

# COURSE SYLLABUS – GST 260 Integration of GIS and IS This syllabus is not considered a legal document and is subject to change.

Course Number, Title, CRN, Section: GST-260 Integration of GIS and Information Systems CRN 1435, Section 101

Semester, Year, Day, Time, Location: Fall 2018, Online available through Blackboard

Instructor Name: Mrs. Megan Click

**Office:** *221* 

**Telephone:** 304-710-3405 **E-mail:** clickm@mctc.edu

Office Hours: M: 9-10am; 11:30-12:30

T: 9am to 12pm W: 9am to 11pm R: 9am to 11am

**Course Description, Credits, Prerequisite(s):** This course is designed to integrate Geographic Information System (GIS) and Remote Sensing (RS) concepts utilized with GIS and image Processing software. Various software systems such as ERMapper, IDRISI/ Kilimanjaro, and ArcGIS will be used to illustrate systems integration in solving geospatial problems with technical solutions. 3 credit hours, (PR: GST 165)

Required Textbook(s): The GIS Guide to Public Domain Data ISBN: 9781589482449

Required Materials: Computer, internet access, thumb drive, log book

Recommended Materials: n/a

**Account Requirements:** All students must have an MCTC account with user name and password and communicate with their instructors via MCTC e-mail.

All students are required to complete their *Starfish* profile and use *Starfish* to schedule appointments with their advisor(s) and other services. Students can login to *Starfish* from the link in *Blackboard*. Students should check their MCTC email daily for incoming messages and *Starfish* alerts.

All students are required to complete online assignments and assignments posted on Blackboard.

MCTC IT Helpdesk: Call (304)710-3470 or email <a href="mailto:helpdesk@mctc.edu">helpdesk@mctc.edu</a>

24/7 Blackboard Help Desk: Call 304-293-5192 or email helpdesk@mail.wvnet.edu

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**Learning Outcomes:** After successfully completing this course, you will be able to:

- 1. Learn inventory collection techniques using GIS and GPS technologies.
- 2. Explore technical software packages.
- 3. Explore data types and integration methodology.
- 4. Utilize modern day GIS best practices using software, hardware and equipment.

# **General Education Learning Outcomes:**

<b>Covered</b>		<b>Embedded in the following</b>
<b>(√)</b>	<b>General Education Learning Outcomes</b>	<b>Course Learning Outcomes</b>
	I. <u>Communication</u>	
	a. The student will compose coherent, unified written documents that	
	demonstrate correct mechanics and style, as well as appropriate	
	documentation of sources.	
	b. The student will communicate verbal and nonverbal messages	
	appropriate to the audience and situation.	
x	II. Critical Thinking	1-4
	The student will use appropriate evidence and sound reasoning to make	
	a judgment.	
	III. <u>Cultural Intelligence</u>	
	The student will demonstrate an understanding of the complexity of	
	elements important to members of another culture in relation to its	
	history, values, politics, communication styles, economy, or beliefs and	
	practices.	
	IV. Numerical Literacy	
	The student will apply mathematical reasoning to solve quantitative	
	problems.	

\*provide the number(s)

**Assessment of Learning Outcomes:** Your final grade will be based on chapter assignments, exercises, and a final project.

# **Evaluation/Grading:**

Chapter Exercises 1000 Points
Research Project Proposal 100 Points
Final Project Presentation 100 Points
Final Project 100 Points

TOTAL 1300 Points Available

**Due Dates:** Assignments are due weekly and are to be submitted prior to Midnight Sunday of the week they are assigned.

**Make-up Policy:** An excused absence will consist of a medical doctor's dated excuse or a proven death in the immediate family. Work missed with an excused absence must be made up within three days of the return to

class. Exams missed during an excused absence must be taken within one week of the student's return to class; exams missed during an unexcused absence will be recorded as zero. If a student must be absent, it is his/her responsibility to do any work assigned before returning to class.

