

SYLLABUS

BIOL 152: Intro To Biological Sciences II Spring 2017 MW 4-5:15 PM, MCALC 1201

Instructor: Rachel Hill komosinskira@vcu.edu
Office hours: [removed]
Or by appointment
Room 118a of LFSCB

Supplemental Instruction: [removed]

Weekly review sessions: [removed]

Office hours: [removed]

Marathon sessions:
[removed]

Preceptors: [removed]

NOTE: This syllabus may be subject to change at the instructor's discretion at any time.

*****SUPER IMPORTANT:**

You cannot receive points for any assignment, exam, or presentation without first completing the Academic Integrity Module and receiving full points. The module can be found in Blackboard. You can repeat it as many times as it takes you to get a perfect score.

Course Description

Semester course; 3 lecture hours. 3 credits. Prerequisites: BIOL 151 and CHEM 101. Focuses on evolutionary principles, the role of natural selection in the evolution of life forms, taxonomy and phylogenies, and biological diversity in the context of form and function of organisms. Designed for biology majors.

Course Overview

This course will focus on biological diversity from an evolutionary perspective. Along with basic principles and mechanisms of evolution, the role of natural selection in the evolution of life forms, taxonomy and phylogenies, and the introduction/learning of specific vocabulary, details, and concepts, emphasis will be placed on the development of critical thinking skills including the application of the material to novel

scenarios and the analysis of novel information. This course is intended to help cultivate a passion for the biological sciences and facilitate synthesis of existing student knowledge with new topics for a more comprehensive understanding of biological concepts, thereby preparing students for more advanced courses in biology.

Learning Objectives

By the end of this course students should be able to:

- 1) Explain the basic principles and mechanisms of evolution
- 2) Distinguish evolutionary relationships between organisms on phylogenetic trees
- 3) Assess the connections between organisms, adaptations and evolutionary trends
- 4) Explain the evolution and diversity of plants and describe some key systems in plants
- 5) Explain the evolution and diversity of animals and describe some key systems in animals
- 6) Analyze new information related to the subject matter and apply course materials to novel situations
- 7) Given the content and rigor of the course, the student will evaluate current study and time management skills and devise new methods for learning the material.

Textbook (required)

Biology: How Life Works 1st edition by Morris, J et al.

or

Biology: How Life Works 2nd edition by Morris, J et al.

(Electronic version is okay – there will also be copies at the library to check out for limited use)

Textbook (required – and free)

OpenStax Biology

<https://openstax.org/details/books/biology>

Top Hat (required)

Our Top Hat course page will become available Saturday, January 21 (unless you hear earlier).

We will be using the Top Hat (www.tophat.com) classroom response system in class. You will be able to submit answers to in-class questions, discussions, group work, etc. using Apple or Android smartphones and tablets, laptops, or through text message. You will also be able to view powerpoints in class and after class using TopHat.

You can visit tinyurl.com/TopHatStudentGuide for the Student Quick Start Guide which outlines how you will register for a Top Hat account, as well as providing a brief overview to get you up and running on the system.

By Saturday, January 21, an email invitation will also be sent to your school email account (if you don't receive this email, you can register by visiting our course website [removed]).

Top Hat will require a paid subscription, and the standard pricing for the cheapest option is \$24 for 4-months of unlimited access. For a full breakdown of all subscription options available please visit <https://tophat.com/pricing/>. There are several professors in Biology using TopHat, so if you foresee continuing to take upper level Biology, I would consider the expanded pricing options.

Top Hat will not count towards assignment points until January 25th. This means you can delay purchasing a subscription in case you decide to drop the course. Top Hat has a 7-day free trial period as well, which gives you a whole extra week before you need to officially purchase.

Classroom Conduct & Computer Use Policy:

Any behavior which is distracting or disruptive to fellow students or to me will not be tolerated – you will be asked to leave. If you bring a computer to lecture it must be used solely for that class. If you are caught doing something other than class work, you will lose your privilege to bring a computer to class for the rest of the semester. Disruptive behavior may include talking during lecture, surfing the internet, texting, or a cell phone ringing/buzzing during class.

