# Kutztown University: Fall 2024
# Geg 010 Planet Earth Users' Guide: Intro. to Physical Geography

**Dr. Richard Courtney**
Dept. #: 610 683-4364 (34364)
KU Snow Line: 610 683-4649

**Email:** courtney@kutztown.edu

**Office:** Graduate Center 105
**Office Hrs:** MWF 11 - Noon; TH 3:30 - 4:30 (except 1st Thu of month) and by appointment
**Supplemental Instructor:** Alexa Karlowicz
**Email:** akarl372@live.kutztown.edu

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

**Class Meeting Days and Time:** MWF 10 - 10:50 **Room:** Boehm Science Building 262

**Recommended Text:** Strahler and Strahler Physical Geography, 3rd ed. (ISBN: 0-471-48053-3).
**Required Text:** College Atlas of the World, 2nd ed. (ISBN: 978-0-470-88887-2).

| **Evaluation:** | | | |
|---|---|---|---|
| | Map Test | 10% | Sep. 20 (4th week) |
| | Exam 1 | 15% | Sep. 27 (5th week) |
| | Exam 2 | 15% | Oct. 23 (9th week) |
| | Exam 3 | 15% | Nov. 11 (12th week) |
| | Exercises | 15% | 6 exercises to be worked on INDEPENDENTLY (absolutely no copying!). |
| | Final | 30% | Monday, Dec. 9 @ 8:00 -10:00 a.m. |

| **Formats:** | | | |
|---|---|---|---|
| | 1 Map Test: | 75 multiple choice | Available in D2L during class time only. |
| | 3 Exams: | 50 multiple choice and fill-ins | Available in D2L during class time only. |
| | 1 Final: | 100 cumulative questions | Available in D2L during final exam time only. |

(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 |

**Basic Course Requirements:**

- Internet access: For all exams, and for all assigned materials in D2L.
- The required atlas: College Atlas of the World 2nd edition.
- A calculator
- Commitment to class attendance and participation.

**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. They should be put away during class time.

**No extra credit work** will be assigned other than possible in-class videos and/or 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:**
The primary objective of this course is to examine the Earth-Atmosphere-System (EAS) and discuss the mechanisms that drive the earth's weather so that students will be able to correctly explain the factors that create the pattern of climates present today. A secondary objective is to introduce students to Geomorphology, the study of landforms. Toward this end, landforms created by tectonic and volcanic processes, and running water will be discussed. We will complete exercises involving the metric system, coordinates and map scale, isolining, humidity, weather, solar angle, seasons, and time. Students are also expected to read and learn each of the assigned tutorials found in Desire2Learn (D2L). This course satisfies GE C1: Scientific Inquiry.

## Tentative Course Sequence, Textbook Readings, and §D2L Tutorials

**0 Introduction (Exam 1)**
D2L First Day Materials

**I Systems and Energy (Exam 1)**
Reading: Ch. 1; Ch. 2, and Ch. 4 pp. 63-66.
§Tutorials: 1, 2, and 3.
Ex. 1: Scientific Notation and the Metric System

**II Atmospheric Composition and Structure (Exam 1)**
Reading: Ch. 4 pp. 75-76, Ozone Layer pp. 78-79; Ch. 5 pp. 110-112, 122-128; Ch. 7 pp. 169-173; Ch. 3 pp. 38-45, 56-60, and College Atlas pp. 12-13.
Tutorials 4, 5, 6, and 7.
Ex. 2: Maps and Coordinates

**III Solar Radiation, Energy Balance and Surface Temperature Variation (Exam 2)**
Reading: Ch. 4 pp. 63-75, 77-84; and Ch. 5 pp. 101-110, 112-122
Tutorial 8.
Ex. 3: Isoline Mapping

**IV Winds, Atmospheric and Oceanic Circulation, and El Niño (Exam 2)**
Reading Ch. 7 pp. 172-199.
Tutorials 9, 10, 11, 12, and 13.

**V Atmospheric Moisture and Stability (Exam 3)**
Reading: Ch. 6 pp. 135-152.
Tutorials 14, 15, 16, 17, and 18.
Ex. 4: Relative Humidity, Lapse Rates, and Stability

**VI Air Masses, Fronts, and Storms (Exam 3)**
Reading: Ch. 8 pp. 205-224; and Ch. 6 pp. 146-155.
Tutorials 19, 20, and 21.
Ex. 5: Station Model

**VII Climate (Exam 3)** You will need to do this on your own as it will not be covered in class!!
Tutorial 22.

**VIII Seasons, Solar Angle, and Time (Final)**
Reading Ch. 3 pp. 49-53, and 46-49.
Tutorials 23, 24, 25, 26, and 27.
Ex. 6: Solar Angle, and Time