# **Student Conduct Classroom Policy:**

- 1. **Electronic Devices** Turn off your cell phone and all electronic devices and put them away before class starts so you can focus on the class discussion and not cause a distraction for others. Do not "text" or use laptops during class.
- 2. **Respect** You will be exposed to a variety of viewpoints, values and opinions in college that will differ from your own. All students in this class should feel comfortable expressing their viewpoints and concerns in class. You are an important part of creating an atmosphere that makes this possible. This applies to your instructor(s) also!
- 3. **Be Honest-** Your instructors and fellow students expect you to choose to act with integrity in all your classes, including this one.

See <a href="http://www.mctc.edu/assets/editor-uploads/2017-18 FINAL Mountwest Catalog 9 13 17 B.pdf">http://www.mctc.edu/assets/editor-uploads/2017-18 FINAL Mountwest Catalog 9 13 17 B.pdf</a> for Mountwest Community & Technical College's Student Code of Conduct for more clarification

Students who engage in disruptive behavior and/or violate the instructor's policy for classroom etiquette that disrupts the learning environment may face disciplinary action under the Mountwest CTC Student Code of Conduct. Disciplinary action may include a warning and/or removal from the course and/or program.

**Faculty Response/Grading Timeframe Expectations:** Student emails and messages (within Blackboard) will be answered in 24-48 hours excluding weekends. Assignments will be graded in 7-10 business days from the date the assignment is due and or received.

#### **College Wide Student Attendance Policy:**

To comply with federal financial aid and loan disbursement guidelines the college adopted an Attendance Procedure. This procedure was effective Fall 2013, with revisions Spring 2016/Fall 2016, and has the following key elements:

- To obtain credit for a course a student must attend at least 85% of the contact hours for a particular course. However, instructors are given the option of allowing a student to complete the course based on the student's documented circumstances and his or her progress in the course.
- Students should be advised that absences in excess of 15% of the total class meeting may result in being dropped from the course. Note: Some departments/programs may have additional attendance guidelines and related grading policies. The instructor shall detail the specific attendance policy for his/her class. Students are responsible for all course work missed.
- A student in an on-campus course missing a cumulative 15 percent of the class meetings and/or not keeping up with the course assignments as specified in the course syllabus may be withdrawn by the instructor.
- Attendance in online courses is defined as active participation and must be regular and substantive. Active
  participation is defined by the engagement activities available through the Learning Management System (LMS)
  (discussion board assignments, submitting/completing assignments, communicating with instructor about
  academic subject matter, participating in an interactive tutorial or computer assisted instruction, completion of

assessments, etc.). A student in an online course must actively participate in the course by completing the required activities as described in the Instructor's syllabus. Simply logging into an online class is not sufficient, by itself, to demonstrate attendance.

# **Academic Support:**

The Academic Skills Center in room 103 provides the following resources:

The Academic Skills Center (ASC) is operated by a director and a highly qualified staff of math instructors and peer tutors. In addition to working with teachers, students have access to computers and videos to assist in building academic skills and refreshing existing skills.

The ASC offers drop-in tutoring and study groups for <u>all</u> math students.

**ASC 099** is the co-requisite to MAT 100 and MAT 144. Students enrolled in ASC 099 are required to attend tutoring sessions.

Academic Skills Center phone number – (304) 710-3400

**Hours of operation:** Monday – Thursday 8:00 a.m. – 6:30 p.m.

**Peer Tutoring** is a free service available to current students who are interested in receiving one-on-one assistance from a peer who has successfully completed the course. **Study mentoring** is a free service in which faculty provide organization and study skills assistance. To make an appointment with a peer tutor or study mentor, please contact Ms. Wendy Carter at <a href="mailto:carter14@mctc.edu">carter14@mctc.edu</a> or (304)710-3400 extension 1011 or stop by the Academic Skills Center in Room 103.

