

Biol 1010: Evolution & the Diversity of Life

Fall 2024 Course Syllabus

Department of Biology, College of Science & Mathematics, Valdosta State University
Meetings 9:00-10:45 in 1011 Bailey Science Center – The Large Auditorium

Dr. Leslie S. Jones

Please Use Blazeview email for All Routine Class Communications

Office: 1096 Bailey Science Center Phone: 219-1337

VSU Email: lesliesj@valdosta.edu

Office Hours: Mon & Wed 11:30-12:30, Tues & Thurs 11:00-12:00, & Tues 4:00-5:00

Personal Appointments will be scheduled by Blazeview (BV) Email

What You Need to Know!!!

This Is Not a Typical Science Class

My Teaching Philosophy

I love science, and I want you to see how all of the Natural Science disciplines are connected around an organized conceptual framework that can be arranged from the entire Universe down to very small waves of invisible energy on the basis of their conceptual relationships. We will cover this theme in the beginning, and it will be carried out through the semester. I also have an active personality and the “attention span of a flea.” I resent being forced to sit through anything boring, so I try to make my classes interesting for you. If you look bored, I will speed up, so your best bet is not to do that or fool around. I will try to present information at a reasonable rate that allows you to take notes. If I speak too fast for you, I recommend taping the lectures and photographing important slides with your cellphones. This way you can go back and add missed information to your notes. To slow the presentation down, ask questions so I can clarify aspects of the information.

If you make an effort, keep up, and do the assignments, & see me for help - YOU can pass this course!

Course Objectives

This is a Core IMPACT class which satisfies guidelines provided by the University System of Georgia - USG and provides students with essential knowledge in foundational academic areas. In their words, the class will involve “*Inquiry and Analysis, Problem-Solving, Teamwork*”. Students will use ‘**scientific methods**’ and laboratory procedures or mathematical and computational methods to analyze data, solve problems, explain natural phenomena, and ask scientific questions or use data, mathematics, or technology to understand the universe?

Since most of you are taking this class to satisfy a requirement in Area T - Technology, Mathematics & Sciences (STEM) in the Core Curriculum, I will structure the information to be useful to people who are not biology majors. This course will help master course content, and support students’ broad academic and career goals. The Core has been designed to give breadth to your education. Given everything that is happening to our environment, everyone needs to understand the basics of the Natural Sciences.

Natural Science, Math, and Technology classes provide information about the physical universe and the nature of science using scientific methods and/or mathematical reasoning and concepts to solve problems. This particular class is described as “an introduction to the diversity of life on Earth with a special emphasis on ecological and evolutionary processes and relationships.”

Statement of Social Justice Commitment & Student Support

As an educator, I have a strong personal commitment to teaching the principles of Diversity, Equity, & Inclusion (DEI). For me, social justice is the most important part of being an American. When I see examples of discrimination, it breaks my heart because it is so unfair.

Therefore, there will be relevant interdisciplinary lessons that connect biology to the following **Social Value Issues**:

- 1. Sex & Gender** to clarify the distinctions between these terms and the complexity of LGBTQ+ issues
- 2. Religion & Science** to highlight the importance of personal worldviews and make sense of different spiritual ideas
- 3. Human Diversity** to demonstrate how “Race” was invented to justify racism and has no *biological* validity at all

Concern for other people should not be depicted as a political issue when it is a matter of being a decent human. However, because these topics have been politicized in the current polarized climate of the USA, we can also look at the different perspectives on each issue. You will have a chance to write optional essays exploring both of the political sides of these, that will count as extra points on your Unit Tests. There is one topic per unit and one chance to get these points.

