## APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR and MINOR

1.	Submitted by the College of Date:								
	Department/Division offering course:								
2.	What type of change is being proposed?								
	PROPOSED CHANGES								
	Please complete <u>all</u> "Current" fields.								
	Fill out the "Proposed" field only for items being changed. Enter N/A if not changing.								
	Circle the number for each item(s) being changed. For example: 6.								
3.	Current prefix & number: Proposed prefix & number:								
4.	Current Title								
	Proposed Title <sup>†</sup>								
	†If title is longer than 24 characters (including spaces), write a sensible title (24 characters or less) for use on transcripts:								
5.	Current number of credit hours: Proposed number of credit hours:								
6.	Currently, is this course repeatable? YES NO If YES, current maximum credit hours:								
	Proposed to be repeatable? YES NO If YES, proposed maximum credit hours:								
7.	Current grading system:								
	Proposed grading system: Letter (A, B, C, etc.) Pass/Fail								
8.	Courses must be described by at least one of the categories below. Include the number of <u>actual contact hours per week</u> for each category, as applicable.								
Cu	rrent:								
(	) CLINICAL () COLLOQUIUM () DISCUSSION () LABORATORY () LECTURE								
(	) INDEPEND. STUDY () PRACTICUM () RECITATION () RESEARCH () RESIDENCY								
(	) SEMINAR () STUDIO () OTHER – Please explain:								
	Proposed:								
	() CLINICAL () COLLOQUIUM () DISCUSSION () LABORATORY () LECTURE () INDEPEND. STUDY () PRACTICUM () RECITATION () RESEARCH () RESIDENCY								
	() SEMINAR () STUDIO () OTHER – Please explain:								
Q	Requested effective date (term/year):								

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10.	Current teaching method: N/A	Community-Based Experience						
	Proposed teaching method (if applicable):	Community-Based Experience	Service Learning Component Both					
11.	Current cross-listing: N/A	Prefix and Number NAM	ME of current cross-listing DEPARTMENT					
	a. Proposed – REMOVE the current cross-listing:							
	170poseu 12.120 / 2 sie eusrem ese							
	b. Proposed – ADD a cross-listing:	Prefix and Number Signa	nture of chair of proposed cross-listing department					
12.	Current prerequisites:							
	Proposed prerequisites:							
(13.)	Current Bulletin description:							
•								
•	Proposed Bulletin description:							
14.	What has prompted this change?							
15.	If there are to be significant changes in the content or teaching objectives of this course, indicate changes:							
16								
16.	Please list any other department that <u>could</u>	be affected by the proposed change:						
1=	Will describe this control of the		ampus? TYES NO					
<b>17.</b> If								
•								

<sup>&</sup>lt;sup>‡</sup> In order for the <u>course</u> change to be considered, <u>program</u> change form(s) for the programs above must also be submitted.

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18.	Is this course currently included in the University	Studies Program?		Yes  No
19.	Check box if changed to 400G- or 500-level, you must include a syllabus showing differentiation graduate students by (i) requiring additional assignments by the graduate students; an establishment of different grading criteria in the course for graduate students. (See SF			
20.	Within the department, who should be contacted in	for further informa	ation on the proposed course change?	
Nam	e:	Phone:	Email:	
21.	Signatures to report approvals:			
-	DATE of Approval by Department Faculty	printed name	Reported by Department Chair	signature
	DATE of Approval by Department Lacuity	F	Reported by Department Chain	2/
· <del>-</del>	DATE of Approval by College Faculty	printed name	Reported by College Dean	signature
-	*DATE of Approval by Undergraduate Council	printed name	Reported by Undergraduate Council Chair	signature
-	*DATE of Approval by Graduate Council	printed name	Reported by Graduate Council Chair	signature
	*DATE of Approval by Health Care Colleges Council (HCCC)	printed name	Reported by Health Care Colleges Council Chair	signature
-	*DATE of Approval by Senate Council		Reported by Office of the Senate Council	
-	*DATE of Approval by the University Senate		Reported by the Office of the Senate Council	
*If	f applicable, as provided by the <i>University Senate R</i>	ules.		
	Excerpt from University Senate Rules:	******	**	
	SR 3.3.0.G.2: <b>Definition.</b> A request may be criteria:	e considered a mi	nor change if it meets one of the following	
	<ul><li>a. change in number w</li><li>b. editorial change in t</li></ul>		ndred series; description which does not imply change in	

a change in prerequisite(s) which does not imply change in content or emphasis, or

which is made necessary by the elimination or significant alteration of the

d. a cross-listing of a course under conditions set forth in SR 3.3.0.E;

content or emphasis;

correction of typographical errors.

