS Technology” by Wright et al.

Class 12 (Tuesday 6/20): Final Exam
Urban Applications of Geographic Information Systems (GIS)
POLI 310

May Evening 2013
Tuesdays and Thursdays, 5:30 to 8:45 p.m.
Bell South Building, Room 219

Kevin Keenan, Ph.D. Email: KeenanK@cofc.edu
Office: 26 Coming Street, Room 101 Office hours: By appointment
Phone: (843) 953-5679

Course Description

This course provides an introductory overview of geographic information systems applied to the study of cities and urban policy issues. It introduces students to foundational concepts and applications of Geographic Information Systems (GIS), and it asks students to use this software to explore and solve real-world urban problems. Students will learn about the data and methodology for using GIS to solve urban problems in economic, social, planning, and political settings. Topics covered include an overview of GIS data, the spatial display of data, conducting queries on data, and geocoding among many others. The main software used for the course is ArcGIS 10.1, which is produced by the Environmental Systems Research Institute (ESRI). This course is conceptualized as one that bridges theoretical ideas with an applied skill. This means that your course readings are extremely important, as you will read about an urban theory and possible ways to study the applicability of this theory to an issue occurring in the world. We will then work directly with the software for most of the class session to study that issue.

Objectives

Students successfully completing Urban Applications of Geographic Information Systems will be able to do the following things:

- define several foundational concepts in urban studies
- apply the ArcGIS software to explore these concepts
- apply the ArcGIS 10 software to explore real world urban problems.
Course Philosophy and the Culture of GIS

This course is both theoretical and applied, and it is offered at the advanced undergraduate level. As such, there are two expectations from students. First, it is expected that the bulk of student learning is going to come from independent work. Students are required to work independently to understand complex theoretical and conceptual ideas; class time will be used to clarify some of these ideas, but most time will be spent working directly with the software. This means that reading the course text before you come to class is required to fully achieve learning in this class (as you will often be using the software to explore concepts discussed in the reading). Second, learning of an applied skill is achieved by actually working with that skill directly. Again, this means that most of the class time will be used to work with the data and software. If you do not read the textbook, you will not be successful in this class and your learning will be quite limited.

Further, geographic information system work is typically conducted via teamwork, and that process will be mirrored in this class. That means that you are expected to share insights with your classmates regarding how to complete GIS tasks in the labs, and you are encouraged to ask each other if you have questions as you work independently. It is imperative that you realize that the content of this course is different from other courses, and so it necessitates a different mode of delivery. We will start lab assignments in class while I’m here to help make sure you begin correctly, but you will be expected to finish the labs on your own time in addition to reading the textbook. (This is part of the course structure. It is intentional.) It is expected that you will be in the lab during non-class hours, and that you will be talking with and learning from each other. Experiencing such a learning environment is part of the process of learning GIS and digital culture.

Please keep an open mind! You will be working with software that is onerous, frustrating, and sophisticated while also being practical, powerful, and easy to use at the same time. Please be aware that you will get frustrated; I will too. However, just take a deep breath and know that this is part of the process and is to be expected.

Course Texts

There is one required textbook for this course; it is available for purchase at the campus bookstore. The main readings for the course will come from this book, as will the labs and data. It is essential that you purchase this book.

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DO NOT purchase an earlier edition of this textbook. The data will not correspond to the data that we will be using, and the earlier versions are based on earlier versions of the software. We will be using ArcGIS 10.1.

IMPORTANT: Check to make sure the book you are purchasing has either a data CD in the back or provides you with a code and a web site where you might download the data.

- You must purchase this book right away, and it is recommended that you get it at the bookstore. We will begin working with it fairly quickly in the semester, so waiting for an order to ship from Amazon will negatively impact your learning.

- It is your responsibility to make sure you can access the data needed for the lab assignments in this textbook.

There will also be several articles posted on OAKS that all students are required to read.

You will also need to bring a flash drive to each class period for storing data and your work.