Lecture Exams

There will be four lecture exams and a final/5th exam. Each exam can and will build on information from previous classes and courses, to include BIOL 151, and so will likely have questions about previous material. Exams will consist of multiple choice and short answer questions (short answer questions may involve drawings or charts). The short answer portion will also have fill-in-the-blank and matching questions. For exams 1-4, each multiple choice portion will consist of 25 questions and be done on gradeIT sheets that I will provide. Each MC question will be worth 2 pts – 50 pts total. The Short Answer section will be worth 50 pts overall (or 50 % of the test score). Each exam – except for the final exam – will be the same length and worth the same number of points. The final/5th exam will have an extra section composed of multiple choice and short answer questions that are very much comprehensive in nature. The final/5th exam will total 160 pts. I foresee 80 pts being from “new” material and 80 pts being from cumulative material. The format will still be similar to the other exams though – 50% from MC and 50% from short answer.

Exam Rebuttals

There will be options for rebuttals for the short answer section. Because I am aware that grading short answers is very different from multiple choice questions I am giving everyone the opportunity to petition for more points based on the answers they give on the short answer section. However, to be eligible for consideration you must do the following:

1. Take your short answer test and compare it carefully with the keys that are available in the main biology office (LFSCB 126)

Please keep in mind that you cannot copy or photograph the keys in anyway. Doing so is a course policy violation and can impact your grade in the course.

2. Once you have made a careful comparison, type up a rebuttal to the grading that clearly indicates areas in which you potentially are eligible for more points.

Rebuttals that fail to provide a reasonable explanation or include "my answer matches the key" or "I meant to say..." will not be considered.

If your answer is wrong, it is simply wrong. I'm looking for you to legitimately show that your answer is valid. In some cases, citing page numbers from the textbook may be helpful. Maintaining ignorance on a question makes it worse for all of us.

3. Type up your rebuttal in a way that clearly indicates which questions you would like to have re-evaluated. Print the petition out; no handwritten petitions will be considered.

4. Turn in your petition and your original short answer test sheet (stapled together!) to the main biology office by 5pm one week after your test was made available (dates will be announced in Blackboard).

Please be advised that all tests will be scanned. DO NOT ALTER YOUR ORIGINAL TEST. THIS IS AN ACADEMIC HONESTY VIOLATION!!!!!!!

Last, you cannot come and ask me to go over the test with you prior to turning in a petition. If you go over the test with me prior to turning in a rebuttal, you are ineligible to turn in a rebuttal.

I will try to return the rebuttals prior to the next test grades being returned. If you do not pick up your rebuttal within a week of it being returned, you are ineligible to submit further rebuttals.

If you have any question about the instructions, please post them under General Course Questions in the Discussion Board. Make sure to look to see if someone else has already posted the question before you post yours.

Lecture Exam policies:

****Failure to comply with any of these policies may result in the forfeit (0%) of the exam or the involvement of the honor system – this depends on the infraction****

- Memorize your V# prior to your first exam.
- Bring a photo ID for each exam.
- No cell phones during the exam... for any reason.
- No hats
- No ear devices or any other electronic devices
- No bags/purses at your feet - they should be at the front of the room or along the walls
- No clipboards
- You may leave the class during an exam with permission from the instructor
- Do not look at any exam but your own
- Do not speak to your classmates once the exam has commenced
- Turn in all exam materials to the Instructor (this includes extra exams)
- No duplication of exams or exam questions in any way (prior to, during, or after the exam)

Participation:

Participation will be measured daily via Top Hat. We will often be doing work during class in the form of top hat questions, group work, or individual work. This work will allow both of us to assess your mastery of the material, and make adjustments accordingly. Sometimes there will be two different, separate assignments in class – Top Hat questions or discussions. You must come to class prepared, failure to complete work before due date or coming to class will result in a zero for any in class assignments done that day. Should you miss more than four consecutive online assignments or four consecutive classes you may be administratively withdrawn from the class. **See below

Online Work:

Each week you could have several online assignments that must be completed. It is your responsibility to check the course blackboard site for any assignments and to make sure that assignments are completed before due dates. No make-ups for missed work will be given nor will late assignments be accepted. My goal is to make assignments due on Fridays and Tuesdays – but this could change depending on the week. I will try to email when I post the assignment – you also must check Blackboard regularly. Loss of internet access, computer issues, browser issues or other technology related problems are not legitimate excuses for failure to complete assignments before due dates. Assignments outside of class must be done independently unless explicitly noted in the assignment. **See below

Attendance & Missed Work Policy:

Missed Work - It is the student's responsibility to get notes from a classmate due to an absence. It is the student's responsibility to find out from a classmate what was missed, so *be kind and courteous to your colleagues!* There is no "make-up" for in class work. For an "excused" absence, your work *may* be exempted.

