

Phone: 713-688-1361 Website: www.houstonisd.org/waltrip



## **COURSE SYLLABUS**

# RASTER-BASED GEOGRAPHIC INFORMATION SYSTEMS (RBGIS)

CAREER AND TECHNICAL 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)

## **PURPOSE/GOAL:**

This course introduces advanced principles of GIS data sets including raster-based information such as images or photographs. Students will study local problems and acquire information including images or aerial photographs, process the data and merge it with vector data. Students will plan, conduct, and present solutions for the locally-based problems while working with the private sector businesses and local government.

In Raster-Based GIS students will study local problems, acquire information, including images or aerial photographs, process the acquired data, and merge the acquired data with vector data. Students will plan, conduct, and present solutions for locally-based problems. The students will learn how to solve locally-based problems. Students will use locally-based problems to acquire data, process the data and merge it with vector data. Students will plan, conduct, and present solutions.

While the demand for GIS may be impacted by economy, the demand for highly-trained individuals remains high. GIS plays a vital role in national security and the economy. Regional workforce demand for Geographical Information Scientist with a variety of specializations remains high.

#### **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 1 ½ inch view binder,
  - One set of **5-tabs Write-on** or **Printable** Dividers
  - 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 Exceptions.

## TEACHING METHODS AND METHODS OF EVALUATION:

- 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 binder, and other required materials to every class meeting.
- 2. **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 makeup 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.
- 3. The students will be evaluated through a variety of checkpoints, including written tests, observation, quizzes, skill-based tests and projects. Occasional *unannounced* written quizzes will be given to help ensure students stay up with skills and come to class on a regular basis. *There will be no make-up for these unannounced quizzes*.
- 4. **Other Assignments**: Exercises, projects, labs, and other activities will be assigned to reinforce the material. Computer-based assignments must be completed in the classroom.
- 5. **Grading:** The grading system for each grading period is as follows:

• Daily/Classwork Labs (5-6), Article Summaries (5), Quizzes (3-4), etc.

40%

• *Major:* Tests (2), Projects (1)

40%

• *Participation:* Work Ethics

20%

# **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 was absent. \*You must make prior arrangements with me if you need to makeup work or need extra help. Makeup/Tutorial: Tuesday-Thursday (7:30a-8:25a) You must submit all makeup 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 and will only be accepted up to two days late. Assignments will not be counted late if you turn it in by the end of the day which it was due. Late work submitted during class must be submitted as you enter the classroom within the first five minutes and prior to the tardy bell. It will count another day late 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: 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. BE ON TIME. Students should be in the classroom and in their seats when tardy bell rings. 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.

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.