Located on the 1<sup>st</sup> floor of the Main Building in **Room 103D**, the **Mountwest Writing Center** offers you a 30-minute, one-on-one tutoring session for any written assignment. Bring a printed draft of your paper and a copy of your professor's assignment sheet, and your Writing Center instructor will guide you in learning how to revise grammar usage, sentence structure, organization, thesis and paragraph development, and much more. Walk-ins are welcome. No appointments are necessary but are accepted. Please contact Mr. Jesse Riggs, coordinator, at <a href="mailto:riggsj@mctc.edu">riggsj@mctc.edu</a> or (304)710-3437.

Hours of operation: Monday – Thursday 9:00 a.m. – 6:30 p.m.

The **Online Writing Center**— If you are currently enrolled in a Mountwest Community & Technical College program, you can access the Mountwest Online Writing Center to submit a digital copy of your draft for evaluation or request a video conference with a Writing Center tutor. Just click the Online Writing Center link in the Student Resources navigation pane on your Blackboard landing page and follow the steps to enroll.

Mountwest Community & Technical College provides access to **Brainfuse**, an online tutoring service that can be accessed through any *Blackboard* course under "Course Tools."

<u>Procedure for Students with Disabilities</u>: Mountwest Community & Technical College is committed to equal opportunity in education for all students, including those with physical, learning, and psychological

disabilities. It is the responsibility of students with disabilities to contact Jill Goheen at 304-710-3368 or Debbie Spencer at 304-710-3369, in the Office of Student Services, and provide documentation of their disability. Following this, a letter will be sent to each of the student's instructors outlining the academic adjustments and/or auxiliary aids he/she will need to ensure equality in classroom experiences, outside assignments, testing, and grading. The instructor and student will meet to discuss how the adjustments and/or auxiliary aids requested will be provided. For more information, please contact Mountwest Community & Technical College Office of Student Services, phone 304-710-3141.

Please contact: Jill Goheen, <u>kelleyj@mctc.edu</u>, 304 710-3368, Student Services Room 101 J or Debbie Spencer, spencerd@mctc.edu, 304 710-3369, Student Services Room 101 M

# **Additional Policies Affecting Students:**

- See Mountwest Catalog at http://www.mctc.edu/
- Academic Honesty refer to the Mountwest Catalog
- Disabled Student Services Contact the Office of Student Services
- Financial Aid Information <u>ofa@mctc.edu</u> (Check MyMCTC for status)
- Student Information at myMCTC (for which you are responsible as a student) <a href="http://www.mctc.edu">http://www.mctc.edu</a>
- Inclement Weather Procedures http://www.mctc.edu/safety/weather-related-closings/

# **Academic Calendar: The link is**

http://www.mctc.edu/assets/editor-uploads/2018 Fall Academic Calendar.pdf

# Important Dates on the Academic Calendar:

August 20, Monday – First Day of Class

# August 27, Monday – Attendance Reporting due by 3pm

September 3, Monday – Labor Day Holiday, College Closed

September 20, Thursday – Last Day to Drop or do a Faculty Withdrawal for 1st 8 weeks course.

October 11, Thursday – Midterm, 1<sup>st</sup> eight weeks ends and applications for Dec. graduation due.

October 15, Monday – 2<sup>nd</sup> eight weeks courses begin and midterm grades are due by 5pm.

October 25, Thursday – Last Day to Drop or do a Faculty Withdrawal for 16-week individual course.

November 22, **Thanksgiving Holiday**, College Closed.

November 29, Thursday, Last day to completely withdraw from fall term, and last day of regular classes.

December 3, Monday thru December 6, Thursday, Final Exam Days.