Make-Ups - Lecture exams may be made up at the instructor's discretion, but will require an acceptable reason for missing the exam – along with sufficient documentation. You must submit a **written request via email for a make-up within 24 hours** of the exam time outlining your reasons for a make-up. I reserve the right to make the exam a full essay/short answer exam or change the exam questions. You must also provide explicit documentation. Doctor/nurse notes must reference that the illness is either debilitating or contagious (the "common cold" does not warrant missing an exam – I'm talking influenza or norovirus here, people).

DSS

If you require accommodations approved by Disability Support Services, you must meet with me to discuss how your accommodations will be met in this class. This may require a "contract" outlining what the expectations are for you and for me. If you require testing accommodations, you must notify me at least a week in advance for testing at the DSS office or testing center. You must take your test on the same day as the rest of the class (given availability with DSS) as close to the class time as possible. You must also send a reminder at least 24 hours in advance of the test.

Blackboard/E-mail

All students are expected to utilize blackboard and e-mail on a daily basis to keep up with required readings, changes to the schedule and other announcements. Blackboard will regularly be updated with reading assignments and other materials relevant to the course. Students may also periodically receive e-mails, but are expected to check both blackboard and e-mail, as information may not always be made available through both platforms. Feel free to email with questions, but I will not guarantee that I will check my mail after 5pm on weekdays or anytime on the weekends (you may get lucky). Otherwise, I am pretty prompt on responding to email (with 24 hours). This could change during busy advising times.

Grades

Tests : 70% of final course grade (560pts)

Test 1: 100pts

Test 2: 100pts

Test 3: 100pts

Test 4: 100pts

Test 5/Final: 160pts (~80-100 pts from recent material; ~60-80 pts from cumulative/comprehensive material)

Participation and Homework: 30% of final grade (240pts)

Reading Qs/Weekly Qs

Top Hat Participation Qs

Class discussion Qs – also via TopHat but separate from the participation Qs

Each assignment equally weighted as part of the 30% total (unless a particular assignment requires more work than another – this will be noted up front when assigned). However, I will be dropping three

days of in class participation/discussion and one of the online assignments, reading question sets or quizzes. This policy takes into consideration missed classes or if you have an un expected Blackboard issue.

Grading Scale & Extra Credit:

89.50-100% = A 79.50-89.49% = B 69.50-79.49% = C
 59.50-69.49% = D Below 59.49% = F

No extra credit; however, there will be opportunities on each exam for a few extra points over 100%.

This schedule is not set and will be updated. This is currently based on the 1st Edition of the textbook – I will be addressing difference in 1st and 2nd editions as we go. Students will be notified in advance of any changes.

** Indicate weeks in which there is a test

Week	Dates (M/W)	Topic	Textbook Chapters/Pages
1	Jan 16 (MLK day) Jan 18	Introduction to Evolutionary Theory	Section 1.4, Ch. 21 Open Stax 18.1
2	Jan 23 Jan 25	Evolution of populations	Chapter 21
3	Jan 30 Feb 1	Origin of Species (End of Exam 1 Material)	Chapter 22
4	Feb 6 Feb 8**	Evolution Early Life, Intro to phylogenies Exam 1	Chapter 23.1 and 23.2 Campbell ch and Sci Am
5	Feb 13 Feb 15	Bacteria and Archaea; Form, function and diversity	Chapter 26
6	Feb 20 Feb 22	Evolution of multicellularity (End of Exam 2 Material)	Chapter 27 and 28
7	Feb 27 Mar 1**	Evolution of Plants from Algae Exam 2	Chapter 33
8	Mar 6 Mar 8	SPRING BREAK – No class	
9	Mar 13 Mar 15	Evolution of Plants; Seed Plants	Chapter 33 , 31.1, 29.3, 29.4
10	Mar 20 Mar 22	Fungal Evolution and Diversity (End of Exam 3 Material)	Chapter 34.1-34.3 – through 34-13
	Mar 24 (Fri.)	Last Day to Withdraw with grade of “W”	
11	Mar 27 Mar 29 **	Introduction to animal diversity Exam 3	Section 44.1, Section 27.1, Section 44.2 Openstax 27.1
12	April 3 April 5	Bilaterian Animals/Nervous system Muscular system/Skeletal system	Sections 44.3, 35.1, 44.3, 37.1, 37.3
13	April 10 April 12	Evolution and Diversity of Vertebrates (End of Exam 4 Material)	Chapter 44.4, 37.4, 39.1, 39.2, 39.4

