

Basic Computer Techniques in Regional Analysis

MW 3:15-5:25 pm

Lloyd Cassity 102

INSTRUCTOR INFORMATION

Dr. Christine McMichael

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Office hours: M-TH 2-3pm, or just stop by!

Office location: 100-C Lloyd Cassity Bldg.

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CATALOG DESCRIPTION

An introduction to the basic concepts of computers and systems structures. The basic skills of spreadsheet analysis and database management tools will be introduced along with advanced word processing and integration of graphics. The more specific graphing, statistics, and mapping tools needed for regional analysis will also be introduced. Internet communications and the method of transmitting and receiving data will be discussed.

LEARNER OUTCOMES

In this course students will:

- obtain a **working knowledge of computer applications** that are useful for regional analysis
- learn about **sources of data** that are widely used in regional analysis applications
- understand and apply commonly used **statistical and data processing techniques** to regional analysis problems
- gain experience in **communicating knowledge** to others and practice using **library resources**

CLASS STRUCTURE

Almost every class period will be divided into two sections: (1) a lecture section in which you learn about a regional analysis method, technique or type of data and (2) a lab section where you apply this knowledge.

IRAPP computer lab: The lab is located in LC 102 and is open M-F from 8am to 4:30pm (if IRAPP faculty are around the lab may be open until 5 or 6pm). It is not open on weekends.

REQUIRED TEXTBOOK

R. Kitchin & N. J. Tate, *Conducting Research into Human Geography: Theory, Methodology and Practice*, 2000, Pearson Education Limited, 329 pp.

The textbook used in this course was selected to provide you with an overview of the research process, including research design, data analysis and dissemination of results. Reading assignments are listed in the Course Calendar; supplementary readings from other sources will be assigned from time to time

COURSE WEBSITE

The course will make use of the Blackboard system, which can be accessed at <http://moreheadstate.blackboard.com>. The website will contain your grades, lecture notes, and copies of labs and handouts. I will be happy to help you get started if you are not familiar with Blackboard.

COURSE REQUIREMENTS

Course requirements, in addition to regular attendance and participation in class discussions, include:

Labs: Nearly every class will include a lab section in which you apply the techniques you learned during the first half of the class period. Together, all of the labs are worth 60% of your overall grade. Often, you will not be able to finish a lab during the class period. When this happens, please hand in the lab by the stated due date.

Exams: Two exams will be given in this course; each exam is worth 20% of your overall grade. Each exam will consist of two parts and will take two class periods to complete. Exams will include questions and problems

related to previously completed lectures, labs and readings; the second exam will only include material covered since the first exam.

GRADING

The grading scheme for this course is shown below (*NO EXTRA CREDIT*):

Labs: 60%	A: 90 – 100%	D: 60 – 69%
Exams: 40%	B: 80 – 89%	E: < 60%
	C: 70 – 79%	

How to calculate your WEIGHTED PERCENTAGE in 3 easy steps – an example:

Item	Earned Points	Possible Points
Lab #1	10	10
Lab #2	23	25
Exam #1	86	100

Step 1: Calculate your weighted EARNED points: $[(10 + 23) * 0.60] + [(86) * 0.40] = 54.2$

Step 2: Calculate your weighted POSSIBLE points: $[(10 + 25) * 0.60] + [(100) * 0.40] = 61$

Step 3: Calculate your weighted percentage grade: $[54.2 / 61] = 88.9\%$

MAKE-UPS and LATE ASSIGNMENTS

No make-up exams will be given without prior arrangement with the instructor, and then only for a valid, documented reason. All labs are due at the start of class. Late labs will be assessed a 5% per day penalty – no late labs will be accepted after the last regular class meeting.

CLASSROOM POLICIES

In order to be successful in this course you should read the assigned materials before class, attend every class meeting, take careful notes, complete all assignments on time – and participate in class.

Attendance: YOU WILL LOSE 1% FROM YOUR FINAL GRADE FOR EACH UNEXCUSED ABSENCE AFTER THE SECOND ONE.

Computer use: Using a computer during class for anything besides assigned class-related activities (note taking and labs) is very disrespectful to both the instructor and to your fellow students. Please refrain from surfing the internet, instant messaging, etc. during lecture AND lab periods.

Cell phones, etc.: Please turn off all cell phones, pagers, etc. prior to the beginning of class; please do NOT answer cell phones or text message during lecture AND lab time.

Other: Please arrive on time; please inform me prior to class if you need to leave early.

ACADEMIC DISHONESTY

It is expected that all written work will be your own – not copied, borrowed, downloaded, or otherwise taken and passed off as your own (i.e., plagiarized). If any work is submitted which is not your own it will be returned with a failing grade and your name and a description of the offense may be forwarded to the Dean of Students.