Assignments & Evaluation

Class participation – The class participation grade will be determined by your attendance at each class, your engagement during the lectures and small group discussions, and your responses to questions and to other students’ comments. Sleeping or putting your head down during the course will adversely affect the grade. Lateness—both at the beginning of the course and after the break—as well as early departures, will adversely affect the grade. Chatting online using the class computers or other electronic device, or text messaging during class will also negatively affect your grade. The participation grade will be determined primarily by your willingness to speak up and share thoughts, questions, and concerns during the course.

For undergraduate students, participation counts as **15% of your grade**.

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to solve some real world problem. You are required to do all labs. You will be evaluated on organization, grammar, spelling, and presentation in addition to correct content.

For undergraduate students, lab exercises count as **45% of your grade**.

Please see Rubric #2 “Basic Evaluative Elements of Student Lab Assignments,” which is posted on OAKS, for more detailed information regarding how I will evaluate your lab assignments.

**Midterm** – There is a midterm exam in this class, which will be given on Thursday, 30 May during the second half of our scheduled class time. The midterm exam will be a mixture of multiple choice, short answer, and essay questions that cover both theory, application of theory, and use of the software.

For undergraduate students, the Midterm counts as **20% of your grade**.

**Final Exam** – There is a final exam in this class, which will be given on the last day of class (20 June) during our regularly scheduled class time. The final exam will be a mixture of multiple choice, short answer, and essay questions, as well as calculations using the ArcGIS software.

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**Focus of lecture, discussion, and exercises**

- Overview of GIS
- Ways that GIS is applied and used
- Define Shapefile
- Define Map Document
- Learn the user interface
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Reading:
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Systems of Cities

Reading
- Chapter 4 ~ lab is due at the start of the next class

Focus of lecture, discussion, and exercises
- Performing calculations within ArcGIS
- Classifications
- Symbolizations

Class 5 (Tuesday 5/28): Neighborhoods

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- Chapter 5 ~ lab is due at the start of the next class
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Focus of lecture, discussion, and exercises

- Mapping neighborhood change
- Markov chains

Class 6 (Thursday 5/30): Migration and Residential Mobility

Reading:

- Chapter 6 ~ lab is due at the start of the next class

**Mid-term exam**

Class 7 (Tuesday 6/4): Race, Ethnicity, Gender, and Poverty

Reading:

- Chapter 7 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “Negotiating knowledge production: The everyday inclusions, exclusions, and contradictions of participatory GIS Research” by Elwood

Focus of lecture, discussion, and exercises

- Population potential and site locations
- Geocoding
Class 8 (Thursday 6/6): Industrial Location and Cities

Reading:

- Chapter 8
- Critical GIS article available on OAKS: “Mapping Environmental Injustices” by Maantay

Focus of lecture, discussion, and exercises

- Location quotient
- Joins and Relates

Class 9 (Tuesday 6/11): Urban Core and Edge City Contrasts

Reading:

- Chapter 9
- Critical GIS article available on OAKS: “Beyond Cooptation or Resistance” by Elwood

**Class 10 (Thursday 6/13): No class; Keenan at 9TAD conference.**

Class 11 (Tuesday 6/18): Environmental Problems

Reading:

- Chapter 10 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “Social Power and GIS Technology” by Wright et al.

**Class 12 (Tuesday 6/20): Final Exam**
Urban Applications of Geographic Information Systems (GIS)
PUBA 614

May Evening 2013
Tuesdays and Thursdays, 5:30 to 8:45 p.m.
Bell South Building, Room 219

Kevin Keenan, Ph.D.
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Phone: (843) 953-5679

Email: KeenanK@cofc.edu
Office hours: By appointment

Course Description

This course provides an introductory overview of geographic information systems applied to the study of cities and urban policy issues. It introduces students to foundational concepts and applications of Geographic Information Systems (GIS), and it asks students to use this software to explore and solve real-world urban problems. Students will learn about the data and methodology for using GIS to solve urban problems in economic, social, planning, and political settings. Topics covered include an overview of GIS data, the spatial display of data, conducting queries on data, and geocoding among many others. The main software used for the course is ArcGIS 10.1, which is produced by the Environmental Systems Research Institute (ESRI). This course is conceptualized as one that bridges theoretical ideas with an applied skill. This means that your course readings are extremely important, as you will read about an urban theory and possible ways to study the applicability of this theory to an issue occurring in the world. We will then work directly with the software for most of the class session to study that issue.

