

**FOUNDATIONS  
OF THE DISCIPLINE**



**KNOW  
DO  
BECOME**



**BOISE STATE UNIVERSITY**  
CONCURRENT ENROLLMENT

Boise State University – Vallivue High School  
Concurrent Enrollment Program  
GEOLOGY 101; Physical Geology (4 credits)  
SPRING 2025 [1 Semester]

**Section:** 3447 / JVAL

**Class No:** 12485 / 12486

**Instructor:** Gary Griffith

**Office Location:** Vallivue High School (Rm 114)

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**Phone:** 208-454-9253

**Office Hours:** 8:15 AM - 3:45 PM (Mon-Fri)

### **Course Description**

An exploration of Earth's formation and evolution, plate tectonics, atmosphere, physical compositions and hydrological cycles. Explores how the ideas of Alfred Wegener, James Hutton, Marie Tharp, and others helped form our understanding of the Earth as a complete system.

### **Foundations of the Discipline syllabus statement**

Foundations of the Discipline courses are part of Boise State's University Foundations curriculum, which is designed to enhance the more focused study done within each major through broader study in mathematics, sciences, social sciences, humanities, and the arts. The goal: To amplify what you know about the world around you, what you can do with the kind of communications and problem-solving skills essential for success, and who you become as you continue learning throughout your life. The "Know, Do, Become" motto of University foundations encapsulates these overarching goals:

**Know:** Able to employ different ways of knowing and apply key transferable concepts.

**Do:** Able to communicate well, analyze and solve novel problems, and work with others.

**Become:** Has developed into a reflective, self-motivated, lifelong learner who can actively direct their own future growth.

### **University and Course Learning Outcomes**

GEOS 101 supports the following University Learning Outcome (ULO), along with a variety of other course-specific goals:

ULO 8: Apply knowledge and the methods characteristic of scientific inquiry to think critically about and solve theoretical and practical problems about physical structures and processes.

*By the end of this course*, students will be able to:

1. Describe the fundamental processes that operate on Earth's surface and within Earth's interior
2. Interpret observations of the Earth as the products of geologic processes
3. Diagram the interactions within and among Earth's systems including the geosphere, atmosphere, hydrosphere, and biosphere
4. Apply your knowledge of Earth systems to describe and interpret past Earth states or environments
5. Apply the methods of science to test hypotheses, solve problems, and make decisions
6. Reflect on the ways in which humans depend on, influence, and are affected by Earth processes, products, and systems

### **Assessment of Learning Objectives**

All assessments will be cumulative; any and all classroom material will be considered fair game on quizzes and tests immediately after discussion, readings and/or labs.

**Assessment 1:** Quiz 1 (25% of Test/Quiz category)

**Assessment 2:** The Midterm Exam (50% of Test/Quiz category)

**Assessment 3:** Quiz 2 (25% of Test/Quiz category)

**Assessment 4:** The Final Exam (20% of the overall class grade)

### **Grading**

**Labs, Classwork and Final Project: 50% of the total grade.**

Classwork will be chosen for grading at random. Relative point values will be assigned based on assignment difficulty and time required. Any assignment handed in late will be subject to a late penalty per class policy (50% of the graded value). **No work may be handed in more than 3 calendar weeks after the date it was due, unless prior arrangements are made with the instructor. No classwork can be reworked after it has been submitted for a grade.**

**Quizzes and the Midterm Exam: 30% of the total grade.**

The quizzes and Mid-term are cumulative and all material presented and discussed in class up to that point will be considered fair, although mostly the quizzes will cover recent material. If you miss a quiz it is highly recommended that you take it as soon as possible. Retakes may be possible, depending on the quiz format. **No retakes are allowed on the Midterm Exam, although rescheduling is allowed if you are absent on exam day.**

**The Final Exam: 20% of the total grade.**

The Final Exam is cumulative and all material presented and discussed in class will be considered fair. Questions on tests are not meant to trick you, but check your understanding of the material. Take your time and study the questions and all answers; some answers may seem reasonable, but are less reasonable than others. **No retakes are allowed.**

**Extra Credit:** Students are given 3 hall passes (for my class) per semester which are worth extra credit. These passes are used to discourage unnecessary hall wandering and reward responsibility (passing

periods are intended for regular bathroom use). A fourth pass is provided for an emergency situation should the extra credits and emergency are used up, parents will receive a warning email. A **5<sup>th</sup> bathroom use within a single semester will result in a truancy unless there are extenuating circumstances** (please let me know if your student has a medical reason for frequent bathroom use). 60% of my students never use a single pass; using four passes is considered excessive. Other Extra Credit is rarely available and usually difficult to acquire.

