#### MT. SAN JACINTO COLLEGE - ONLINE

# INTRODUCTION TO GEOGRAPHIC INFORMATION SCIENCE FALL 2020

#### August 17th – December 18th (18-week session) ONLINE

Course Code: GEOG 115, Section 4223, 3 units,

Online Instructor: Emina Sulych, GISP Phone: 760-799-4886 cell esulych@msjc.edu

Website: <a href="https://www.msjc.edu/geographyandgis/">https://www.msjc.edu/geographyandgis/</a>

Office Hours: No meetings at the campus. Online meeting or desktop share session can be scheduled if and when student make

request and at least 24 hours in advance.

#### Required Text:

Mastering ArcGIS, 8th edition, by Maribeth Price. Exercise data is provided by the author with the text book and is web based at:

http://highered.mheducation.com/sites/1259929655/information\_center\_view0/index.html. It is student's responsibility to order textbook when class starts. CANVAS also provides students with Connect access to the text and downloadable data required for this class.

# Required Application:

A student demonstration version of ESRI's software ArcGIS Desktop10.7 or higher is available from ESRI (<a href="www.esri.com">www.esri.com</a>). (You can find DVD copy of the software at the bookstore MSJ Campus – check for hours of operations). Your computer needs to be compatible with Windows 7, 8 or 10. Check system requirements /

your computer's combability:

https://desktop.arcgis.com/en/arcmap/latest/get-started/setup/arcgis-desktop-system-requirements.htm

**ArcGIS software is not compatible with Apple/ Mac**. For installation process contact ESRI and/or go to:

http://gis.harvard.edu/services/blog/installing-arcgis-desktop-mac

Students are required to have software that creates word document, spreadsheets or .cvs file types, presentations, .zip and .pdf converter - such is MS Word, Excel, Power Point, 7Zip or UnZip and Adobe Acrobat. If you do not have a secure internet connection for taking the exams or enough bandwidth to watch online videos you MUST make arrangements to use another computer or use a Remote Desktop: <a href="https://rdshelp.msjc.edu/index.php/RDS">https://rdshelp.msjc.edu/index.php/RDS</a> Help.

## Recommended Preparation:

Introduction to Computer Information Systems and Data Processing (CSIS 101) and working knowledge of MS Windows programs.

#### Course Description:

This course prepares students with the geographic concepts necessary for technical application of Geographic Information Systems (GIS). Topics include data structure, acquisition, integration and manipulation. Through practical applications in GIS students will use scientific and technical methods of inquiry to analyze tabular and spatial data for geographic trends, patterns and relationships.

#### Course Objectives:

Upon completion of this course students will be able to:

- Compare and contrast conventional mapping technology to GIS automated technology.
- Distinguish basic cartographic principles in map production.
- Recognize basic map coordinate systems and map scales.
- Formulate and interpret geographically referenced data.
- Define problems associated with acquisition and accuracy of data used in GIS.
- Recognize the two basic GIS data structures (raster and vector).
- Compare and contrast which data structure is best suited to a particular GIS application.

- Comprehend and apply basic concepts used in GIS database manipulation.
- Identify the basic hardware and software requirements needed for GIS applications.
- Identify and analyze how GIS is used in scientific, business and government applications.

#### Course Structure:

The course consists of 5 hours of online (virtual) lecture and lab each week. Lectures and assignments are posted on Canvas. Live Sessions would be announced and I will cover live demonstrations of the software on first scheduled session.

#### Attendance/Participation:

This is online course and your attendance / participation is recorded by Canvas. Keep in mind that you will spend at least 5 hours a week for reading material, completing assignments, exams, discussions etc. If you are "absent" for 2 weeks in a row I will drop you. You will be responsible for a "W" or "F" on your transcript for not attending or completing assignments.

## Grading System:

Grading Scale: 90-100=A, 80-89=B, 70-79=C, 60-69=D, <60=F. I do not grade on a curve!! But I do give credit for extra initiative and enthusiastic participation:). All required assignments and tasks will be assigned on Sunday's under Announcement Page (CANVAS). Every week assignments will consist of reading textbook material, completion of exercises following chapters, posts on discussion board, quizzes etc. I also expect student's ideas and creativity to be part of every assignment. Assignments will be submitted in MS Word or .PDF in CANVAS. Homework assignments are due on Sunday's by midnight at the end of each week.

