

Program: HABITAT RESTORATION

Information form

C:

ENVS 103

D:

INTRODUCTION TO  
GEOGRAPHIC INFORMATION  
SYSTEMS

E:

3

SYSTEMS

(Enter date & section) By:

Calendar Description:

Summary of Revision

Calendar Description:	Summary of Revision
<p>Geographic information systems (GIS) are computer-based systems that capture, store, analyze, and display data that are related to locations on the earth. GIS is used in a wide variety of applications, including urban planning, environmental management, and resource allocation. This course provides an overview of GIS and its applications. Topics include: data collection, data storage, data manipulation, data analysis, and data display. The course also covers the history of GIS and the current state of the field.</p>	<p>1.000000</p>

or an equivalent textbook.

It will be updated periodically.

**O. Course Objectives**

At the conclusion of the course the student will:

1. Explain the appropriate uses of different map projections
2. List and describe the components and functions of a GIS

Subject and Course Number

Displaying Data

- a) Coordinate systems
- b) Map projections
- c) Converting data acquired from other sources

4.

5. Data Management and Manipulation

- a) Raster and vector data
- b) Relating and joining tables
- c) Organizing data for analysis

6. Database Query and Analysis

- a) Querying the database
- b) Spatial analysis of the database
- c) Calculating statistics

7. Output of Results

- a) Cartographic elements
- b) Cartographic design
- c) Drawing and modifying a map
- d) Adding tables and charts
- e) Oral and graphic presentation skills

Q. Method of Instruction

ing.

follow

Lectures

- 1. Lectures
- 2. Labs
- 3. Seminar Presentations
- 4. Slides, Films
- 5. Small Group Discussions
- 6. Group Projects

1.

**INFORMATION SYSTEMS**

Subject and Course Prerequisites

**R. Course Evaluation**

The instructor will present a written course out-

of the follow-

1. Labor

2. Multi-

line with specific evaluation criteria at the beginning of the

atory assignments with a combined value of up to 50%.

ests with a combined value of up to 30%.

term project or paper with a value of up to 25%.