Letter Grade	Percent
A	90-100
B	80-89
C	70-79
D	60-69
F	< 59

### **Student Code of Conduct:**

View the Boise State University Student Code of Conduct [here](#). Definitions of cheating, plagiarism, and other forms of academic dishonesty as well as university policies and procedures for handling such cases are included. This includes, but is not limited to, signing someone's name to the in-class activity, consulting another student's exam, quiz, or laboratory materials from a previous, or current semester, and/or making your exam, quiz or homework available to another student. Students caught breaking the Code of Conduct will receive a zero on the assignment and will be reported to the Dean of Students.

Boise State University expects all of us to uphold the Boise State University [Statement of Shared Values](#), which includes the following:

**Academic Excellence ▪ Caring ▪ Citizenship ▪ Fairness ▪ Respect ▪ Responsibility ▪ Trustworthiness**

Building these values into our behavior creates an ideal space for learning, where we can all feel comfortable engaging with challenging tasks and ideas. If you have concerns about the Shared Values or see anyone in class, including me, struggling to uphold them, I encourage you to share your concerns with me. My goal as a teacher is to provide you with effective tools and space to think critically about issues that affect all of us as students, citizens, and humans. Every semester I make adjustments to this course to better achieve that goal. **You have the ability to be successful in this course!**

### **Disabilities, Resources and Accommodations**

Students with disabilities needing accommodations to fully participate in this class should contact the Educational Access Center (EAC). All accommodations must be approved through the EAC prior to being implemented. To learn more about the accommodation process, visit the EAC's website at <http://eac.boisestate.edu/students/getting-started/>. If you find yourself struggling with your mental or physical health during the semester, or otherwise, please feel free to approach me. I work hard to be flexible, understanding, fair, and accommodating.

### **Educational Access Center (EAC)**

The EAC will provide guidance on academic accommodations you may provide for students who have temporary or permanent disabilities such as students who have a 504 or IEP plan. Please note, students may be required to submit additional documentation.

Educational Access Center (EAC): (208) 426-1583 | [boisestate.edu/eac](http://boisestate.edu/eac)

### **Tutoring**

Boise State Advising and Academic Support Center (AASC) coordinates academic support services for students. Free academic assistance and tutoring is available to Boise State students in a variety of locations and formats. Students may visit AASC's tutorial services at [boisestate.edu/aasc/academicsupportservices](http://boisestate.edu/aasc/academicsupportservices) for more information and contacts by subject.

Advising and Academic Support Center: (208) 426-4049 | [boisestate.edu/aasc](http://boisestate.edu/aasc)

### **Geology 101 Course Schedule**

Deviations from the following course plan will undoubtedly occur over the semester. In particular, we may substitute some material or may take longer to cover certain topics than originally planned.

### **Tentative Course Syllabus**

Week 1 – Orientation

Week 2 – Basic Mapping (**Lab 1 -Global Coordinates**)

Week 3 – Understanding Topography (**Lab 2 -Creating a Topographic Map**)

Week 4 – Earth Formation and Spheres (**Lab 3 -Earth Spheres**)

Week 5 – Geologic Time (**Lab 4 -Isotopes**) **Quiz 1**

Week 6 – Absolute Time

Week 7 – Earthquakes (**Earthquake frequency/magnitude research paper**)

Week 8 – Energy Transfer (**Lab 5 -Epicenters and Wave Velocities**)

Week 9 – Surface Deformation **Midterm Exam**

Week 10 – Geologic Structures

Week 11 – Volcanoes (**World Volcanoes Research Project**)

Week 12 – Compounds and Minerals (**Lab 6 -Mineral Identification**)

Week 13 – Rock Classification (**Lab 7 -Rock Identification Lab**)

Week 14 – Weathering and Erosion (**Lab 8 -Surface Area Weathering Lab**)

Week 15 – Mass Movement **Quiz 2**

Week 16 – Deposition (**Weathering and Erosion Final Project**)

Week 17 – Earth as a Complete System

Week 18 – Review Week

Week 19 – Final Exam