

North Central Michigan College

NCMC MASTER COURSE SYLLABUS

Last Date Revised ___ 11/11/08 _____

DIVISION/AREA: Liberal Arts

DEPARTMENT: Geography (GEO)

ASSOCIATE DEAN: Sam McLin

ORIGINATOR: Kurt Yuengling

DEAN OF INSTRUCTION: Tim Dykstra

HOURS OF INSTRUCTION:

Credit hours: 3
Lecture: 2
Lab: 2
Contact hours: 70.4

COURSE TITLE: Cartography

COURSE ALPHA: GEO **COURSE NUMBER:** 150

CATALOG DESCRIPTION:

An interactive study of maps. Topics will include the history of map making, the different models and projections used to represent the Earth, the variety of map types and their appropriate uses, and the techniques and conventions used in the design of map scales, labels and legends. In a lab setting students will learn to interpret different maps and create their own.

PREREQUISITE(S): None

COREQUISITE(S): None

GENERAL EDUCATION DISTRIBUTION AREA: None

GENERAL EDUCATION/PROGRAM OUTCOMES: Think Critically and Analytically

COURSE OBJECTIVES AND OUTCOMES:

1. Demonstrate knowledge of:
 - the history of geodesy.
 - the appropriate use of the different map projections and coordinate systems.
 - the various types of thematic maps
2. Create maps that indicate an understanding of the assigned task, the data available, and cartographic conventions.
3. Produce maps that are aesthetically pleasing and include:
 - legends with all appropriate information
 - correct symbology of various types of numeric and qualitative information
 - appropriate use of text, color, and layout
4. Create, manage and display digital images using popular software.

METHODS OF INSTRUCTION: Lectures, discussions, labs

METHODS OF EVALUATION: Class Participation, Exams/Quizzes, Project(s)

REQUIRED TEXT AT TIME OF COURSE ADOPTION/REVISION:

Title: *Cartography: Thematic Map Design, 6th Edition*

Authors: *Dent, Torguson, and Hodler.* Publisher: *McGraw-Hill.*

ISBN-13: *9780072943825*

Reasonable accommodations can be provided for students with documented disabilities. Please contact Learning Support Services for assistance: 231/348-6817.

SUGGESTED TIME ALLOWANCE AND SEQUENCE OF INSTRUCTION:

(List general content description of what is being covered each week)

	PART I - ESSENTIALS OF THEMATIC MAPPING
WEEK 1	Introduction to Geodesy and Thematic Mapping
WEEK 2	Map Projections, Coordinate Systems, and Scale
WEEK 3	Geographic Data and Map Symbolology
WEEK 4	Descriptive Statistics and Data Classification
	PART II - TYPES OF QUANTITATIVE THEMATIC MAPS
WEEK 5	Choropleth Maps
WEEK 6	Dot Density Maps
WEEK 7	Proportional Symbol Maps
WEEK 8	Isarithmic Maps (and showing topography)
WEEK 9	Cartograms or Value-by-Area Maps
WEEK 10	Flow Maps
	PART III - THE DESIGN OF THEMATIC MAPS
WEEK 11	Map Design Process
WEEK 12	Elements of Map Composition
WEEK 13	Appropriate Formats to Make a Readable Map
WEEK 14	Principles for Color Thematic Maps
	PART IV - MAP PRODUCTION
WEEK 15	Printing Fundamentals
WEEK 16	Introduction to Virtual and Web Mapping

APPROVED FOR ADOPTION/REVISION BY THE CRD/AP COMMITTEE ON 12/10/08