

# GIST 54A: SEMINAR IN SPECIALIZED APPLICATIONS OF GEOGRAPHIC INFORMATION SYSTEMS I

## Foothill College Course Outline of Record

|                                    |   |
|------------------------------------|---|
| <b>Effective Term:</b>             | Summer 2022   |
| <b>Units:</b>                      | 2   |
| <b>Hours:</b>                      | 2 lecture per week (24 total per quarter)   |
| <b>Advisory:</b>                   | This is an introductory level course in the applications of GIST, and assumes no prior knowledge of the discipline; not open to students with credit in GEOG 54A. |
| <b>Degree &amp; Credit Status:</b> | Degree-Applicable Credit Course   |
| <b>Foothill GE:</b>                | Non-GE  |
| <b>Transferable:</b>               | CSU   |
| <b>Grade Type:</b>                 | Letter Grade (Request for Pass/No Pass)   |
| <b>Repeatability:</b>              | Not Repeatable  |

## Student Learning Outcomes

- Discuss the diverse applications of Geographic Information Systems.
- Explain how Geospatial Technology can be used to solve a problem of a geographic nature

## Description

Seminar on the diverse applications of Geographic Information Systems (GIS). Weekly presentations by guest speakers.

# Course Objectives

The student will be able to:

1. discuss the diverse applications of Geographic Information Systems

## Course Content

1. Guest speakers will discuss the applications of GIS to some of the following professions:

- a. Agriculture
- b. Archaeology
- c. Anthropology
- d. Biology
- e. Business
- f. City government
- g. Ecological modeling
- h. Economics
- i. Education
- j. Emergency management
- k. Epidemiology
- l. Facilities management
- m. Forestry
- n. Geography
- o. Geology
- p. Hydrological modeling
- q. Land use management
- r. Military
- s. Real estate
- t. Transportation
- u. Travel

- v. Urban planning
  - w. Utility management
  - x. Zoology
2. Individual GIS project
- a. Project planning
  - b. Data acquisition and management
  - c. Implementing a project
  - d. Written report and oral presentation

## **Lab Content**

Not applicable.

## **Special Facilities and/or Equipment**

- 1. "Smart" classroom with computer, projector and internet access.
- 2. When taught via Foothill Global Access, ongoing access to computer with email software and hardware; email address.

## **Method(s) of Evaluation**

Methods of Evaluation may include but are not limited to the following:

Application of concepts introduced in class in final discussion  
Written critiques of relevant articles in the discipline

## **Method(s) of Instruction**

Methods of Instruction may include but are not limited to the following:

Lecture presentations

Classroom discussion  
Demonstrations  
Reading assignments

## **Representative Text(s) and Other Materials**

No textbook. Readings distributed based on guest speakers. Current events and articles published in peer reviewed academic journals.

## **Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments**

1. Readings distributed based on guest speakers.
2. Current events and articles published in academic journals.

## **Discipline(s)**

Geography or Drafting/CADD or Environmental Technologies or Forestry/Natural Resources