

GS 101 – PHYSICAL GEOGRAPHY

Instructor: Dr. Carrie Davis Todd

Office: ST 310P, phone: x8574

Email: cdavistodd@worchester.edu

Meeting Times: MWF, 8:30 am – 9:20 pm

Office Hours: M – TH 1:00 – 2:00 pm or by appointment

Text: *Introducing Physical Geography, 4th Ed.*, Strahler and Strahler

Introduction

This course provides an introduction to physical geography – the study of the Earth's surface and the processes that shape it over various time scales. The emphasis of this course is on recognizing Earth's four spheres (atmosphere, biosphere, hydrosphere, and lithosphere) and learning geographical techniques to understand each. Course topics will be addressed through readings, lectures and in-class activities.

Course Goals

Upon completion of this course, students will be able to:

- read a topographic map, identify landscape features, and explain the processes responsible for these features
- explain the interactions among Earth's four spheres and predict how a change in one could impact the others
- discuss the relative influences of natural and anthropogenic forces on Earth's climate
- discuss the natural processes that shape Earth's surface and compare these processes to the role of humans on landscapes and the environment
- recognize and analyze current global events related to course topics

Course Components

Readings: You are expected to complete the assigned readings prior to class. Unless otherwise noted, the readings come from the textbook. If you choose not to purchase the textbook, or have an earlier edition, it is your responsibility to make sure you know the assigned material.

Quizzes: Quizzes will be given on a regular basis to evaluate your comprehension of the assigned readings (pre-lecture). Most quizzes will cover material from the readings, so it is your responsibility to make sure you understand the reading prior to a quiz. Quizzes start at the beginning of class. **No make-up quizzes** will be given, although your lowest quiz score will be dropped.

Lectures: Lectures are intended to clarify complex topics introduced in the readings and provide more detailed explanations of concepts and geographical techniques. Lectures may also be used to reiterate information from the quizzes and exams.

In-class activities: Activities provide an opportunity for you to experience the course topics in individual or small-group settings. These activities are to be completed during class and are not to be considered homework, unless additional time is required. Activities are due by the beginning of the next class session. The majority of activities will take place on Fridays. While an attempt will be made to announce these activities ahead of time, the timing may change and it is your responsibility to attend class and participate in these activities. Make-up activities will only be given in cases of excused absences cleared with the instructor **ahead of time**.

Exams: The three exams will be traditional in-class, closed-book exams. Exams start at the beginning of class. There will be **no make-up** (or early) exams without a documented and legitimate excuse prior to the scheduled exam period.

Attendance Policy

Attendance is expected. It is your responsibility to obtain the material covered in class in the case of an absence. Not all activities will be listed on the syllabus, so a missed class could mean a missed activity that cannot be made up. Notification of excused absences *ahead of time* allows you to make up work missed in class. It is your responsibility to obtain material covered during an unexcused absence. Make-up quizzes and exams **will not** be given.

Examples of excused absences:

- Medical reason with note from doctor or documentation
- Family emergency with notification
- Professional activity with advanced notification and documentation
- Jury duty or court

Examples of unexcused absences:

- Leaving town for vacation or ski weekend
- Can't find a parking place
- Alarm didn't work or you overslept
- Employment or work obligations

Academic Honesty Policy

Plagiarism and cheating will not be tolerated in this course. Plagiarism and cheating occur when a student passes off another person's work as their own. This includes, but is not limited to, copying another person's work, restating the ideas of another person, submitting someone else's work as your own, allowing someone to copy/use/submit your own work, or collaboration without recognition of each person. The consequence of plagiarism or cheating will be **immediate dismissal** from the course and a **failing grade**. For more specifics on the definitions of plagiarism and cheating, consult the Worcester State student handbook.

Grading

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|--------------------------|-----|
| Quizzes | 20% |
| Class Activities | 30% |
| Exam I | 15% |
| Exam II | 15% |
| Exam III | 15% |
| Attendance/Participation | 5% |

Course Schedule

| Week – first day | Topics | Reading* |
|-------------------------|----------------------------------------------------------------|--------------------------------------------------|
| Week 1 – 1/23 | Course introduction Earth's movement Latitude/longitude | Ch. 1 (pp. 24-32) |
| Week 2 – 1/28 | Global time Seasonal variation Maps | Ch. 1 (pp. 32 – 42, 670 – 671) |
| Week 3 – 2/4 | Air Temperature Temperature variations Greenhouse effect | Ch. 3 (pp. 88-102, 108-113) |
| Week 4 – 2/11 | Hydrologic cycle Humidity Precipitation processes | Ch. 4 (pp. 120-140) |
| Week 5 – 2/20 | Winds Global circulation processes El Nino | Ch. 5 (pp. 152-163, 167-181) |
| Week 6 – 2/25 | Weather Systems Hurricanes | Ch. 6 (pp. 186-197, 200-204) |
| Week 7 – 3/3 | Rocks and minerals | Ch. 11 (pp. 398– 405, 408 – 413) |
| Week 8 – 3/10 | Plate tectonics Volcanoes | Ch. 12 (pp. 423 – 446) Ch. 13 (pp. 453 – 475) |
| Week 9 – 3/24 | Soil Properties Soil Development | Ch. 10 (pp. 365 – 371) |
| Week 10 – 3/31 | Ground Water | Ch. 15 (pp. 514 – 520) |
| Week 11 – 4/7 | Surface Water | Ch. 15 (pp. 520 – 538) |
| Week 12 – 4/14 | Fluvial Landforms | Ch. 16 (pp. 546 – 552, 555– 557) |
| Week 13 – 4/23 | Coastal Landforms | Ch. 18 (pp. 598 – 612) |
| Week 14 – 4/28 | Glacial Landforms Alpine vs. continental | Ch. 19 (pp. 630 – 635, 641– 645) |
| Week 15 – 5/5 | Glacial Lake Missoula | |

* Readings should be completed by the first class of the week.

Quiz/Exam Schedule

| Day | Topic (associated chapters) |
|------------|---------------------------------------------------------------------------|
| Jan. 28 | Quiz 1: Time zones, Earth's movement, lat/long, seasons (Ch. 1) |
| Feb. 4 | Quiz 2: Air temperature, temperature variation, greenhouse effect (Ch. 3) |
| Feb. 11 | Quiz 3: Hydrologic cycle, humidity, precipitation (Ch. 4) |
| Feb. 20 | Quiz 4: Winds, global circulation, El Niño (Ch. 5) |
| Feb. 25 | EXAM I (Chs. 1, 3, 4, 5) |
| Mar. 3 | Quiz 5: Rocks and minerals (Ch. 11) |
| Mar. 10 | Quiz 6: Volcanoes (Ch. 13) |
| Mar. 24 | Quiz 7: Soils (Ch. 10) |
| Mar. 31 | EXAM II (Chs. 10, 11, 12, 13) |
| Apr. 7 | Quiz 8: Surface Water (Ch. 15) |
| Apr. 14 | Quiz 9: Fluvial Landforms (Ch. 16) |
| Apr. 23 | Quiz 10: Coastal Landforms (Ch. 18) |
| Apr. 28 | Quiz 11: Glacial Landforms and Processes (Ch. 19) |
| May 7 | EXAM III (Chs. 15, 16, 18, 19) |

Note:

Quizzes and Exams will start at the beginning of class. It is your responsibility to arrive on time as no additional time will be given.