

Three Rivers Community College (CIV, ENV, GIS) K146 - Introduction to GIS Fall 2015

Tentative Course Syllabus – Subject to Change

Meeting Day/Time: Lecture: Thursday, 5:30 – 7:10 pm Lab: Thursday 7:30 – 9:10 pm Room D230

Course Instructor: Alisa Morrison

Email: alisa.morrison@yahoo.com (preferred), amorrison@trcc.commnet.edu

Cell phone : 860-235-6765

Office Hours: By appointment

Required Text

Law, Michael and Collins, Amy. 2013. Getting to Know ArcGIS Desktop (for ArcGIS 10.1). Third Edition. ESRI Press; Redlands, California.

You will need the required text and Data disk for each class in order to complete the assignments.

****A minimum 4 gb USB flash drive is STRONGLY recommended for this course.**

Learning Objectives

- Become familiar with the utilization of ArcGIS 10
- Become comfortable with reading and interpreting maps
- Understand the core functionality of ArcGIS
- Create detailed, meaningful maps for presentation
- Become familiar with the capabilities of remote sensing

Course Structure

This course is broken into two sections (lecture and lab). Since this is a “hands on” class, I have structured this course such that each class involves a short introduction/demonstration to a topic that will be followed by an assignment or exercise that utilizes ArcGIS. In addition, there will be two “work weeks” to give students time to work on their project/paper.

The first half of the semester provides an introduction to ArcMap and ArcCatalog and basic map making. The second half considers more specific tools that can be performed in ArcMap and ArcCatalog that will allow you to manipulate and analyze the data of interest. The last week or two of class will focus on data acquisition and remote sensing of the environment.

Most classes include an assignment(s) to be turned in prior to the next class. **Each student is expected to turn in his/her own work for each assignment.**

Tentative Schedule

The meaning of “tentative”, as used here, means that the schedule outlined below is under terms that are uncertain or not final. In other words, required reading, essays, quizzes/exams, and dates **may** change. However, all changes and variations of the schedule will be discussed in class; thus, class attendance is essential for students and excuses for missed assignments or quizzes/exams will not be accepted.

I will be adding to this weekly. By the Sunday prior to class, the assignments for Thursday will be posted.

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Date	Topic
Sep 3	Lecture 1: Introduction to GIS (Chapters 1 and 2)
Sep 10	Lecture 2: Maps and Mapping (Chapters 3, 4, and 5) Final Project - Introduction
Sep 17	Lecture 3: Coordinate Systems and Projections
Sep 24	Lecture 4: Datums, Scale and Accuracy
Oct 1	Lecture 5: Data Models and Sources
Oct 8	Lecture 6: Spatial Analysis
Oct 15	Midterm Project Open Lab
Oct 22	Lecture 7: Spatial Analysis Part II Mid Term Presentations Group I
Oct 29	Lecture 8: Raster Analysis Mid Term Presentations Group II
Nov 5	Lecture 9: Raster Analysis Part II
Nov 12	Lecture 10: Remote sensing - How does it work applications and data sources
Nov 19	Final Project Open Lab
Nov 26	<i>Thanksgiving Recess*****</i>
Dec 3	Lecture 13 – Wrapping it all up!!
Dec 10	Final Project Open Lab
Dec 17	Final Project Presentation

Three Rivers Community College (CIV, ENV, GIS) K146 - Introduction to GIS Fall 2014 Grading

60% - Class Assignments – Assignments will be exercises from the above text and/or additional supplements that I have provided. These assignments will be performed in class. If the assignment is not completed in class, it is necessary that the assignment be completed on your own. All assignments must be emailed to me in electronic form as a pdf. In other words, I would like the final maps for each assignment exported from ArcMap as a pdf and emailed to me at alisa.morrison@yahoo.com. Assignments should be saved as your first initial and last name_assignmentXX_date (example: `jsmith_assignment1_091012`). If there are any issues for handing in assignments, please let me know as soon as possible.

Lab reports are graded on a scale of +/-).

15%-Mid Term Paper- During the semester, you will begin to see the numerous applications of GIS. The mid-term paper involves researching and writing a short (3-5 page) paper investigating the use of GIS in some field. This paper will require a minimum of 4 scientific references from peer-reviewed journals. You will also be required to give a 5 minute talk on your paper.

20% - Final Project Assignment – During the semester you will complete a GIS project that will involve the analysis of a problem, the collection of data, and the creation of presentation quality maps and graphs. You will also be required to give a 5 minute presentation of your project.

5% - Attendance/quizzes/bonus – During the semester, there may be unannounced quizzes. Also, extra effort will get extra credit.

Course Grading

Final letter grades for the course	Percentage of points	Percentage range
generally mean the following percentage of points: Letter grade		
A	95	93.3 - 96.7
A-	91.65	90.0 – 93.2
B+	88.3	86.7 – 89.9
B	85	83.3 – 86.6
B-	81.65	80.0 – 83.2
C+	78.3	76.7 – 79.9
C	75	73.3 – 76.6
C-	71.65	70.0 – 73.2
D+	68.3	66.7 – 69.9
D	65	63.3 – 66.6
D-	61.65	60.0 – 63.2
F	<60.0	< 60.0

Course Policies

Class Etiquette:

The use of cell phones and personal handheld electronic devices during class detracts from the learning environment for both yourself and your classmates. Please place all cell phones on silent during the class. If you must answer a call, please leave the classroom quietly to do so. During exams and quizzes, please turn in your exam/quiz prior to leaving, as it will be considered complete.

