



Broward Community College

Course Outline

STATUS: A

COMMON COURSE NUMBER: GIS1047C

COURSE TITLE: Applications of Geographic Information Systems

CREDIT HOURS: 2

CONTACT HOURS BREAKDOWN:

Lecture/Discussion	<u> 32 </u>
Lab	<u> 32 </u>
Other	<u> </u>
Contact Hours/Week	<u> 4 </u>

CATALOG COURSE DESCRIPTION:

Prerequisite: GIS1040C, GIS1042C

Corequisite: None

In this course students will use the principles of GIS learned in Introduction to GIS I and Introduction to GIS II and apply them in individual projects culminating with a group project.

General Education Requirements - Associate of Arts Degree, meets Area(s):
 General Education Requirements - Associate in Science Degree, meets Area(s):

UNIT TITLES:

1. Review of GIS Data Development Procedures
2. Basic Foundation Projects
3. Individual Projects
4. Group Projects
5. Presentations

I. Course Overview:

Upon successful completion of this course, the students should be able to apply the principles of GIS in individual and group projects, and orally present the project outcomes.

II. Units:

Unit 1. Review of GIS Data Development Procedures

General Outcome:

1.0 The students should be able to generate and manipulate digital and analog data.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

1.1 Generate digital data from existing public data.

1.2 Create digital data from existing analog data.

1.3 Project data between coordinate systems and datums.

Unit 2. Basic Foundation Projects

General Outcome:

2.0 The students should be able to complete projects involving manipulation of digital and analog data.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

2.1 Complete a project involving the generation of digital data from existing data.

2.2 Complete a project involving the creation of digital data from analog data.

2.3 Complete a project involving the projection of data between several different coordinate systems and datums.

Unit 3. Individual Projects

General Outcome:

3.0 The students should be able to plan and carry out an individual project to successful completion.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

3.1 Identify a project.

3.2 Plan procedures for a project.

3.3 Create a project.

3.4 Perform quality assurance/quality control on a project.

3.5 Rebuild project as necessary.

Unit 4. Group Projects

General Outcome:

4.0 The students should be able to plan and carry out a group project to successful completion.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 4.1 Work productively in a group.
- 4.2 Identify and plan a group project.
- 4.3 Create a group project.
- 4.4 Perform quality assurance/quality control on a group project.
- 4.5 Rebuild a group project as necessary.

Unit 5. Presentations

General Outcome:

5.0 The students should be able to orally present individual and group projects.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 5.1 Present results of individual projects to an audience.
- 5.2 Act as a team member during a group presentation of a group project.