

Kutztown University: Spring 2025  
GEOG 330: Cartography

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Office Hours: MWF 11 - 12:00,  
TH 3:30 - 4:30  
and by appointment  
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 x 15% = 45%	T/F, MC and Take-home Essay
Projects	7 x 5% = 35%	
Project Portfolio	1 x 5% = 5%	
Poster Project	1 x 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	B	C	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: 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.

Kutztown University  
**Spring 2025 Calendar for**  
**GEOG 330 Cartography TH 1:30-3:20 p.m.**

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

**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 (<http://faculty.kutztown.edu/courtney>) and click the link to Course Announcements for updates on any course changes.**

# Cartography Grading Chart

Exercises and Portfolio Scores and Points				Final Project Proposal & Map Scores & Points				Exam Scores and Points						
	Score	Out of	Pts. \$		Score	Out of	Pts. ∞		Score	Out of	Pts. †			
Ex. 1				Propos.				Exam 1						
Ex. 2				Map				Exam 2						
Ex. 3				∞For Project Points, Proposal: (Score ÷ Out of) × 5 Map: (Score ÷ Out of) × 10				Final						
Ex. 4														
Ex. 5														
Ex. 6														
Ex. 7														
Portfolio				<b>Final Project Pts.</b>					<b>Sum of Exam Pts.</b>					
<b>Sum of Exercise Pts.</b>				\$For Exercise Points, (Score ÷ Out of) × 5					#For Exam Points, (Score ÷ Out of) × 15					

<b>Sum of Points From Above Equals Overall Percentage</b>

Record all of your scores on this form and retain all your work in case of any discrepancies.