14	April 17 April 19**	Population Ecology Exam 4	Chapter 46.1-46.3
15	April 24 April 26	Species Interactions, Communities and Ecosystems	Chapter 47.1-47.5 Chapter 25.3
16	May 1	Species Interactions, Communities and Ecosystems (cont.)	

Final Exam (Exam 5): Monday, May 8 – 4:00pm – 6:50 pm

Final exam will cover ecology and comprehensive information from the rest of the semester.

Last day for add/drop for this session: January 23, 2017

Last day to withdraw for this session: Friday, March 24, 2017

Important Dates

Important dates for the Spring 2017 semester are available online <http://academiccalendars.vcu.edu/>

Statements for Syllabi and Blackboard Pages

This content was last updated in January 2017. When linking to the online syllabus statements, please use

<http://go.vcu.edu/syllabus>

The topics include:

- Campus emergency information
- Class registration required for attendance
- Honor System: upholding academic integrity
- Important dates
- Managing stress
- Mandatory responsibility of faculty members to report incidents of sexual misconduct
- Military short-term training or deployment
- Student conduct in the classroom
- Student email policy
- Student financial responsibility
- Students representing the university - excused absences
- Students with disabilities
- Withdrawal from classes

Campus emergency information

What to know and do to be prepared for emergencies at VCU:

- Sign up to receive [VCU text messaging alerts](#). Keep your information up-to-date. Within the classroom, the professor will keep his or her phone on to receive any emergency transmissions.
- Know the safe evacuation route from each of your classrooms. Emergency evacuation routes are posted in on-campus classrooms.
- Listen for and follow instructions from VCU or other designated authorities. Within the classroom, follow your professor's instructions.
- Know where to go for [additional emergency information](#).
- Know the emergency phone number for the VCU Police (828-1234).
- Report suspicious activities and objects.
- Keep your permanent address and emergency contact information current in eServices.

Class registration required for attendance

Students may attend only those classes for which they have registered. Faculty may not add students to class rosters or Blackboard. Therefore, if students are attending a class for which they have not registered, they must stop attending.

Honor System: upholding academic integrity

The VCU Honor System policy describes the responsibilities of students, faculty and administration in upholding academic integrity, while at the same time respecting the rights of individuals to the due process offered by administrative hearings and appeals. According to this policy, "Members of the academic community are required to conduct themselves in accordance with the highest standards of academic honesty, ethics and integrity at all times." In addition, "To support a commitment to the Honor System, all members of the VCU community are required to:

- Adhere to the Honor System policy and its procedures;
- Report any suspicion or knowledge of possible violations of the Honor System;
- Answer truthfully when called upon to do so regarding Honor System matters;
- Maintain appropriate confidentiality regarding related to Honor System matters."

More information can be found at in the [VCU policy library](#).

Important dates

You can view important dates for the semester in the [academic calendar](#).

Managing stress

Students may experience situations or challenges that can interfere with learning and interpersonal functioning including stress, anxiety, depression, alcohol and/or other drug use, concern for a friend or family member, loss, sleep difficulties, feeling hopeless or relationship problems. There are numerous campus resources available to students including University Counseling Services (804-828-6200 MPC Campus, 804-828-3964 MCV Campus), University Student Health Services (MPC 804 828-8828, MCV Campus 804 828-9220) and the Wellness Resource Center (804-828-9355). 24 hour emergency mental health support is available by calling 828-1234 and asking to speak to the on-call therapist or utilizing the National Suicide Prevention Lifeline (1-800-784-2433).