I support all students regardless of immigration status or country of origin. As a Dreamer Ally, I support Dreamer students and promote their sense of belonging and safety as they pursue their higher education goals. A helpful site is https://international.uoregon.edu/immigration_faq. I commit to not sharing your status with anyone if you reveal it to me. I also remind you that **when interacting with faculty, staff, and offices around campus you are never required to reveal your immigration status.**

Biol 1010 – Fall 2024 – Tentative, but Probable Weekly Outline

Topic	SmartBooks	Other Assignments
Unit 1: The Nature of Science		
1. The Natural World		
8/20 – Opening Day with Course Overview		
8/22 – Levels of Organization		Student Information Sheet
2. The Sciences		
8/27 – Hierarchy & Ranking		Alphabetical Review Homework Due
8/29 – Natural Disciplines & Social Implications		
3. Reasoning		
9/3 – Holism & Reductionism	Ch.1	
9/5 – Scientific Reasoning		
4. Sex & Gender		
9/10 – Biological Sex	Ch.35	
9/12 – Cultural Construction of Gender		
5. Life		
9/17 – Characteristics of Life		
9/19 – Emergent Properties		Optional Essay on Sex & Gender (9/16)
6. Transition		
9/24 – Unit 1 Test – The Natural World		Pretest Due 9/23
Unit 2: Evolution		
9/26 – Social Religious Controversy that Surrounded Evolution		
7. History		
10/1 – Origins	Ch.15	
10/3 – Evidence	Ch.13	
8. Types of Selection		
10/8 – Artificial	Ch.12	
10/10 – Natural		
XXXXXXX – Fall BREAK (9/14-9/15)		
9. Change over Time		
10/15 – Fall Break Holiday - No Class		
10/17 – Speciation	Ch.14	
10. Human Evolution		
10/22 – Migrations		
10/24 – Skin Colors		
11. Transition		
10/29 - Human Diversity Is Not Race		Optional Essay on Race & Racism (10/28)
10/31 – Unit 2 Test – Evolution		Pretest Due 10/30
XXXXXXX – 10/31 Last Day to Drop Classes		
Unit 3: Biodiversity		
12. Microbes		
11/5 – Prokaryotes	Ch.17	
11/7 - Eukaryotes (& Protists)	Ch.18	
13. Flora		
11/12 – Biomes	Ch.39	
11/14 – Plants	Ch.19	
14. Fungi & Fauna		
11/19 – Fungi	Ch.20	
11/21 - Animal Adaptations		Optional Essay on Biodiversity (11/20)
15. Unit Test		
11/26 - Unit 3 Test - Biodiversity		Pretest Due 11/25
11/28 – No Class Thanksgiving Break		
15. Environmental Sciences		
12/3 – Climate Changes		
12/5 – Human Impact on the Natural World		Optional Essay on Worldview (12/9)

Comprehensive Final Exam – Thursday, Dec 12th - 2:45 – 4:45 pm in BSC Lecture Hall 1011

BIOL 1010 Class Support

Emails - Please Use Our Blazeview (BV) Email for All Class Matters!!!

I check it often and will respond as long as your message was polite.

If several people ask the same question, I will respond to the whole class.

My VSU email: lesliesj@valdosta.edu should only be used if your message is urgent.

To be safe, you need to **Check Your Blazeview Email OFTEN** (several times per week) for updates.

Class emails are not text messages and are expected to be written coherently.

My title is **Dr. Jones**, and you should start any email with that included in a greeting.

Mrs. Jones is my mother, and I can forward your emails to her if you want?

The first thing you should do is tell me **which of my classes you are in** because I have several.

The next sentence should contain the **reason for your message**.

After you explain yourself, you should close the message properly.

Textbook

Biology: Concepts & Investigations (5th Ed.) Marielle Hoefnagels (2021)

Your eBook account is part of the Day 1 textbook savings program. To simplify access to the textbook and other learning resources for this class, your McGraw Hill Connect course materials have been integrated directly into Blazeview. Select the **Content** tab from the navigation bar and locate the **Textbook** section. Select the **McGraw Hill Connect Courseware Direct Link (1.3)**. NOTE: The Day 1 Course Materials widget on the course homepage is only used to opt out of the Day 1 program.

11 SmartBook assignments are listed on the Schedule (on the next page) & Posted in BV.

These chapter exercises introduce/remind you of vocabulary that is important before lecture.

For *Tests*, be sure to reread the parts of chapters on what was covered in class.

