1. Course Objectives:

a. This course focuses on providing the knowledge and experience necessary to conduct GIS based research at the post graduate level and/or to develop GIS based applied projects in natural resource management; environmental management; urban and regional planning; socioeconomic and infrastructure development; and geomatics.

2. Course Outcomes:

a. The student will be able to demonstrate GIS skills taught as special topics.

3. Course Code:

a. GIS – 901

4. Credit Hours:

 a. Theory
 =
 03

 b. Practical
 =
 00

 c. Total
 =
 03

5. **Detailed Contents:**

a. Investigations to be decided with students according to their special interest in this particular field. It will also include lessons, seminars and literature review of particular research subjects.

6. Textbooks/Reference Books:

- a. Stewart Fotheringham, Chris Brunsdon, Martin E Charlton Quantitative Geography: Perspectives on Spatial Data Analysis 2000 SAGE Publications ISBN: 0761959483
- b. John Stillwell Applied GIS and Spatial Analysis 2004John Wiley & Sons, Ltd. England ISBN: 0470844094
- c. Jacek Malczewski GIS and Multicriteria Decision Analysis 1999 John Wiley & Sons, Inc. ISBN: 0471329444
- d. Martien Molenaar An Introduction to the Theory of Spatial Object Modelling for GIS 1998 Taylor & Francis, Inc. ISBN: 074840774X