## Kutztown University: Spring 2024 GEG 330: Cartography

Dr. Richard Courtney Office Hours: MWF 11 - 12:00,

Office: Graduate Center 104 TH 3:30 - 4:30

Dept #: 610 683-4364 (34364) and by appointment
e-mail: courtney@kutztown.edu KU Snow Phone: 610 683-4649

http://faculty.kutztown.edu/courtney "Course Announcements" Check here daily!

Lecture/Lab TH 1:30-3:20 PM Rm: Graduate Center 100

**Required Texts:** Robinson et. al., Elements of Cartography, Sixth Edition (0-471-55579-7),

and National Geographic College Atlas of the World 2<sup>nd</sup> ed. (978-0-470-88887-2)

Required Supplementary Materials: You are to read the assigned tutorials in Desire2Learn.

**Grading:** Exams  $3 \times 15\% = 45\%$  T/F, MC and Take-home Essay

Projects  $7 \times 5\% = 35\%$ Project Portfolio  $1 \times 5\% = 5\%$ Poster Project  $1 \times 15\% = 15\%$ 

(Only a signed doctor's note is an acceptable excuse for missing the final exam as per College regulations)

### **Grading Scale:**

Letter Grade	А	В	С	D	F
Pct. Range	90+	75 - 89	60 - 74	50 - 59	< 50

### **Policies:**

**Warning:** College and University policies regarding cheating, plagiarism, and academic fraud will be enforced at my discretion. See http://www.kutztown.edu/thekey and http://app.kutztown.edu/policyregister/Policy/ACA-027.

**Cell phone use is prohibited:** They may  $\underline{not}$  be used as calculators either.

No extra credit work will be assigned other than in-class videos and a pop quiz.

Attendance Policy: Please see http://app.kutztown.edu/policyregister/Policy/ACA-016.

**Make-up Policy:** Students must arrange to take missed quizzes or exams as soon as possible. Excuses must cover every day missed between the quiz/exam date and the date of the make-up quiz/exam. See the web address immediately above for acceptable excuses.

**Graded Work:** Students must retain all graded and returned work in case of grade recording errors. Students are also expected to complete a copy of the Grading Chart.

**Final Exam Conflict Policy:** See the following URL for policy details: http://app.kutztown.edu/policyregister/Policy/ACA-080.

**Gender- Based Crimes:** Educators must report incidents of gender-based crimes, including sexual assault, sexual harassment, stalking, dating violence, and domestic violence. If a student discloses such incidents to me during class or in a course assignment, I am not required to report the disclosure, unless the student was a minor at the time the incident occurred. Regardless of the student's age, if the incident is disclosed to me outside the classroom setting or a course assignment, I am required by law to report the disclosure, including relevant details, such as the names of those involved in the incident, to Public Safety and Police Services and to Mr. Jesus Peña, Title IX Coordinator.

### **Course Objectives:**

This course is designed to instruct students as to the fundamentals of good cartography. The main objectives are for students to become proficient with data manipulation and the proper use of the graphic elements and visual variables, skills that constitute the very foundation of good cartography. In this pursuit, students will also become familiar with map coordinates, scale, and projections. Students will study and create maps representative of the major cartographic classes. Cartography will be performed in the computer/GIS environment. Although no prior experience with GIS is required, basic computer skills are necessary. Overall, students are to become adept in gathering, manipulating, and representing geographic data in the Excel and ArcGIS environments, and to produce a portfolio of maps in Adobe Acrobat suitable for job interviews.

### **TENTATIVE COURSE SEQUENCE**

### Section 1: Introduction; The Nature of Cartography (Exam 1)

Reading: Chapters 1, 2, and 3. D2L\* Section 1.

### Section 2: Geographic Coordinates and Map Scale (Exam 1)

Reading: Chapters 4 and 6 pp. 92-95. D2L Section 2.

Exercise 1: Using an atlas, working with coordinates, and calculating map scale.

### Section 3: Map Projections (Exam 1)

Reading: Chapter 5. College World Atlas pp. 12-13. D2L Section 3.

Exercise 2: Data Processing and Display in Excel.

### Section 4: Map Design and Typography (Exam 2)

Reading: Chapters 18 and 22 pp. 404-414, 416-423. D2L Section 4.

Exercise 3: Point Symbol Mapping.

### Section 5: Cartographic Generalization: Symbolization (Exam 2)

Reading: Chapters 24 pp. 450-467; and 25 pp.475-492. D2L Section 5.

### Section 6: Geographic Data, Graduated Symbols, and Dot Maps (Exam 2)

Reading: Chapters 16 pp. 271-277, 279-283; 25 pp. 480-486; 26 pp.494-501;

and Appendix A. D2L Section 6.

Exercise 4: Graduated Symbol Mapping.

Exercise 5: Dot Mapping.

### Section 7: Isarithmic Mapping (Final)

Reading: Chapters 26, pp. 505-515; and 27 pp. 538-543. D2L Section 7.

