Kutztown University: Fall 2024 GEG 330: Cartography

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

Office: Graduate Center 105 TH 3:30 - 4:30 (except 1st Th of month)

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 2nd 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	A	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 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.

No AI: All written work submitted for this course must be fully prepared by you and not by AI. This includes exam take home essays, and written portions of assignments/projects. Use of AI will be considered academic fraud and will be dealt with accordingly. Contact me if you have questions.

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: Class Interval Calculations.

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, Dec. 5 by 4:00 p.m.

*D2L: Desire 2 Learn

Kutztown University Fall 2024 Calendar for GEG 330: Cartography

Sun	Mon	Tue	Wed	Thu	Fri
1 st wk. Aug. 25	26	27 Intro., Definition of Geog., Nature of Cartography	28	29 Classes of Maps, Foci in Cart, Earth's Shape	30
2 nd wk. Sep. 1	2 No Classes	3 Map Generation Process, Datums and Coordinates	4	5 Using an Atlas Ex. 1 Coordinates and Scale	6
3 rd wk.	9	10 Scale Calculations (Bring a calculator)	11	12 Map Projections	13
4 th wk. 15	16	17 Ex. 2 Data Processing and Display in Excel	18	19 Work on Ex. 2 Exam 1 THE out	20
5 th wk. 22	23	24 Exam 1 Complete Ex. 2	25	26 Map Design & Typography	27
6 th wk. 29	30	Oct. 1 Intro to ArcGIS Pro	2	3 Ex. 3. Point Symbol Mapping	4
7 th wk.	7	8 Work on Ex. 3	9	10 Work on Ex. 3	11
8 th wk.	14 No Classes	15 Monday Schedule!	16	17 Generalization and Symbolization	18
9 th wk. 20	21	22 Geographic Data	23	24 Grad. Symbols & Dot Maps Ex. 4 Graduated Symbols	25
10 th wk. 27	28	29 Work on Ex. 4	30	31 Final Project Talk Exam 2 THE out Ex. 4	Nov. 1
11 th wk.	4	5 Exam 2 Ex. 5 Dot Density Mapping	6	7 Work on Ex. 5	8
12 th wk. 10	11	12 Isarithmic Mapping	13	14 Proposals Due! Ex. 6 Isoline Mapping	15
13 th wk. 17	18	19 Work on Ex. 6	20	21 Choropleth Maps & Class Intervals (bring calculator)	22
14 th wk. 24	25	26 Ex. 7 Class Interval Calcs.	27	28 Thanksgiving Break	29
15 th wk. Dec. 1	2	3 Map Reproduction All remaining work due by 4:00	4	5 Final Pjts. & Portfolios Due Final THE out	6
Finals Week	9	10	11	12 Final Exam! 11:00 a.m 1:00 p.m.	13

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

Check my home page (http://faculty.kutztown.edu/courtney) and click the link to

Course Announcements for updates on any course changes.

Cartography Grading Chart

Exe	rcises ar	Exercises and Portfolio Scores and Points	0	Fir	ıal Project Iap Score	Final Project Proposal G Map Scores & Points	Ф	EX	kam Score	Exam Scores and Points	ts
	Score	Out of	Pts.§		Score	Out of	Pts.∞		Score	Out of	Pts.‡
Ex. 1				Propos.				Exam 1			
Ex. 2				Map				Exam 2			
Ex. 3								Final			
Ex. 4											
Ex. 5				Ę	∞For Proje	∞For Project Points,	L.				
Ex. 6				rropo Map:	(Score ÷	Map: (Score \div Out of) \times 10	, × 5 < 10				
Ex. 7											
Portfolio											
Sun	of Exer	Sum of Exercise Pts.			Final Pro	Final Project Pts.			Sum of Exam Pts.	xam Pts.	
SF (Sc	or Exerc	§For Exercise Points, (Score \div Out of) \times 5						3)	$\pm ext{For Exam Points}$, Score \div Out of) $ imes$	‡For Exam Points, (Score ÷ Out of) × 15	2

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.