3 Graded Unit Pretests allow you to check your preparation and indicate what you need to study more.

3 Topical Units each culminate in a test (10% of the grade)

These are conceptual, multiple-choice tests with 50 questions and 10 five-point sequences.

Test Dates will be on: September 24th, October 31st, November 26th

Scantron scores will be posted on Blazeview ASAP after the test. The Optional Essays can add 10 points to the score.

A Comprehensive Final Exam will take place in the same classroom on Thursday, December 12th from 8:00 – 10:00

Everything we cover or discuss in class can be included in this final evaluation.

You are expected to have a conceptual understanding of this information.

Instructional Support

Even in a large class, it is important to speak to your professor, come to my office during office hours or make an appointment

Office Hours: Mon & Wed 11:30-12:30, Tues & Thurs 11:00-12:00, & Tues 4:00-5:00

To find my office, go to the Buffalo in the Atrium, turn 90° to your left and walk down the hall through 2 sets of doors.

Just before the exit, there is a door on the right to a suite – My office is the first on the left - #1096

Required Technology Platforms

LMS - Blazeview (BV): Learning Management System - Your VSU Account

This will be used for **ALL** class communication, writing assignments, and access to various resources.

<http://www.valdosta.edu/academics/elearning/blazeview-d2l.php>

CMS - McGraw Hill (MH) Connect: Course Management System – **SmartBook & Pretests**

You can start early for all chapters in each unit. **Missed Deadlines = 0% No Exceptions!**

The program contains a complete electronic version of the textbook – click on the book cover on the right.

SmartBook – pre-reading will be assigned, allowing you to work until you reach 100%.

This adaptive program adjusts to every student's individual skills and content knowledge.

Prompts drill on vocabulary and basic concepts in preparation for class.

Exercises take longer if you do not read the book.

Work as long as you want to get 100%.

These are much "lower order" questions than you should expect on class tests.

Practice Pretests - consist of 50 questions, randomly selected from a large pool

These can be taken 3 times, and only your best grade will be reported.

They are each due at midnight on the day before the Unit Tests.

McGraw Hill (MH) Customer Support - Call (800) 331-5094

If you have any problems with these programs...

First try another Browser.

Then, shut down your computer and restart it or try another computer.

Go to campus and use a computer in the lab if you must.

The MH people are supposed to take care of any problem, but in case they do not, get the **Case Number**.

If MH does not help you, then email me in Blazeview and be sure to send me the Case Number.

BIOL 1010 Course Policies

Your Grade Depends on Your Effort

SmartBook Assignments – 20%

Practice Pretests (9/23, 10/30, 11/25) – 15%

Unit Tests – Multiple Choice - Each is 15% for 45% Total

Optional Essay Scores for up to 10 points are added to each Scantron Test Score

Comprehensive Final Exam - 20%

Blazeview Record of Your Grades

All grades will be recorded in the BV Learning Management System. You will know where you stand because the Connect assignments are linked to this. At times you will notice that the grades go up or down for unknown reasons. The only explanation for these weird events is that the ghosts of the Internet like to scare students and get them to send screaming emails to faculty members. At the end of the semester, my grades are often more generous than those that are calculated on BV, so try not to worry about a few points, until the end of the semester. You can do the math and calculate your grades. If you want me to check them, I want to see that your calculations are different from BV before I calculate them

Personal Responsibility

You must keep track of all assignment deadlines - **late work will not be accepted!!!**

Optional Essays, SmartBook & Practice Pretest assignments should be completed early because those deadlines are final.

If you miss a unit test for any reason, you must notify me within 24 hours.

Make-up tests will only be given for legitimate reasons and will be Essay Exams.

Your grades will be posted in Blazeview, so you will know where you stand.

If that is not the grade you want for the semester, make more effort on the assignments!

Class Decorum

When class begins at 9:30, please **be prepared to begin taking notes** in writing or on a laptop.

You are more than welcome to record the lectures to playback later.

I encourage you to snap images of key slides on your phones.

It is very easy to tell if you are texting, so don't do that in class!

This is a large class and getting up distracts your classmates.