#### **Assignments:**

**Discussion Board:** This is a forum type assignment and it is worth 5 to 20 points – you will respond to the main treads posted by instructor and respond to at least two posts by your classmates. Your posts should be on academic level, clear of grammar and spelling errors and consist of well researched material.

**Homework assignments:** 20 points each; will be submitted in MS Word. Each exercise is related to the discussed topic and textbook chapter.

**Quizzes:** 50 -100 questions, true/false/multiple choice. Quizzes will be "open book", online, with set time limit to complete. There will not be an opportunity for "make up" quizzes, unless you notify me of your absence ahead of a time.

**Final Project:** 150 points – will be well earned! Final Project is a summary of your knowledge and learned skills. Students will be provided with requirements at the first live

session meeting. This project is time consuming and complex. GIS professionals do these types of projects on daily basis at workplace – you will get a taste of demanding tasks and polish your GIS skills. You will not be able to pass the course unless you submit Final Project.

**Virtual Campus Course:** 20-50 points earned for completion of each Virtual Campus course(s). Example: 24 hour / 8 module assignment – at the end of each module there is an exam. You must earn 8 out of 10 points to pass. Proof of completion of this course is a Certificate which you will turn in for full credit on this assignment. How many VC's will be assigned will depend on ESRI's availability.

On every assignment, you need to clearly write your name, date and assignment number. i.e. Esulych\_HW#1\_01/05/2019.

Please use MSJC email account and if you absolutely have to use your personal email account, then state your full name in subject line.

#### How to succeed in this course:

- Going to school is a job: treat it like one; use benefits of online environment and learn at home.
- Ask questions email, discussion board, web search, learn beyond you will get an answer.
- Participate in class discussions.
- Take notes on lectures, films, readings, and class discussions and review notes.
- Read the chapters that correspond to class topics during the week in which the topic is discussed.
- Prepare for class review sessions prior to each exam.
- Prepare for live sessions with questions.
- Keep track of your total accumulation of points.
- If you are thinking about dropping the course because you are having trouble, please talk to me!
- If you are having trouble with completing assignments, please talk to me!
- If you do decide to drop the course, please complete the process through enrollment services.
- Bring your own experience and share with rest of us your ideas. We learn from each other!

#### The key to your success as a student is TIME MANAGEMENT!!!

For every unit, you are enrolled in you should expect an average of 3 hours per week dedicated to the subject over the 15-week semester. Thus, a 3-unit course may require 9 hours per week for in class lecture and out of class preparation. If you need help with any assignment or completion of this course, please contact me!

## Virtual Classroom Etiquette:

Cheating, plagiarism, or other forms of academic dishonesty are subject to disciplinary sanctions. If you cheat on any assignments or if you plagiarize on an assignment, you will receive a zero for that work. If you do it again, you will be dropped from the course and reported to college administration "(Section 605.04B Board Policy): Cheating, plagiarism, or other forms of academic dishonesty are subject to disciplinary sanctions."

In a public place of higher education, it is the instructor's responsibility to maintain a safe and mutually respectful learning environment. Disruptive or disrespectful behavior towards other students or me will not be tolerated. Therefore, the first incident of disruptive or disrespectful behavior will result in dismissal from the class. The second incident will be referred for disciplinary action by college administration. The third incident may result in expulsion from the college.

#### Academic Support:

is available for all students through the services provided in each campus' Learning Resource Centers. Inquire at each center regarding hours of operation and specific subjects for which tutors are available. In addition, some subject area specialist tutors are available for courses through specific departments. Ask your instructor if specialized tutors are available for your individual course.

#### **Disability Statement:**

Mt. San Jacinto College abides by the Americans with Disabilities Act and Section 504 of the Rehabilitation Act of 1973 that prohibits federal and state agencies or programs from discriminating against qualified individuals with disabilities. Students in this course who have a documented disability, that limits a major life activity which may have some impact on your work in this class and for which you may require accommodations should meet with a counselor in Disabled Student Services Program (DSP&S) as soon as possible. DSP&S is located in modular #1019 on the Menifee Valley Campus, room # 1112 on the San Jacinto Campus and are open Monday – Thursday 8:00 AM – 5:00 PM or visit www.msjc.edu/dsps.

# College Computer and Internet Access Policy:

No downloading of illicit material from the web (such as pornography). No downloading of limited use software without licensing agreement. Improper use of data license agreements will be reported to college administration. Please refer to the Acceptable Use Policy posted in each computer lab.