## Montgomery College Rockville Campus Department of Applied Technology



## Course Syllabus – Fall 2018

## **GEOG260 Introduction to Geographic Information Systems** Thursday 6:00 – 9:30 pm

**Instructor:** 

Office Hours:

Office:

Daytime number:

E-mail:

Text: Price, Maribeth. *Mastering ArcGIS*, 8th Ed., McGraw Hill, 2019.

\*USB Flash Drive

INTRODUCTION: This course will introduce Geographic Information Systems (GIS) and will familiarize you with the most widely used GIS, ArcGIS, a part of the ESRI GIS software. GIS is a combination of software and hardware with capabilities for manipulating, analyzing, and displaying spatially referenced information, i.e. information that is referenced by its location on the earth's surface. Through demonstrations and handson computer use, you will learn to display and analyze spatial data, query databases, change the nature of the spatial data, and design maps for presentation.

- ❖ Define Geographic Information Systems;
- Apply cartographic principles of scale, resolution, projection and data management to a problem of geographic nature;
- Identifying and accessing publicly available datasets;
- Utilize modern industry-standard GIS software for conducting basis GIS analyses, and producing cartographic output

OBJECTIVES/OUTCOMES: By the end of the semester, students should understand the way a GIS operates; ability to manage spatial data; application as a tool for problem solving; and should have the skills necessary to manage spatial databases and create appropriate maps from the databases.

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COURSE GRADE will be determined as follows: 1000 points total

**Exams = 2 @ 100 points each

***Lab Assignments = 350 points (10 @ 35 pts. each)

***Practical Lab = 125 points

****Term Project = 325 points
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\*Final grade will be determined on the following scale:

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90-100\% = A 80-89\% = B 70-79\% = C 60-69\% = D 59\% and below = F
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\*\*You will have <u>two</u> exams during the semester. These exams will cover lecture and reading material before the exam date. The make-up (essay) will be given at the regularly scheduled time for final exams. After the exams have been graded, they will be returned to the students for review and discussion.

\*\*\*You will have ten lab assignments throughout the semester pertaining to lecture material and that week's topic. You should be familiar with the basic skills of file manipulation (copying, moving files, etc.) The GIS concepts introduced in this class are similarly basic ones concerning spatial data and its manipulation by computer. Students will have lab time to work on these assignments. Assignments will be due at the beginning of the next class period. No exceptions.

\*\*\*\*A practical lab will be conducted as an in-class assignment using the tools and processes learned during the semester.

\*\*\*\*\*A term project will be required for this course. This project will require out-of-class time. Students will have lab time to work on the term project. **Due December 6, 2018** 

**NOTE**: This class is designed to introduce both GIS concepts and hands-on skills in GIS operations. Consequently, we will build on previously learned material and skills. You should read the assigned textbook chapters before the respective lectures. Preparing this way will give you the background to what is being covered that week in class. Though time for practice and lab assignments is built in during class periods, you will need to schedule some extra lab time during the week, especially to work on your Term Project.

You are here to learn and work on GIS skills. The computers are not for checking email, playing games, or for any used beyond those that are class related.

It is very important that you communicate with me effectively via phone, e-mail, or appointments. I will make myself available to you during the week by appointment. Otherwise, I do have office hours before class on Thursday. I want this semester and your geography course to be a positive experience; therefore, I will strive to make it productive, educational, and enjoyable!

Participation and attendance is important for the material presented in this course. Excessive absence will reduce your grade for the course.

Honor code will be in effect for the student in the performance of class participation, assignments, and examinations. Work groups and research teams are encouraged as long as the individual effort is recognizable in the final product.

Plagiarism is defined as the unauthorized use or close imitation of the language and thoughts of another author and the representation of them as one's own original work. Plagiarism is a very serious offense on any assignment or term project, which will result in a zero.

Disability Support Services: Any student who may need an accommodation due to a disability, please make an appointment. A letter from Disability Support Services (R-CB122; G-SA175; or TP-ST120) authorizing your accommodations will be needed. Any student who may need assistance in the event of an emergency evacuation must identify to the Disability Support Services Office; guidelines for emergency evacuations for individuals with disabilities are found at:

www.montgomerycollege.edu/dss/evacprocedures.htm.

Assessment level: All students are required to have the required assessment level and prerequisites (unless approved by the professor) as stated in the college catalog under class descriptions.

If you are a veteran or on active or reserve status and you are interested in information regarding opportunities, programs and/or services, please visit the Combat2College website at www.montgomerycollege.edu/combat2college.

Montgomery College is a smoke free campus!