Plagiarism includes: 1) copying the work of another student with or without the other student's knowledge; 2) collaborating with another student and submitting work that is identical, nearly identical, or inordinately similar; 3) changing a few words but copying the sentence structure without giving credit; 4) copying words and/or passages directly from books, articles, course readings, or internet sites, and failing to use quotation marks and/or offering appropriate citation. If there are any doubts about what constitutes plagiarism it is the **student's responsibility** to clarify any questions with the instructor.

STUDENTS with DISABILITIES

In compliance with the Americans with Disabilities Act (ADA), all students with a documented disability are entitled to reasonable accommodations and services to support their academic success and safety. Though a request for services may be made at any time, services are best applied when they are requested at or before the start of the semester. To receive accommodations and services the student should immediately contact the Disability Services Coordinator in the Office of Academic and Career Services, 223 Allie Young Hall, 606-783-5188, www.moreheadstate.edu/acs/

IN AN EMERGENCY

Emergency response information will be discussed in class. Students should familiarize themselves with the nearest exit routes in the event evacuation becomes necessary. You should notify your instructor at the beginning of the semester if you have special needs or will require assistance during an emergency evacuation. Students should familiarize themselves with emergency response protocols at <http://www.moreheadstate.edu/emergency>.

E-MAIL

I may need to contact you during the semester via e-mail. Please make sure your university email account is working properly and *be sure to check it regularly*. ALSO, you will turn in most of your assignments to me via email to the following address: **msu.geo@gmail.com**

Important note: This syllabus is subject to modification. All changes will be announced in class. *You are responsible for being aware of any adjustments.* Please contact me if you have any questions about adjustments to course timing or content

SURVIVAL TIPS

I will challenge you in this class because I really want you to gain something useful from it. You will need to put forth the effort and take this course seriously while, I hope, having some fun! At the same time, I will work hard to ensure that the greatest number of students learn and understand the information. I will always be available to assist you as a group and as individuals, and I welcome your questions and thoughts!

You may also improve your performance in this class by following a few easy steps:

- **Come to class regularly and take complete notes.** There is no substitute for your presence in class.
- **Review your notes regularly.** Spend some time glancing over your notes each or every other day.
- **Read the textbook.** Reading the book will help you understand and retain lecture/lab material.
- **Be an active participant in class.** Don't EVER feel that your questions are "dumb".
- **Come see me!** Feel free to come by, email me or call my office – you won't ever be "bothering" me.
- **Complete all assignments on time.** Missing a few points here and there will eventually add up! And remember - there is NO EXTRA CREDIT.
- **Find and/or form study groups.** I don't recommend relying on such groups for all of your studies, but they are quite effective for filling in gaps in notes and enhancing understanding of complex material. I am more than happy to meet with study groups at a convenient campus location.

COURSE CALENDAR

DATE	TOPIC(S)	READING(S)
1/12	Class introduction; Thinking about research	Chapter 1, sections 1.1-1.2
1/14	Planning a research project I	Chapter 2, sections 2.1-2.4
1/19	<i>NO CLASS</i>	
1/21	Planning a research project II	Chapter 2, sections 2.5-2.10
1/26	Evaluating web-based information and data sources	
1/28	Elements of a research paper; Literature review	Chapter 10
2/2	<i>Literature review - lab workday*</i>	
2/4	<i>Literature review - lab workday</i>	
2/9	Producing data for qualitative analysis	Chapter 7
2/11	Analyzing qualitative data	Chapter 8, sections 8.1-8.7
2/16	Surveys	Chapter 3, sections 3.1-3.5.0
2/18	Giving professional presentations; PowerPoint	
2/23	EXAM #1 – part a	
2/25	EXAM #1 – part b	
3/2	Social science, economic & natural science databases	
3/4	<i>Databases project - lab workday</i>	
3/9	<i>Databases project - lab workday – progress reports</i>	
3/11	<i>Databases project - lab workday</i>	
3/16	<i>SPRING BREAK</i>	
3/18	<i>SPRING BREAK</i>	
3/23	<i>Databases project - lab workday – progress reports</i>	
3/25	Databases project –PowerPoint presentations	
3/30	Preparing and exploring quantitative data; SPSS	Chapter 4, section 4.5
4/1	<i>Databases project – poster review</i>	
4/6	Analyzing and interpreting quantitative data I	Chapter 5, sections 5.1-5.6.2
4/8	Analyzing and interpreting quantitative data II	Chapter 5, sections 5.6.4 and 5.7.1
4/13	<i>Quantitative data analysis - lab workday</i>	
4/15	Remote Sensing (RS); Geographic Information Systems (GIS)	Chapter 6, sections 6.3.1-6.3.3 and 6.7
4/20	RS/GIS data and analysis I	
4/22	RS/GIS data and analysis II	
4/27	<i>RS/GIS - lab workday; Print database project posters</i>	
4/29	EXAM 2 – part a	
5/4	EXAM 2 – part b	
5/6	<i>IRAPP-sponsored poster session</i> (Time TBA)	Required

*Lab workday – class attendance IS required for EVERY lab workday during the semester.