Objectives

Students successfully completing Urban Applications of Geographic Information Systems will be able to do the following things:

- define several foundational concepts in urban studies
- apply the ArcGIS software to explore these concepts
- apply the ArcGIS 10 software to explore real world urban problems
- critique the GIS as both a practice and a software system
- generate a research methodology for using GIS to study a public administration problem, including an overview of data sources and the necessary steps for conducting the analysis
Course Philosophy and the Culture of GIS

This course is both theoretical and applied, and it is offered at the graduate level. As such, there are two expectations from students. First, it is expected that the bulk of student learning is going to come from independent work. Students are required to work independently to understand complex theoretical and conceptual ideas; class time will be used to clarify some of these ideas, but most time will be spent working directly with the software. This means that reading the course text before you come to class is required to fully achieve learning in this class (as you will often be using the software to explore concepts discussed in the reading). Second, learning of an applied skill is achieved by actually working with that skill directly. Again, this means that most of the class time will be used to work with the data and software. *If you do not read the textbook, you will not be successful in this class and your learning will be quite limited.*

Further, geographic information system work is typically conducted via team work, and that process will be mirrored in this class. That means that you are expected to share insights with your classmates regarding how to complete GIS tasks in the labs, and you are encouraged to ask each other if you have questions as you work independently. It is imperative that you realize that the content of this course is different from other courses, and so it necessitates a different mode of delivery. We will start lab assignments in class while I’m here to help make sure you begin correctly, but you will be expected to finish the labs on your own time in addition to reading the textbook. (This is part of the course structure. It is intentional.) It is expected that you will be in the lab during non-class hours, and that you will be talking with and learning from each other. Experiencing such a learning environment is part of the process of learning GIS and digital culture.

Please keep an open mind! You will be working with software that is onerous, frustrating, and sophisticated while also being practical, powerful, and easy to use at the same time. Please be aware that you will get frustrated; I will too. However, just take a deep breath and know that this is part of the process and is to be expected.

Course Texts

There is one required textbook for this course; it is available for purchase at the campus bookstore. The main readings for the course will come from this book, as will the labs and data. It is essential that you purchase this book.

The cost of a new copy of this book is $156.15, a used copy is $117.10, and a rental copy is $76.40. You can also rent an ebook for $68.90 or buy an ebook for $103.35. The bookstore has each type of copy.

DO NOT purchase an earlier edition of this textbook. The data will not correspond to the data that we will be using, and the earlier versions are based on earlier versions of the software. We will be using ArcGIS 10.1.

IMPORTANT: Check to make sure the book you are purchasing has either a data CD in the back or provides you with a code and a web site where you might download the data.

- You must purchase this book right away, and it is recommended that you get it at the bookstore. We will begin working with it fairly quickly in the semester, so waiting for an order to ship from Amazon will negatively impact your learning.

- It is your responsibility to make sure you can access the data needed for the lab assignments in this textbook.

There will also be several articles posted on OAKS that all students are required to read.

You will also need to bring a flash drive to each class period for storing data and your work.

Assignments & Evaluation

Class participation – The class participation grade will be determined by your attendance at each class, your engagement during the lectures and small group discussions, and your responses to questions and to other students’ comments. Sleeping or putting your head down during the course will adversely affect the grade. Lateness—both at the beginning of the course and after the break—as well as early departures, will adversely affect the grade. Chatting online using the class computers or other electronic device, or text messaging during class will also negatively affect your grade. The participation grade will be determined primarily by your willingness to speak up and share thoughts, questions, and concerns during the course.

Participation counts as 15% of your grade.

Please see Rubric #1 “Evaluating Student Participation,” which is posted on OAKS, for more detailed information regarding how I will evaluate your participation.