Final Exam Schedule: The link is http://www.mctc.edu/student-services/registrar/exam-schedule/

# Fall 2018 EXAM SCHEDULE

EXAM	MONDAY	TUESDAY	WEDNESDAY	THURSDAY
HOUR	December 3	December 4	December 5	December 6

9:00 A.M.	CLASSES	CLASSES	CLASSES	CLASSES
TILL	MEETING AT	MEETING AT	<b>MEETING AT</b>	<b>MEETING AT</b>
11:00 A.M.	8:00 MW	9:00 or 9:30 TR	9:00, 9:30 OR	8:00 TR
			10:00 MW	
11:30 A.M.	CLASSES	CLASSES	CLASSES	CLASSES
TILL	MEETING AT	MEETING AT	<b>MEETING AT</b>	<b>MEETING AT</b>
1:30 P.M.	11:00 MW	12:30 TR	12:30 MW	11:00 TR
2:00 P.M.	CLASSES	CLASSES	CLASSES	CLASSES
TILL	MEETING AT	MEETING AT	<b>MEETING AT</b>	MEETING AT
4:00 P.M.	2:00 MW	3:30 TR	3:30 MW	2:00 TR

**NOTE:** All classes meeting at 3:00 p.m. and after that are not listed above will be examined in two-hour time blocks at the first regularly scheduled class meeting during the above examination period. If the two-hour time allowance results in a conflict in exam times, it is the student's responsibility to notify the professor of the later course and to reschedule the later exam. Rescheduled exams must be concluded by Thursday, December 6, at 6:00 p.m.

DEADLINE FOR ONLINE SUBMISSION OF GRADES IS MONDAY, December 10, 12:00 NOON.

#### **COURSE SCHEDULE**

# Week 1: Aug. 20- Aug. 26

Read syllabus

Complete Online Orientation, Learner Responsibility Quiz, and Discussion Board Introduction

Read Chapter 1: Spatial Data and the Public Domain

Watch the Chapter 1 Lecture Video

**Complete Chapter 1 Exercise** 

# Week 2: Aug. 27- Sept. 2

Read Chapter 2: Spatial Data models, vector data, and data quality

Watch the Chapter 2 Lecture Video

**Complete Chapter 2 Exercise** 

#### Week 3: Sept. 3-Sept. 9

**Read Chapter 3: Raster Data and Privacy Issues** 

Watch the Chapter 3 Lecture Video

**Complete Chapter 3 Exercise** 

#### Week 4: Sept. 10-Sept. 16

Read Chapter 4: Spatial Data: True Cost and Local Access

# Watch the Chapter 4 Lecture Video Complete Chapter 4 Exercise

# Week 5: Sept. 17-Sept. 23

Read Chapter 5: National and State Data Portals and Metadata Standards

Watch the Chapter 5 Lecture Video

**Complete Chapter 5 Exercise** 

# Week 6: Sept. 24-Sept. 30

**Read Chapter 6: International Spatial Data Infrastructures** 

Watch Chapter 6 Lecture Video

**Complete Chapter 6 Exercise** 

### Week 7: Oct. 1- Oct. 7

Read Chapter 7: Putting Public Domain Spatial Data To Work

Watch Chapter 7 Lecture Video

**Complete Chapter 7 Exercise** 

# Week 8: Oct. 8-Oct. 14

Read Chapter 8: The Data User as Data Provider

**Watch Chapter 8 Lecture Video** 

**Complete Chapter 8 Exercise** 

Final Project Proposal Due

# Week 9: Oct. 15 – Oct. 21

Read Chapter 9: Public Domain Data on the Cloud

Watch Chapter 9 Lecture Video

**Complete Chapter 9 Exercise** 

# Week 10: Oct. 22- Oct. 28

Read Chapter 10: The Future of Public Domain Data in GIS

**Watch Chapter 10 Lecture Video** 

**Complete Chapter 10 Assignment** 

# Week 11: Oct. 29- Nov. 4

**Project Preparation** 

# Week 12: Nov. 5- Nov. 11

Project Preparation- Submit list of data found and to be used for project

Week 13: Nov. 12 - Nov. 18

**Project Preparation** 

Week 14: Nov. 19- Nov. 25

**Project Preparation** 

Week 15: Nov. 26 - Dec. 2

**Project Preparation** 

Week 16: December 3 @11:30 am

**Final Project Presentation**