prerequisite(s);

## **Course Syllabus**

#### **FOR 200**

## **Basics of Geospatial Technology**

#### **Class Period**

Lecture: 1 hour per week Lab: 3 hours per week

#### Instructor

Dr. J. M. Ringe Room 108 T.P. Cooper Building 859-257-7594 jringe@uky.edu

#### **COURSE OVERVIEW**

## **Course Description**

A basic introduction to the various types of maps and their uses, field navigation skills, and map making. The course is heavily field and laboratory based, with an emphasis on hands-on learning and practice. Both traditional technologies, such as compasses, U.S. Geological Survey maps, and aerial photographs as well as newer technologies, such as global positioning systems and geographic information system databases will be employed in carrying out course exercises.

# **Student Learning Outcomes**

At the end of this course, the student will be able to demonstrate the following skills.

- 1. Interpret individual maps (topographic map, aerial photo, field map, soils map, geology map, digital image) and synthesize data from multiple maps to describe a particular site.
- 2. Demonstrate the correct usage of a compass to find direction and navigate in the field by taking and following azimuths, triangulating, pacing, and setting a declination.
- 3. Construct digital and hand-written field and land classification maps using compass and pacing, global positioning systems (GPS), topographic maps, aerial photos, field maps, soils maps, geology maps, and digital images.
- 4. Demonstrate the correct usage of a GPS unit in the field to collect data and construct maps with the data using computer software to make corrections to the GPS data and incorporate GPS data into existing geographic information system databases.
- 5. Construct aesthetic, accurate maps using your knowledge of proper map design skills.
- 6. Knowledge of basic geographic information concepts including remote sensing imagery, map projections, and modeling earth.

## **Grading Procedures – Assignments, Grading Criteria, Letter Grades**

Grades will be determined from attendance and in-class exercises (40%), a mid-term exam (30%), and a final exam (30%). Attendance is recorded after the student completes the class exercise and returns borrowed equipment. The attendance policy is described on page 3.

Final grades will be assigned as follows:

### Letter Grades

A: > 90%

B:  $\geq 80\%$  and  $\leq 90\%$ 

C: > 70% and < 80%

D:  $\geq 60\%$  and < 70%

E: < 60%

### **Course Outline**

Week 1 – Introduction to topographic maps, contour lines, feature shapes, scales, distances, coordinate systems

Week 2 – Determining cross-sections from topographic maps, calculating elevations, elevation differences and slope characteristics

Week 3 – Introduction to compasses, determining and following azimuths, determining pace, compass and pacing traverses

Week 4 – Using map and compass together, declinations, navigating around obstacles, location of landmarks through triangulation

Week 5 – Introduction to aerial photos, plotting aerial boundaries on maps

Week 6 – Stereovision, creating stereo pairs, determining photo scales from maps and ground truthing

Week 7 – Determination of area on maps and photos

Week 8 – Determining angles on photos and heights from stereopairs

Week 9 – Making field maps

Week 10 – Plotting boundaries from deeds

Week 11 – Introduction to GPS

Week 12 – Creating boundary surveys and permanent landmarks with GPS

Week 13 – Introduction to GIS

#### **COURSE POLICIES**

### **Attendance and Excused Absences**

Attendance is recorded after the student completes the class exercise and returns the borrowed equipment.

Lectures: Attending lectures is required (and expected) of all students. Skipping class is not acting in your best interest, will most likely adversely affect your grade, is disrespectful of your instructor, and is not professional behavior.

Lab Sessions: Attending lab sessions is required of all students. Missing labs will cause you extreme difficulty on the lab exams. Make-up labs will be given <u>only</u> for excused absences.

Exams: Make-up exams and quizzes (Lab or Lecture) will be given <u>only</u> to students who miss an exam as a result of excused absences. In all other circumstances, a grade of 0 (zero) will result for the missed exam or quiz.

### **Academic Integrity, Cheating and Plagiarism**

Cheating of any form, including plagiarism, will not be tolerated. Cheating will be dealt with in accordance with University regulations. (See <a href="http://www.uky.edu/Student Affairs/Code/">http://www.uky.edu/Student Affairs/Code/</a>)

# **Professional Preparation**

This course helps prepare you for your professional career. You are expected to attend class, be on time, participate in class discussions, and be respectful of your instructor and fellow classmates.

# **Disability Statement**

Students with a disability that need classroom or exam accommodations should contact the Disability Resource Center, 257-2754, room 2 Alumni Gym, <u>jkarnes@uky.edu</u>.