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Geographic Information Systems (GIS) Course Syllabus 2021-22

Instructor: Mr. Bain

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Office Hour: Office Hours: Monday (4:10pm-5:00pm) & Wed/Fri (1:05 pm-2:35 pm)

Welcome to your Geographic Information Systems (GIS). The purpose of this course is to provide instruction to the student in order to earn high school credit. GIS is an applied course for students who have already mastered basic computer skills and wish to apply those skills in novel contexts with the use of geographic information systems (GIS) and geospatial technologies. Upon completion of this course, proficient students will develop the ability to reason spatially and analyze relationships among concepts; to capture, store, validate, integrate, analyze, and display data related to locations on the Earth; and to create, query, maintain, and modify geospatial datasets. Students will learn how GIS is used as a decision-making and data management tool to solve problems in various industries and fields. Furthermore, students will use GIS software to create a spatially accurate map with data retrieved from online or locally available resources.

About Office Hours

During office hours, I will sit down and go through and answer emails and other communication from the class. This will also be a time when I will be available for face-to-face/virtual meetings. When sending emails, please be as descriptive as possible, for me to understand your question or problem. Please allow 24 hours for my reply. I can also be available for tutoring on Monday's if you make an appointment with me ahead of time. Keep in mind; that office hours are in addition to my regular conference periods (4th and 5th) where I also can respond to emails or other inquiries.

Course Description

This course is divided into six units, which you will go through in order. The units are:

Unit One: Operating Systems and Networking

Unit Two Introduction to GIS

Unit Three Mapping

Unit Four Introduction to ArcGIS

Unit Five Data Analysis in GIS

Unit Six Introduction to Project Management

Course Objectives

Upon completion of this course, you will be able to

1. Demonstrate use of GIS to:
 - a. Identify problems
 - b. Monitor change
 - c. Manage and respond to events
 - d. Perform forecasting
 - e. Set priorities
 - f. Understand trends
2. Use GIS software to create maps and to perform analyses.
3. Manage a GIS project

Class Policies

• Attendance Requirements

You are expected to do the following to meet attendance requirements during the online experience:

- Attend class.
- Login to the HUB, daily for announcements and to check the course assignments.
- Actively work in the HUB [daily] by completing and submitting all assignments by the deadline.

• Assignments

All assignments are due by the due date. I will post assignments with dates due in the HUB and discuss assignment specifics during our live classes. I will also send out reminders via Remind. Assignments will be considered late if not submitted to me in the designated time period. Ten points will be deducted for each day an assignment is late. Assignments more than three days late, will not be accepted, and will receive a zero

• Missed Classes

You (the student) are responsible for obtaining material distributed and for making up work done in class when you are absent. You must make prior arrangements with me if you need to make up a test or quiz or if you need extra help. You may discuss making up assignments during asynchronous class time. The Best Practice is to discuss during class, but you may also send me an email request.

• Academic Dishonesty:

Plagiarism and cheating are serious violations of school policy and will not be tolerated. Cheating on a test or assignment will result in grade of a zero and can lead to failure of the class.

• Course Rules, Expectations, and Standards

I will expect you to participate in all discussions when directed to do so. Be respectful and courteous to all students involved in the discussions. Foul or abusive language will **NOT BE TOLERATED!**

Grading Procedures

Each item submitted will be graded as acceptable or unacceptable. Unacceptable assignments and those that need improvement will be returned with suggestions and must be redone by the deadline. Acceptable assignments will be graded.

Your grade in this course will be calculated by the following:

- Classwork (Daily Assignments, Homework, Minor Checkpoints) 50%
- Daily (Work Ethics, Hub Activities, Participation) 20%
- Major (Major Assessments) 30%

Textbook and Supporting Materials

- There is no state adopted textbook for this class. We will use a variety of Web resources during this class. Much of the Web lessons are provided by Esri.com on their cloud-based ArcGIS platform. Printed texts are provided by Digital Quest. You will link to the lessons by accessing the lesson and resource links in your course. I will make assignments available a few days prior to the week assigned so that you may work ahead if you like.
- Needed Supplies and Materials: One (1) – 5 Subject Spiral Notebook and Blue or Black ballpoint pens for taking notes.

Classroom Management

School policies will be enforced. In addition, students will be expected to:

1. **PRACTICE GOOD MANNERS AT ALL TIME.** Respect yourself, your classmates, and teacher. Absolutely, no talking or getting up while the teacher is talking, or the class is engaged in whole-group instruction or activities.
2. **BE ON TIME.** Students should be in the classroom and in their seats when tardy bell rings.
3. **BE IN PROPER DRESSCODE.** You are required to have your pants pulled up, ID on, and in appropriate approved attire before you enter the classroom. Please check yourself before crossing the threshold.
4. **BE PREPARED FOR CLASS.** Please bring all materials and supplies to class every day.
5. **BEGIN WORK IMMEDIATELY.** Upon entering the class, each student is expected to look at his/her Weekly Assignment Sheet and/or board; then proceed with preparations for the day's work. For example, take out binder, pen, flash drive, and other materials as needed.
6. **KEEP YOUR WORK AREA NEAT AND CLEAN.** Your workspace must be free of clutter and hazards. Place backpacks, purses, and other items not needed for this class in the assigned storage area.
7. **TURN IN WORK ON TIME.** Due dates on assignments will be followed strictly.
8. **USE ASSIGNED COMPUTER.** Under no circumstances can the student move to another computer without permission from the teacher.
9. **LISTEN CLOSELY AND FOLLOW DIRECTIONS.**
10. **CLEAN AROUND WORKSTATION AND RETURN ALL MATERIALS ABOUT FIVE MINUTES BEFORE END OF CLASS.**

11. YOU ARE DISMISSED BY THE TEACHER AND NOT THE BELL. Please remain seated until dismissed by the teacher.

12. FOLLOW SCHOOL RULES AND ALL OTHER CLASSROOM RULES AS STATED AND/OR POSTED.

Modification/Change: Course Schedule and Lessons are subject to change to meet the needs of all students