You should **only get up during class if you have a personal emergency.**

Phone calls can wait even if it is your mother or someone that important!

Class ends at 10:45. I can tell the time, so we will usually end just before the designated time.

Please do not fidget or rattle your book bags until the minute hand is horizontal.

Then you can make a fuss, **unless I beg you to give me a few more seconds.**

Attendance Policy

You are expected to attend all class meetings because the **tests are based on the lectures.**

You will not understand the course enough to pass unless you are present.

Exchange contact information with 3 classmates – in case you need something, or you miss class.

If you do miss class for any reason, you are responsible for obtaining the notes from a classmate.

Sit in the back of the room if you are late or need to leave early so you will not disturb the class.

If you arrive after 9:30 and class has started, you must enter upstairs or I will have to stop class and remind you

If you need to leave early on any day, please sit at the back and leave through one of those doors

This Course is designed to satisfy the USG requirements in Technology, Mathematics and Science.

As one of the Core IMPACTS courses, BIOL 1010 will provide essential knowledge in the foundational academic area of the natural sciences. The first unit of the course will include special attention to the way the natural sciences operate to understand and explain the Natural World in terms of the multitude of natural phenomena that comprise everything in the universe. Much of this will be explicitly covered in Unit 1: The Nature of Science where we will specifically cover a conceptual framework known as *Levels of Organization of the Natural World*. This provides a transdisciplinary picture of how the course content fits within a scheme of the relationships between the disciplines of:

Astronomy

Earth Science

Ecology

Biology

Chemistry

Physics

BIOL 1010 General Information

Everything That Must Be Stated for Everyone's Protection

Cheating Will Not Be Tolerated!

Members of the class are expected to maintain high standards of integrity. Evidence of dishonest conduct or cheating will result in no credit for the assignment and depending on the case, a grade of "F" for the course. This course will use the VSU Handbook Code of Ethics as a basic standard of behavior. Everyone in the class is expected to read the Biology Department Plagiarism Policy posted at: <http://www.valdosta.edu/colleges/arts-sciences/biology/documents/resources/PlagiarismPolicy.pdf>

Do not expect leniency for claims on the grounds of not knowing better. By taking this course, you agree that all required course work may be subject to submission for textual similarity review to Turnitin, a tool within Blazeview. For more information on the use of Turnitin at VSU see [Turnitin for Students](#). You will be reported to the Dean of Students and letter of concern documenting the problem will be sent to the College of Education. Be aware that employers such as school systems do call that office at VSU to check on whether you have a record of infractions.

Submission of Papers that use AI and are not original papers written by the student will result in failure. This course will use Turnitin AI detection to check for the use of Chat GPT and other AI-generated content in student papers. This will identify instances of plagiarism.

Turnitin will be used as a "tool that can help promote academic integrity by checking student papers for originality. Turnitin's advanced algorithms can detect subtle instances of plagiarism, including those that involve the use of AI." This is to ensure that you "are submitting original work and that academic standards are being upheld.

Family Educational Rights & Privacy Act

Grades cannot be posted by Name or Social Security Number. Scores and student work will not be given over the telephone, by email or to another student. Faculty members can't speak to parents without a student signing a consent form that is filed in the registrar's office.

Non-Discrimination and Title IX Statement

Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Mr. Darius Thomas. To view the policy or to report an incident visit: <https://www.valdosta.edu/administration/student-affairs/title-ix/>

Accommodations Statement:

Students with disabilities who are experiencing barriers in this course may contact the Access Office <https://www.valdosta.edu/student/disability/> for assistance in determining and implementing reasonable accommodations. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu.

Mental Health Support:

Mental Health services are available and treatment does work. You can learn more about confidential mental health services available on campus at <https://www.valdosta.edu/hopeconnect>

If you, or someone you know, needs support, is distressed, or exhibits concerning behavior, help by making a referral to the BIT Team. <https://www.valdosta.edu/administration/student-affairs/bit.php>

To request reasonable accommodations for pregnancy and childbirth, please contact the Christina Kidd 333-5941