Late/Missed Work: All assignments are due the following week after it has been assigned unless otherwise specified. Late labs will receive grade reductions as follows: -1 one week late; -2 two weeks late;

After this time the assignment will not be accepted and the student will receive a zero for the lab assignment

Attendance: Missing a day of lecture/lab without prior arrangements will not result in a zero for an assignment. However, the student will be solely responsible for learning any missed material and handing in missed assignments. My contact information is provided at the top of this syllabus. If you inform me well in advance of an absence, I will be happy to make appropriate accommodations.

Make-ups: I need adequate notice to schedule make-ups: at least two weeks for normal life situations and at least one day for sudden emergencies. In case of a dire emergency, contact me as soon as you can through email. I reserve the right to ask for documentation of an emergency-related absence, and to deny a make-up in the absence of a clear life-or-death situation.

Academic Conduct: It is expected that each student will turn in only his or her own work. Violations of the Student Code are taken seriously. This includes copying or sharing answers on tests or individual assignments, plagiarism, or having someone other than yourself do your work. Depending on the act, a student could receive an F grade on the test/assignment, an F grade for the course, or could be suspended or expelled.

Special Needs

Please inform me as soon as possible if you require any accommodations in addition to those provided here.

Counseling and Student Development Services at TRCC:

If you have a question regarding a special learning need that may affect your progress in this course, please contact Student Services, Room A-119 (860-383-5217) as soon as possible. *Please note that I cannot provide special learning accommodations until I receive the necessary paperwork from the college's Office of Counseling and Student Development Services. Accommodations cannot be provided retroactively.*

Available Support Services:

If you need additional assistance for this course, tutors, study skill workshops, and other course assistance can be arranged by contacting the Tutoring and Academic Success Centers, Room C117 (860-892-5713).

If you have not yet used the library to obtain information and search scientific articles, you may contact the Library for more training and information (860-885-2346).

Religious Holidays:

Sec. 10a-50. (Formerly Sec. 10-334g). Absence of students due to religious beliefs. No person shall be expelled from or refused admission as a student to an institution of higher education for the reason that he is unable, because the tenets of his religion forbid secular activity on a particular day or days or at a particular time of day, to attend classes or to participate in any examination, study or work requirements on such particular day or days or at such time of day. Any student in an institution of higher education who is unable, because of such reason, to attend classes on a particular day or days or at a particular time of day shall be excused from any examination or any study or work assignments on such particular day or days or at such particular time of day. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school because of such reason an equivalent opportunity to make up any examination, study or work requirements which he has missed because of such absence on any particular day or days or at any

particular time of day. No special fees of any kind shall be charged to the student for making available to such student such equivalent opportunity. No adverse or prejudicial effects shall result to any student because of his availing himself of the provisions of this section. For the purposes of this section, "institution of higher education" shall mean any of the schools comprising the state system of higher education, as defined in section 10a-1. (P.A. 75-367, S. 1.)

KEYS TO SUCCESS

Readings:

To ensure success in the classroom and to take active participation in your learning, each assigned reading should be read prior to the week assigned. Reading the material ahead of time will allow you to gain a familiarity with the concepts prior to learning about the concept in class. This will increase your understanding and allow you to participate by asking questions on the material that you find complex or confusing.

Software:

The "Getting to Know ArcGIS Desktop (for ArcGIS 10.1)" text book comes with a 180-day free trial download of ArcGIS 10.1 It is highly recommended that you download the ArcGIS 10.1 software on your personal computer to aid in completing the assignments.

ArcGIS 10.1 is installed on the computers in the Open Computer Lab, Room E-112

Attendance:

Although attendance is not mandatory, attendance is necessary to succeed in this course.

Academic Dishonesty:

Plagiarism means using someone else's statement word-for-word without quotation marks (even if you cite it) or using someone else's ideas, even if you paraphrase them, without proper attribution of credit through a citation.

Student Code of Conduct: All students should be aware of the guidelines for the Student Code (http://www.trcc.commnet.edu/Div_StudentServices/StudentPrograms/PDF/TRCC-StudentHandbook.pdf) College Policies: Student Conduct and Discipline Policy, a portion of which is repeated below:

Section 3: Expectations for Student Conduct

Consistent with the Student Conduct Philosophy set forth in Section 1 of this Policy, students are expected to:

"2. Demonstrate academic integrity by not engaging in conduct that has as its intent or effect the false representation of a student's academic performance, including but not limited to: cheating on an examination, collaborating with others in work to be presented, contrary to the stated rules of the course, plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed or otherwise obtained) as one's own, stealing or having unauthorized access to examination or course materials, falsifying records or laboratory or other data, submitting, if contrary to the rules of a course, work previously presented in another course, and knowingly assisting another student in any of the above, including an arrangement whereby any work, classroom performance, examination, or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed."

The penalty for plagiarism on Lab reports is a zero.

The penalty for cheating on a quiz or exam will be a zero on the affected assignment.

Digication:

As a student you will maintain an online learning portfolio using a college-designed template in Digication. Through this electronic tool you will have the opportunity to monitor your own growth in college-wide learning. It may even help you determine a major that is best suited to you. You will be able to keep and maintain your learning portfolio after graduation. A Three Rivers General Education

Assessment Team will select and review random works to improve the college experience for all. If your work is selected and reviewed for assessment purposes, it will remain anonymous and private. Digication provides a “place” where you will connect your learning from the classroom, college, and life in general. Sometimes when you review all of the work you have done and think about it, you end up learning something different and perhaps unexpected. Please review your course outlines to determine what assignments to upload into the TRCC Digication template and please post your own choices, as well. Have fun in learning!