

## Master Syllabus

### GEO 1209 - Introduction to Cartography

**Division:** Liberal Arts, Communication and Social Sciences

**Department:** Geography

**Credit Hour Total:** 4.0

**Lecture Hrs:** 3.0 **Lab Hrs:** 2.0

**Prerequisite(s):** GEO 1107

**Date Revised:** June 2015

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### Course Description:

This course is an introduction to the science and art of map making. From the history and principles of thematic map compilation and design, basics of map projections, data sources and processing, map color, symbolization and topography to common types and styles of thematic maps. Three classroom, two lab hours per week.

### General Education Outcomes:

- Oral Communication Competency
- Written Communication Competency
- Critical Thinking/Problem Solving Competency
- Values/Citizenship/Community Competency
- Computer Literacy Competency
- Information Literacy Competency

### Course Outcomes:

#### Color Application Theory in Cartographic Design

Demonstrate an ability to apply the basics of color theory application in cartographic and map design.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must complete lab exercises with 70% or higher

#### Spatial Communication through Maps

Demonstrate an ability to design and effectively communicate spatial information through maps.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must complete lab exercises with 70% or higher

#### Map Creation and Presentation

Demonstrate an understanding of visual hierarchy in maps, layout design, symbology, pattern selection, and legend placement.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must complete lab exercises with 70% or higher

#### GIS Software Applications

Demonstrate the use of various GIS software applications in map design.

**Assessment Method:** Oral examination  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must complete lab exercises with 70% or higher

#### Map Types

Demonstrate an ability to identify various map types and interpret geographic spatial relationships within these maps.

**Assessment Method:** Oral examination  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must successfully complete lab exercises with 70% or higher

**The Principles of Cartographic Design and Production**

Apply principles of cartographic design and production.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

Students must successfully complete exams with 70% or higher

**Assessment Method:** Portfolios  
**Performance Criteria:**

Students must complete lab exercises with 70% or higher

**Outline:**

Principles and practices of cartography

Computer assisted cartography

Qualitative and quantitative information

Map projections

Map design and presentation

Basic statistical concepts for cartography: classification methods

Visual thinking and visual communication

Data collection: GPS