**IX Earth's Structure and Plate Tectonics (Final)**
Reading: Chapters 13 and 14.
Tutorials 28 and 29.

**X Fluvial Geomorphology (Final)**–Tentative!
Reading: Ch. 6 pp. 136-138; and Chapters 16 and 17.

SEQUENCE AND TIMING MAY CHANGE SO BE AWARE OF ANNOUNCED CHANGES.
Check for date changes at: http://faculty.kutztown.edu/courtney Look for "Course Announcements"

Kutztown University

# Fall 2024 Calendar for
# GEG 010 Planet Earth Users' Guide: Intro. to Physical Geography

| Sun | Mon | Tue | Wed | Thu | Fri |
|---|---|---|---|---|---|
| 1st wk. **Aug. 25** | 26 Intro., D2L Def. of Geog. | 27 | 28 Systems | 29 | 30 System Balance |
| 2nd wk. **Sep. 1** | 2 No Classes | 3 | 4 Metric System | 5 | 6 Temp. and Energy Units |
| 3rd wk. 8 | 9 EM Spectrum | 10 | 11 EM Transfer and Atmos. Composition | 12 | 13 Atmospheric Structure |
| 4th wk. 15 | 16 Magnetosphere | 17 | 18 Earth's Shape and Coordinates | 19 | 20 **MAP TEST** |
| 5th wk. 22 | 23 The Globe and Map Projections | 24 | 25 Map Scale | 26 | 27 **EXAM 1** |
| 6th wk. 29 | 30 Energy Distribution | **Oct. 1** | 2 Global Energy Budget | 3 | 4 Surface Temp. Variation |
| 7th wk. 6 | 7 Isoline Mapping | 8 | 9 Wind Forces | 10 | 11 Winds by Scale |
| 8th wk. 13 | 14 No Classes | **15 Mon. Schedule Global Circulation** | 16 Wind-driven Currents | 17 | 18 Ocean Currents |
| 9th wk. 20 | 21 El Niño | 22 | 23 **EXAM 2** | 24 | 25 Atmospheric Moisture |
| 10th wk. 27 | 28 Adiabatic Lapse Rates | 29 | 30 Atmospheric Stability | 31 | **Nov. 1** Uplift Mechanisms |
| 11th wk. 3 | 4 Air Masses and Fronts | 5 | 6 Storms | 7 | 8 Weather Station Model |
| 12th wk. 10 | 11 **EXAM 3** | 12 | 13 Seasons | 14 | 15 Solar Angle |
| 13th wk. 17 | 18 Local Solar Time | 19 | 20 Standard Time | 21 | 22 DST and IDL |
| 14th wk. 24 | 25 Earth's Structure and Tectonics | 26 | 27 Thanksgiving | 28 | 29 Break |
| 15th wk. **Dec. 1** | 2 Volcanoes | 3 | 4 Fluvial Geomorphology | 5 | 6 Fluvial Geomorphology |
| Finals Week | 9 **Final Exam 8 - 10 a.m. in D2L** | 10 | 11 | 12 | 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.**

# Planet Earth Users' Guide Grading Chart

| Exercise Scores and Points | | | | Map Test Score & Points | | | Exam Scores and Points | | | | Final Exam Score & Points | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Score | Out of | Pts.[§] | Score | Out of | Pts.[¥] | | Score | Out of | Pts.[‡] | Score | Out of | Pts.[£] |
| Ex. 1 | | | | | 75 | | Exam 1 | | | | | | |
| Ex. 2 | | | | | | | Exam 2 | | | | | | |
| Ex. 3 | | | | | | | Exam 3 | | | | | | |
| Ex. 4 | | | | | | | | | | | | | |
| Ex. 5 | | | | | | | | | | | | | |
| Ex. 6 | | | | | | | | | | | | | |
| Ex Pts. | **Sum of Ex. Pts.** | | | **Map Test Pts.** | | | **Sum of Exam Pts.** | | | | **Final Exam Pts.** | | |
| [§]For Ex. Pts., (Score ÷ Out of) X 2.5 | | | | [¥]For Map Test Pts., (Score ÷ 75) X 10 | | | [‡]For Exam Pts., (Score ÷ Out of) X 15 | | | | [£]For Final Exam Pts., (Score ÷ Out of) X 30 | | |
| **Course Points Structure: 15 Ex. Pts.+ 10 Map Test Pts. + 45 Exam Pts, + 30 Final Exam Pts. = 100 points** | | | | | | | | | | | | | |

| Pts. Total = Course % |
|---|
| |

Record all of your scores on this form and retain all your work in case of any discrepancies. v. Fa18