



Phone: 713-688-1361

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COURSE SYLLABUS

GEOGRAPHIC INFORMATION SYSTEMS (GIS)

CAREER AND TECHNOLOGY EDUCATION (CTE) DEPARTMENT
WALTRIP HIGH SCHOOL

1900 W. 34th Street ▪ Houston, Texas 77018 ▪ 713-688-1361 ext. 515212 ▪ rblackmo@houstonisd.org

Tutorial/Makeup Times: Tuesday-Thursday mornings (7:30-8:25)

COURSE PURPOSE/OBJECTIVES:

Purpose:

Geospatial Technology impacts all of us in our daily lives. In the last decade you could count on one instance of geospatial technology daily - the one map that influenced your day, your week, and your vacation. Today, GPS, satellite imagery, political maps, news, TV, social networking, smartphones, tracking pets, tracking crime, bus routing, geospatial technology is all around us. Students will be involved in creating geospatial solutions. Geographic Information Systems is a course designed to introduce students to Geographic Information Systems and Remote Sensing technology through academic study and applied instruction. This course emphasizes student learning through case studies and logical in-class thinking exercises. The basics of managing spatial data to generate maps through GIS will be covered, within class, hands-on lab practice. The student will be able to do homework practice with online GIS tutorial exercises.

Geographic information is increasingly relevant and often critical to businesses and organizations. A geographic information system (GIS) forms the basis for accessing geographic information, mapping, analysis, and decision making. This course emphasizes and ties together the key topics of GIS as they are used in business settings. Students will learn how today's businesses and organizations rely on the use of geographic information in all aspects of their operation; make decisions based on location; manage better through GIS; and form spatial strategies for organizations.

Learning Objectives:

Upon successful completion of this course, students will be able to:

- Understand the underlying principles and functions of GIS.
- Apply the steps in developing and implementing a GIS system.
- Analyze real world cases involving GIS and spatial analysis.
- Consider the ethical, legal, and security implications of GIS.
- Utilize spatial data to create maps for business decision making.
- Understand the management, planning, and strategy challenges for uses GIS in organizations.

REQUIRED TEXT AND MATERIALS:

1. There is **no state adopted textbook** for this class. Students will employ a variety of texts, handouts, software, and online resources.
2. **Materials and Supplies:**
 - One **100**-Sheet Composition Notebook
 - One **USB** (flash or jump) **Drive** **Drives must be stored in the classroom*
 - Blue or Black Ink Pen **Work done in pencil will not be accepted. No Exception.*

TEACHING METHODS AND METHODS OF EVALUATION:

1. **Class Meetings:** Important material from the text and outside sources will be covered during our regularly-scheduled class meetings. Regular attendance is critical, and students should take careful notes. Discussion is encouraged, as is student-procured outside material relevant to topics being covered. Bring your notebook and other required materials to every class meeting.
2. **Other Assignments:** Exercises, projects, labs, and other activities will be assigned to reinforce the material. Computer-based assignments must be completed in the classroom.
3. **Grading:** The grading system for each grading period is as follows:
 - **Daily** (*Activities, Minor Checkpoints*) 40%
 - **Participation** (*Work Ethics*) 20%
 - **Major** (*Test/Project*) 40%

COURSE POLICIES:

- **Missed Classes:** You (the student) are responsible for obtaining material distributed and for making up work done in class when he or she is absent. You must make prior arrangements with me if you need to make up work or need extra help. You may discuss makeup work or extra help in class during independent practice time. **Standard Makeup/Tutorial Times are Tuesday-Thursday mornings (7:30-8:25). You must makeup all work within three days of returning to class.**
- **Assignments:** All assignments are due on the due date. Late submission of assignments will be assessed a penalty of 15 points per day and will only be **accepted two days late**. Assignments will not be counted late if you turn it in during the first tutorial period occurring after the class in which it was due. Late work submitted during class must be submitted during the first five minutes. It will not be accepted after the first five minutes of class.
- **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.
- **Classroom Courtesy:** No food or drinks allowed. **Turn off** and **put away** cells phones and other personal electronic devices before entering the building.
- **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 everyday.
 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.