Mandatory responsibility of faculty members to report incidents of sexual misconduct

It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct/violence (e.g., sexual assault, sexual exploitation and partner or relationship violence). This means that faculty cannot keep information about sexual misconduct/violence confidential if you share that information with them and they must report this information immediately to the university's Title IX Coordinator. In addition, department chairs, deans, and other unit administrators are required to report incidents of sex or gender-based discrimination to the university's Title IX Coordinator. Once a report is made, you will receive important information on your reporting options, on campus and off campus resources and remedial measures such as no-contact directives, residence modifications, and academic modifications. If you would prefer to speak with someone confidentially for support and to discuss your options for reporting, contact:

VCU's Wellness Resource Center 804.828.9355 | myoptions@vcu.edu | thewell.vcu.edu
Greater Richmond Regional Hotline (Community program) 804.612.6126 | 24-hour hotline
VCU's Counseling Services 804-828-6200

For more information on how to help, please [click here](#). The Policy on Sexual Misconduct/Violence and Sex/Gender Discrimination, can be found in the [VCU policy library](#). For more information about the University's Title IX process, please visit equity.vcu.edu.

Military short-term training or deployment

If military students receive orders for short-term training or for deployment/mobilization, they should inform and present their orders to Military Student Services and to their professor(s). For further information on policies and procedures contact Military Student Services at 828-5993 or access the corresponding policies.

Student conduct in the classroom

According to the [Faculty Guide to Student Conduct in Instructional Settings](#), "The university is a community of learners. Students, as well as faculty, have a responsibility for creating and maintaining an environment that supports effective instruction. In order for faculty members (including graduate teaching assistants) to provide and students to receive effective instruction in classrooms, laboratories, studios, online courses, and other learning areas, the university expects students to conduct themselves in an orderly and cooperative manner." Among other things, cell phones should be turned off while in the classroom. The Student Code of Conduct also prohibits the possession of or carrying of any weapon. For more information see <http://register.dls.virginia.gov/details.aspx?id=3436>.

Student email policy

Email is considered an official method for communication at VCU because it delivers information in a convenient, timely, cost-effective, and environmentally aware manner. Students are expected to check their official VCU email on a frequent and consistent basis in order to remain informed of university-related communications. The university recommends checking email daily. Students are responsible for the consequences of not reading, in a timely fashion, university-related communications sent to their official VCU student email account. This policy ensures that all students have access to this important form of communication. It ensures students can be reached through a standardized channel by faculty and other staff of the university as needed. Mail sent to the VCU email address may include notification of university-related actions, including disciplinary action. Please read the policy in its entirety at the [VCU Policy Library](#).

Student financial responsibility

Students assume the responsibility of full payment of tuition and fees generated from their registration and all charges for housing and dining services, and other applicable miscellaneous charges. Students are ultimately responsible for any unpaid balance on their account as a result of the University Financial Aid Office or their third party sponsor canceling or reducing their award(s).

Students representing the university – excused absences

Students who represent the university (athletes and others) do not choose their schedules. Student athletes are required to attend games and/or meets. All student athletes should provide their schedules to their instructors at the beginning of the semester. The Intercollegiate Athletic Council strongly encourages faculty to treat missed classes or exams (because of a scheduling conflict) as excused absences and urges faculty to work with the students to make up the work or exam.

Students with disabilities

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, as amended, require that VCU provide "academic adjustments" or "reasonable accommodations" to any student who has a physical or mental impairment that substantially limits a major life activity. To receive accommodations, students must register with the Disability Support Services Office on the Monroe Park Campus (828-2253) or the Division for Academic Success on the MCV campus (828-9782). Please also visit the [Disability Support Services website](#) and/or the [Division for Academic Success website](#) for additional information.

Once students have completed the DSS registration process, they should schedule a meeting with their instructor (s) and provide their instructor (s) with an official DSS accommodation letter. Accommodation letters will outline the required classroom accommodations. Additionally, if coursework requires the student to work in a lab environment, the student should advise the instructor or a department chairperson of any concerns that the student may have regarding safety issues related to a disability. Students should follow this procedure for all courses in the academic semester.

Withdrawal from classes

Before withdrawing from classes, students should consult their instructor as well as other appropriate university offices. Withdrawing from classes may negatively impact a student's financial aid award and his or her semester charges. To discuss financial aid and the student bill, visit the [Student Services Center](#) at 1015 Floyd Avenue (Harris Hall) and/or contact your financial aid counselor regarding the impact on your financial aid.