Lab Exercises and Assignments – The bulk of your learning in this class will come from lab exercises found at the end of each chapter and those assigned by me that will ask you to think creatively about urban problems and to use GIS to solve those problems. During the first half of the semester, we will work primarily from the textbook. For the
second half of the semester, the labs will require you to think creatively about using GIS to solve some real world problem. You are required to do all labs. You will be evaluated on organization, grammar, spelling, and presentation in addition to correct content.

Lab exercises and assignments count as 45% of your grade.

Please see Rubric #2 “Basic Evaluative Elements of Student Lab Assignments,” which is posted on OAKS, for more detailed information regarding how I will evaluate your lab assignments.

Midterm – There is a midterm exam in this class, which will be given on Thursday, 30 May during the second half of our scheduled class time. The midterm exam will be a mixture of multiple choice, short answer, and essay questions that cover both theory, application of theory, and use of the software.

The midterm counts as 10% of your grade.

In-class Final Exam – There is a final exam in this class, which will be given on the last day of class (20 June) during our regularly scheduled class time. The final exam will be a mixture of multiple choice, short answer, and essay questions, as well as calculations using the ArcGIS software.

The in-class final exam counts as 10% of your grade.

Take-home Final Exam – The take-home portion of the final examination requires you to write a section of a research methodology that uses GIS. This is in lieu of an in-class essay portion of your examination. As part of the methodology, you need to explain two primary things: (1) what tools from GIS you will use to study an urban policy, planning, or public administration problem; and (2) what data sources you will realistically be able to access and use for your analysis. Though this is a take-home exam, it should be written as a formal section of a research methodology. This means you need to have clear writing with correct grammar and mechanics. There is a rubric available for this portion of your exam to guide you in your learning.

The Take-home Final Exam counts as 10% of your grade.

Please see Rubric #3 “Evaluating the Take-home Final Exam,” which is posted on OAKS, for more detailed information regarding how I will evaluate your research methodology.
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**Presentation** – You are required to sign up to lead a presentation on one article that critically explores GIS. Critical GIS is a field of scholarship that has developed to understand both the power of GIS, but also its limitations. This field of scholarship questions whether GIS is a science, simply a tool, or a method. It has been pioneered by feminists and other critical scholars. You are encouraged to use one of the readings posted on OAKS, though you are welcome to find your own reading. (If you find your own reading, you must circulate this to the class one week ahead of time so that everyone might read it and be prepared to discuss it with you.) There is a detailed rubric that explains how you will be graded on this assignment available on OAKS.

The presentation will be worth **10% of your grade**.

Please see Rubric #4 “Evaluating Graduate Student Presentations,” which is posted on OAKS, for more detailed information regarding how I will evaluate your presentation.

Your final grade for the course will be calculated using the following grade distribution (percentage of total score of all assignments).

- A = 93 – 100
- A- = 90 – 92.9
- B+ = 87.5 – 89.9
- B = 82.5 – 87.4
- B- = 80 – 82.4
- C+ = 77.5 – 79.9
- C = 72.5 – 77.4
- C- = 70 – 72.4
- D+ = 67.5 – 69.9
- D = 62.5 – 67.4
- D- = 60 – 62.4
- F = 0.0 – 59.9

**General Policies and Procedures**

- **Statement on Academic Integrity:** The College of Charleston regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the Student Honor Code and the Code of Conduct. The College will pursue cases of academic dishonesty.

  Complete information about the College of Charleston’s academic integrity policies is available through the Office of Student Services. Please see the following document, available online: [http://studentaffairs.cofc.edu/general_info/honor_system/index.html](http://studentaffairs.cofc.edu/general_info/honor_system/index.html).

- **Student Email:** Students are required to have a College of Charleston email account and to check it at least once per day. All notices regarding the course will be sent to the College of Charleston account.
• **Faculty Email:** The professor uses KeenanK@cofc.edu and will check it at least once per day during the week. Immediate responses via email should not be expected, but can generally be expected within a 24-hour period.

• **Cell phones and pagers** may be left on, but they must be turned to silent mode.

