

**\*THIS SYLLABUS IS A DYNAMIC AND WILL BE UPDATED CONTINUOUSLY\***

**Updated 10/7/2018**

**BIOL 108: Environmental Biology**  
**Fall 2018**

**Instructor:** Dr. Jeff Atkins  
**Office:** C312  
**Email:** jwatkins6@vcu.edu

**Lecture:** Section 01 - Tuesday & Thursday 1200 – 1315  
Section 02 - Tuesday & Thursday 1330 – 1445

**Classroom:** Gottwald B118

**Office Hours:** Tuesday 1500 – 1600 or by appointment

### **Course Description**

This course is for non-biology majors and is intended to present an overview of issues in ecology, environmental science, and the relationships between humans and both the natural and built environments. At the core, this is an environmental science course with ecological and biological highlights. We will cover issues related to natural resources, agriculture, water use, climate change, population growth, land use, and current global environmental problems. We will examine these issues from scientific, social, political, and economic perspectives. After taking this course, students should be able to objectively assess how humans impact the natural environment.

### **Assessment**

Your overall course grade will be derived from a combination of participation (20%), written assignments (40%), quizzes (10%), and exams (30%).

Quizzes will be 4-5 questions, mostly short answer, given at the beginning of class. Some quizzes will be “choose your own adventure” quizzes where you will provide questions on the board and I will pick the five to make up the quiz. The lowest scoring quiz will be dropped.

Assignments will be given throughout the semester that will reinforce the topics we talk about in class. These will be incredibly varied in approach and content and will comprise the bulk of your grade since they will require substantial effort during the semester.

Exams will be conducted twice during the semester, a mid-term exam and a final exam. Both will be take-home exams that will require you to use multiple outside sources. I want you to learn to think, not regurgitate facts.

### **Late Policy**

All assignments that are late will be assessed a 10% penalty for each class period they are delayed.

### **Course Materials**

- 1) Text book: Withgott and Laposta, 2018 Environment: The Science Behind the Stories (not required though, and readings will be uploaded).
- 2) Multimedia: Additional materials will be linked to in the syllabus (see below) during the semester. You are responsible for reading, listening to, or watching these materials.

### **Attendance and Participation**

Regular and punctual class attendance is expected and will account for 20% of your grade. You are expected to arrive on time and remain until class is dismissed. Roll will be taken every day. Participation credit will be at my discretion, but includes being attentive, engaging in class conversation, and avoid distractions.

Authorized absences are granted for students who are approved by the appropriate administrator of the University to miss class. Examples of authorized absences includes class field trips, University sponsored workshops, musical performances, and intercollegiate sports participation. Students who miss class due to illness will be allowed to make up missed work provided adequate documentation is presented (e.g. doctor's note). Extenuating circumstances will be evaluated on a case-by-case basis. Communication via email, promptly, is necessary though.

September 27 – Watersheds

**Assignment 1** – [Know your watershed](#) (Due October 4)

October 2 – Food, Agriculture, and Sustainability

Introduction to concepts and big ideas

**Assignment 2** - [Where does your food come from?](#) (Due October 9)

October 4 – Out of class assignment (in lieu of class, you got some stuff to do!)

**Assignment 3** - [YouTube Assignment](#) (Due October 9)

Preparation: Chapter 10 from Withgott and Laposta (will be online for all)

October 9 – Food, Agriculture, and Sustainability II

**Quiz 1** - [Chapter 10 \(pg. 235-249\) from Withgott and Laposata](#)

October 11 – Food, Agriculture, and Sustainability III

Preparation: [Withgott and Laposta pg. 209-220](#)

October 16 – FALL BREAK

October 18 – The Earth

Preparation: NASA – [“The Birth of a New Island”](#)

Bill Nye – [“Plate Tectonics, Volcanos, and Earthquakes”](#)  
[Withgott and Laposta pg.32-36](#)

**Quiz 2** – Choose your own adventure!

\*Bring in in a solid, short answer question to write on the board.

Best five get picked, with some type of reward if yours is chosen.

**Assignment 4** - TBD

October 23 – The Atmosphere

October 25 – Ecosystems and Biomes

**Exam 1** – Take home exam, due **November 1.**

October 30 – Evolution and Biodiversity

November 1 – Evolution and Biodiversity II

November 6 – Ethics and Economics

November 8 – Ecosystem Services

November 13 – Human Population

November 15 – The Urban Environment

November 20 – Guest Lecture (TBA)

November 27 – Global Climate Change

November 29 – Global Climate Change

December 3 – Environmental Health

December 5 – Risks and Natural Hazards