Exercise 6: Isoline Mapping.

### **Section 8: Choropleth Mapping (Final)**

Reading: Chapter 26, pp. 515-525. D2L Section 8.

Exercise 7: Choropleth Mapping.

### Section 9: Map Reproduction (Final)

Reading: Chapters 30, and 31, pp. 590-596. D2L Section 9.

Final Projects and Exercise Portfolios

Are Due On

Thursday, May 2 by 4:00 p.m.

\*D2L: Desire 2 Learn

# Kutztown University

# Spring 2024 Calendar for GEG 330 Cartography TH 1:30-3:20 p.m.

Sun	Mon	Tue	Wed	Thu	Fri
1 <sup>st</sup> wk. <b>Jan. 21</b>	22	23 Intro., Def. of Geography, Nature of Cartography	24	25 Classes of Maps, Foci in Cart., Earth's Shape	26
2 <sup>nd</sup> wk. 28	29	30 Map Generation Process, Datums and Coordinates	31	Feb. 1 Using an Atlas Ex. 1 Coordinates and Scale	2
3 <sup>rd</sup> wk. 4	5	6 Scale Calculations & Map Projections	7	8 Ex. 2 Data Processing and Display in Excel	9
4 <sup>th</sup> wk.	12	13 Work on Ex. 2	14	15 Complete Ex. 2  Exam 1 THE out	16
5 <sup>th</sup> wk. 18	19	20 <b>Exam 1</b>	21	22 Map Design & Typography	23
6 <sup>th</sup> wk. 25	26	27 Intro to ArcGIS Pro	28	29 Ex. 3 Point Symbol Mapping	Mar. 1
7 <sup>th</sup> wk.	4	5 Work on Ex. 3	6	7 Work on Ex. 3	8
		SPRING BREAK (no	classes M	Iarch 11 through 15)	
8 <sup>th</sup> wk.	18	19 Generalization and Symbolization	20	21 Geographic Data	22
9 <sup>th</sup> wk. 24	25	26 Grad. Symbols & Dot Maps Ex. 4 Graduated Symbols	27	28 Work on Ex. 4	29
10 <sup>th</sup> wk.	Apr. 1	2 Ex. 5 Dot Density Mapping	3	4 Final Project Talk Exam 2 THE out	5
11 <sup>th</sup> wk.	8	9 <b>Exam 2</b> Work in Ex. 5	10	11 Isarithmic Mapping	12
12 <sup>th</sup> wk.	15	16 Ex. 6 Isarithmic Mapping	17	18 Proposals Due	19
13 <sup>th</sup> wk.	22	23 Choropleth Mapping Ex. 7 Class Intervals	24	25 Work on Ex. 7	26
14 <sup>th</sup> wk. 28	29	30 Map Reproduction. All remaining work due by 4:00	May 1	2 Final Pjts. & Portfolios Due Final THE out	3
Finals Week	6	7	8	9 Final 2-4 p.m.	10

You must take your final exam with your regular section.

Sequence and timing may change, so be aware of announced alterations!

Check my home page (<a href="http://faculty.kutztown.edu/courtney">http://faculty.kutztown.edu/courtney</a>) and click the link to Course Announcements for updates on any course changes.

# Cartography Grading Chart

Exe	rcise Scor	Exercise Scores and Points	ints	Final Pr Map S	Final Project Proposal G Map Scores G Points	posal Goints	Ex	Exam Scores and Points	s and Poin	ıts	Proj Scc	Project Portfolio Score & Points	olio ıts
	Score	Out of	Pts.§		Score	Out of		Score	Out of	Pts.‡	Score	Out of	Pts.£
Ex. 1				Propos.			Exam 1						
Ex. 2				Map			Exam 2						
Ex. 3				Sum			Final						
Ex. 4													
Ex. 5				Use th	Use the sums for the	or the							
Ex. 6				calcı	calculation below.	low.							
Ex. 7													
	Sum of	Sum of Ex. Pts.		Final Pjt.	Pjt. Pts.			Sum of Exam Pts.	sam Pts.		Portf	Portfolio Pts.	
3	§For Exerc Score ÷ C	§For Exercise Points, (Score $\div$ Out of) $\times$ 5	5	For I (Score	For Project Points, (Score $\div$ Out of) $\times$ 15	ints, ) × 15	S)	$\pm$ For Exam Points, (Score $\div$ Out of) $\times$ 15	n Points, ut of) × 1¦	5	£For I (Score	£For Portfolio Points, (Score $\div$ Out of) $\times$ 5	oints, ) × 5
	Con	rse Points	Structure	Course Points Structure: 35 Ex. Pts. + 15 Final Project Pts. + 45 Exam Pts. + 5 Portfolio Pts. = 100 points	s. + 15 Fi	nal Projec	t Pts. + 4!	5 Exam Pt	s. + 5 Por	rtfolio Pts.	= 100  po	ints	

Sum of Points From Above Equals Overall Percentage Record all of your scores on this form and retain all your work in case of any discrepancies.