CIS 270 - GEOGRAPHIC INFORMATION SYSTEMS (GIS) Brian Brown

TIME: MWF 4:00 – 4:55 Rm. B-102
OFFICE HOURS: MWF 1:00 – 2:00, 3:00 – 4:00 Rm. B-102 (Office)

COURSE OBJECTIVE: Students will develop an understanding of the concepts and fundamentals of geographic information systems (GIS) including data development, data management, data analysis, and data presentation, as well as be exposed to applications of GIS in business, utilities management, and natural resources, to name a few.

GRADES will be determined based upon the following criteria:

1. (50%) 5 quizzes -- **NO MAKE-UP QUIZZES, DO NOT BE LATE FOR CLASS!!**

2. (25%) Group Project Presentation - students will receive a portion of their grade from other members of their group.

3. (25%) Weekly homework assignments -- **LATE HOMEWORK WILL NOT BE ACCEPTED!!**

A - 90% to 100%
B - 80% to 89%
C - 70% to 79%
D - 60% to 69%
F - 59% and below

ATTENDANCE POLICY:

The COM-FSM Attendance Policy will be observed.

COURSE CONTENT:

1. GIS, Maps, Aerial Photography, & Scale
2. Introduction to ArcView GIS (ch. 7 & 8)
3. Classification (ch. 9)
4. Symbolization (ch. 10)
5. Querying Data (ch. 13 & 14)
6. Database Management Systems and GIS (ch. 15 & 16)
7. Spatial Analysis I (ch. 17 & 18)
8. Spatial Analysis II (ch. 19 & 20)
9. Cartography (ch. 22) - SHORT WEEK
10. Spatial Data Input and Editing (ch. 23 & 24)
11. Global Positioning Systems and GPS Data (ch. 25) - SHORT WEEK
12. Address Geocoding (ch. 26) - SHORT WEEK
13. Introduction to TNTmips
14. Remote Sensing and Digital Image Processing : TNTmips
15. 3-D: DEMs and TINs : TNTmips

TEXTBOOK:

"Getting to Know ArcView GIS", Environmental Systems Research Institute Authors. Third edition published by ESRI Press, 1999.

GROUP PROJECT:

Students will split up into groups of 2-5 to complete the project of their choice.

Deliverables: Group Project Presentation

Ideas: - Create an information kiosk for a department store. - Develop a detailed map. - Develop a spatial database of a grocery store, library video-cassette inventory, etc. - Perform a spatial analysis study for the Pohnpei State Environmental Protection Agency, Police Department, Fire Department, Nature Conservancy, etc. - Solicit projects from the FSM Government, Pohnpei Division of Land, Pohnpei Conservation Board, etc. - Develop a 3-D model.

(spring2001_cis270_syllabus.doc, 1/12/2000, BB)