• **Texting in class** while lecture is in progress or while people are participating is rude. It also hinders your learning. Please do not do it.

• **Chatting online, or checking facebook** while lecture is in progress, while people are participating, or while you should be working on the lab is rude and distracting. It also hinders your learning. Please do not do it.

• **Appropriate use of computers is expected.** These computers have been purchased and made available to you for the purpose of studying geographic information systems and advancing your education. This means that you are not permitted to use these computers for non-academic purposes. It is your responsibility at all times to justify how your use of the computer is advancing your intellectual capabilities.

• **General lab etiquette:** We are among the first people to be using this lab space. It is brand new, so any damage will be traceable to our class. Please do not bring beverages into the room that are in cups; please use only sealable bottles. Please discard any food that is brought into the lab in a hallway garbage can; do not discard stuff in the room and then leave, especially if working here late in the evening, as it will not be cleaned until the next day (and this will, eventually, result in bugs visiting us).

• **Special needs or concerns:** Any students who have special learning needs or concerns are urged to speak with me during the first week of the semester if accommodations are needed. The Center for Disability Services provides a comprehensive list of accessibility resources available at the College on the following website: [http://spinner.cofc.edu/~cds](http://spinner.cofc.edu/~cds).

• **Mutual respect for differing questions and ideas:** The College is a place for open inquiry and exchange of ideas. All members of the College should treat all other members of the College and members of society with mutual respect and appreciation.
Schedule

All reading should be completed before the class period for the associated date.

Class 1 (Tuesday 5/14): Introduction to ArcGIS

Reading: The following readings are available on OAKS:

- “What is GIS?”
- “Restaurants Optimize Site Locations”
- “Participatory GIS”
- “Mapping the Past”
- “Getting a Job in Geography and GIS”
- “Detroit Releases 50-Year Framework Plan”
- Critical GIS article available on OAKS: “GIS, Internal Colonialism, and the U.S. Bureau of Indian Affairs”

Focus of lecture, discussion, and exercises

- Overview of GIS
- Ways that GIS is applied and used
- Define Shapefile
- Define Map Document
- Learn the user interface

Class 2 (Thursday 5/16): The Spatial Display of Urban Environments

Reading:

- Chapter 1~ lab is due at the start of the next class

Focus of lecture, discussion, and exercises

- Working with shapefiles
- Editing shapefiles
Class 3 (Tuesday 5/21): Defining the Metropolis

Reading:

- Chapter 2 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “GIS as tool or science” by Wright et al.

Focus of lecture, discussion, and exercises

- Overview of data sources
- Working with the census
- Queries

Class 4 (Thursday 5/23): Presentation by Tracy McKee

Systems of Cities

Reading

- Chapter 4 ~ lab is due at the start of the next class

Focus of lecture, discussion, and exercises

- Performing calculations within ArcGIS
- Classifications
- Symbolizations

Class 5 (Tuesday 5/28): Neighborhoods

Reading:

- Chapter 5 ~ lab is due at the start of the next class
- Critical GIS article available on OAKS: “Feminist Visualization” by Kwan

Focus of lecture, discussion, and exercises
• Mapping neighborhood change
• Markov chains

Class 6 (Thursday 5/30): Migration and Residential Mobility

Reading:

• Chapter 6 ~ lab is due at the start of the next class

Mid-term exam

Class 7 (Tuesday 6/4): Race, Ethnicity, Gender, and Poverty

Reading:

• Chapter 7 ~ lab is due at the start of the next class
• Critical GIS article available on OAKS: “Negotiating knowledge production: The everyday inclusions, exclusions, and contradictions of participatory GIS Research” by Elwood

Focus of lecture, discussion, and exercises

• Population potential and site locations
• Geocoding

Class 8 (Thursday 6/6): Industrial Location and Cities

Reading:

• Chapter 8
• Critical GIS article available on OAKS: “Mapping Environmental Injustices” by Maantay

Focus of lecture, discussion, and exercises
• Location quotient
• Joins and Relates

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Reading:
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Class 12 (Tuesday 6/20): Final Exam