EEOS 265 – Computer Applications in Geography
Getting Started with Geographic Information Systems

Instructor: David E. Tenenbaum, Ph.D.
Assistant Professor
Environmental, Earth and Ocean Sciences
UMass Boston
Tel: 617-287-7396
Email: david.tenenbaum@umb.edu

Office hours:	Mondays	1:00 - 2:30 PM	S-1-060
	Wednesdays	1:00 - 2:30 PM	S-1-060
	(or email and make other arrangements)		

TA: Yun Yang
Email: yun.yang001@umb.edu

Office hours:	Tuesdays 1:00 – 4:00 PM	S-3-020
	Fridays 1:00 – 4:00 PM	S-3-020

Lectures: Thursdays 6:00 to 8:30 PM   S-2-062

Labs: Tuesdays 6:00 to 8:00 PM   S-3-020

Objectives: This course is an introduction to geo-spatial technologies, with an emphasis on computer-related applications. The course provides students with a brief introduction to the sub-fields of geo-spatial technologies, which include geographic information systems (GIS), global positioning systems (GPS), remote sensing and computer-generated cartography. All topics discussed in lecture are reinforced through computer lab exercises. This course is an excellent introduction to more geo-spatial technology courses offered through EEOS.

Course Web Page: http://alpha.es.umb.edu/~david.tenenbaum/eeos265

Text: Keith Clarke. Getting Started with Geographic Information Systems. 4 Edition. Prentice Hall, 2003.   ISBN 0-13-046027-3.

Text Web: http://www.prenhall.com/clarke4/

Reference Books: Paul A. Longley (Editor), Michael F. Goodchild (Editor), David J. Maguire (Editor), David W. Rhind (Editor). Geographical Information Systems: Principles, Techniques, Management and Applications (Paperback). John Wiley & Sons, 2005. ISBN-13: 978-0-471-73545-8.

Tim Ormsby et al. Getting to Know ArcGIS Desktop: Basics of ArcView, ArcEditor and ArcInfo.   ESRI Press 2001, 2004.

Grading:

Online quizzes	10%
Lab assignments	40%
Mid-term exam	20%
Final exam	30%

Students are reminded that they are required to adhere to the Code of Student Conduct, including its provisions related to Academic Honesty.

SYLLABUS

Date	Session	Content
09/02/2007	Overview	Overview of the course / Questions & Answers
09/04/2007	Lecture 1	What is GIS?
09/09/2007	Lab1	Chapter 1: ArcGIS Lab
09/11/2007	Lecture 2	GIS's Roots in Cartography
09/16/2007	Lab 2	Chapter 2: ArcGIS Lab
09/18/2007	Lecture 3	Maps as Numbers
09/23/2007	Lab 3	Chapter 3: ArcGIS Lab
09/25/2007	Lecture 4	Getting the Map into the Computer
09/30/2007	Lab 4	Chapter 4: ArcGIS Lab
10/02/2007	Lecture 5	What is Where?
10/07/2007	Lab 5	Chapter 5: ArcGIS Lab
10/09/2007	Lecture 6	Why Is It There?
10/14/2007	Lab 6	Chapter 5: ArcGIS Lab
10/16/2007	Review	Overview up to this point / Questions & Answers
10/21/2007	Mid-term Exam	Mid-term Exam
10/23/2007	Lecture 7	Making Maps with GIS
10/28/2007	Lab 7	Chapter 7: ArcGIS Lab
10/30/2007	Lecture 8	How to Pick a GIS?
11/04/2007	Lab 8	Chapter 7: ArcGIS Lab
11/06/2007	Lecture 9	GIS in Action
11/11/2007	No Lab	Veteran's Day
11/13/2007	Lecture 10	The Future of GIS
11/18/2007	Lab 9	Chapter 9: ArcGIS Lab
11/20/2007	Lecture 11	Introduction to Remote Sensing
11/25/2007	Lab 10	Chapter 9: ArcGIS Lab
11/29/2007	No Class	Thanksgiving
12/02/2007	Lab 11	Catch Up on ArcGIS Labs
12/04/2007	Lecture 12	TBA
12/09/2007	Review	Cumulative Course Review
12/11/2007	Review	Cumulative Course Review
TBA	Final Exam	Final Exam