Biol 113 – General Biology

Fall 2021

Online

Fall semester COVID message:

1. **Vaccine promotion**

Get vaccinated! Covid vaccines are readily available both on campus at Graves Gilbert Clinic and across the country at clinics, pharmacies, and physicians' offices (www.vaccines.gov). If you have questions or concerns about the COVID vaccine, please seek the advice of your doctor or another health care professional. Vaccines are the most effective deterrent against transmission of the virus or serious illness if you do contract it. Once fully vaccinated, quarantine is no longer necessary if exposed to a positive case. Even if you have had COVID-19, it's still important to get the vaccine. Also, next week, WKU will launch a vaccination status self-reporting form.

2. **Face masks**

At this time, all individuals, regardless of vaccination status, are expected to wear a face mask in indoor public spaces at WKU. While current guidelines from public health officials indicate masks are not typically needed outdoors, and the university's mask requirement extends only to indoor locations, WKU supports those who choose to wear a mask outdoors.

3. **Daily health checks**

It is also important that you monitor your own health. If you have symptoms consistent with Covid-19, stay home and away from others. If the symptoms persist or rapidly get worse, go to the WKU Clinic or other health care facility and get tested.

4. **Positive case and close contact reporting**

WKU's COVID assistance telephone line is available 24 hours a day at 270-745-2019. To report a positive case or close contact, please call the assistance line. Keep in mind that all WKU faculty, staff, and students are required to report a positive test result or close contact **within four hours of being notified**. The assistance line is available to help address questions regarding Covid-19. Beginning next week, WKU will restart the COVID Campus Community Dashboard to track our number of positive cases.

Specific information regarding these and other Covid-19 initiatives can be accessed at www.wku.edu/healthyonthehill. Please do your part to help us all stay healthy on the Hill this fall. Go Tops!

Online Delivery

All course activity is done online; there are no required face-to-face sessions within the course and no requirements for on-campus activity. Purely online courses eliminate geography as a factor in the relationship between the student and the institution but not necessarily meeting times. All lectures will be posted as mediasite recordings on Blackboard course site and Exams will be administered online on the blackboard site as well.

Instructor Information

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WELCOME TO BIOL 113

Congratulations to you all for joining the Western Kentucky University academic family and a warm welcome to our Biology community. I am all excited and looking forward to exploring with you all the LIFE ON EARTH through the fascinating world of Introductory General Biology. This course will be a memorable journey of biological discoveries that, I promise, you will cherish throughout your life. My teaching philosophy and the prime motivation to contribute to college education is based on the excitement involved in sharing and propagating my knowledge and doing my bit to give back to this great profession which shaped me as an individual. My teaching methodology is based on the principle of "deep learning". Briefly, deep learning is a process where the student learns with understanding as opposed to rote or surface learning where he/she just collects innumerable unrelated facts. My personal definition of a great teacher is "an individual who promotes a classroom environment, where learning is a continuous and stimulatory process aimed at analysis, assimilation and application." That said I look forward to a fulfilling experience in our classes where we will work together and through introductory biology, create a pathway to a greater understanding of ourselves and the life on earth around us. The rest of the course information sheet will help you to understand the objectives we will achieve through this course; the methods used to measure and gauge your progress throughout the course, and the WKU academic policies and rules.

Description

An introductory course in biology for the non-science major, which emphasizes the diversity and organization of life integrated with major principles and new discoveries. This course fulfills one of two natural science (E-NS) requirements of the Colonnade General Education Program.

Expectations and Goals

After successfully completing Biology 113, the student will have a working knowledge of:

1. The scientific process by which scientific knowledge is acquired and analyzed.
2. The basis of cell theory, cell structure and function.
3. Basic principles of Darwinian evolution.
4. The role of biomolecules in the structure and function of cells.
5. The metabolic processes of life.
6. The principles and processes of cell cycle and cell division including the biological basis of cancer.
7. The molecular biological phenomena associated with DNA, RNA and proteins.
8. Mendelian inheritance and genetics.
9. Modern biological research related to biotechnology and genomics.
10. Principles of Ecology.

Course Materials

Required Text

Inquiry into Life, 15th Edition by Sylvia Mader and Michael Windelspecht

To save you some money, maximize your effective use of your textbook, increase learning and evaluate the best ways of teaching you difficult topics, we've entered into a partnership with McGraw-Hill publishers. By enrolling in this course, you agree to purchase the digital materials associated with this course. These materials include 12-month or 24-month (depending on the course) access to Connect, SmartBook and LabSmart (where appropriate), a downloadable e-copy of the textbook, which is yours to keep, and the option to print a gray-scale copy of your textbook at greatly reduced cost. The cost per text, with all online materials is $75. A printed copy is available for purchase for $25 through the WKU Store during the first week of class. To make these savings available to you, WKU must institutionalize the purchasing process. As a result, about two weeks into the semester, you will be billed the cost of the materials for the course. The nice thing about this is that you will have access to all the course materials from day one, without doing a thing! If you choose to drop the course during the regular add-drop period, you won't be charged for the book. You should note that for this course, you WILL be charged for the digital materials. Do NOT Buy a copy of the book from online or local vendors. ONLY the digital format will be used in this course

Course Schedule

We will not do just do a sequential reading of chapters from the text book, but we will ask a series of questions and try to find answers to the BIG QUESTION "What is LIFE all about?" As you can see in the detailed course schedule below, we will ask "What" "Why" and "Who" questions and use chapters in the book as a resource to further develop an understanding the questions asked after the lecture. An analysis through mutual discussions on "how" questions in the form of discussion forums in blackboard will further deepen your understanding of concepts. Every lecture will be followed by a discussion forum

Detailed Course Schedule

Week	Topic (Related Chapter)	Assignment (Discussion forum)
Week 1	Biol 113 - What's in it for me?	Your formal introduction
	What is Life? (Chapter 1)	How do we define Life?
Week 2	What is Life made of? (Chapter2)	How does life work?
	What does our food contain? (Chapter 2)	How does our diet maintain us?
Week 3	What does our food contain? (Chapter 2)	How does our diet maintain us?
	EXAM 1	
Week 4	What are the units of Life? (Chapter 3)	How do you visualize life?
	What is the factory of Life? (Chapter 3)	How does Life work?
Week 5	What protects & fortifies Life? (Chapter 4)	How do you protect Life?
	What runs Life? (Chapter 6)	How do we run Life?
Week 6	What happens when we breathe? (Chapter 7)	How do we maintain Life?

Week	Topic (Related Chapter)	Assignment (Discussion forum)
	What do we owe to plants? (Chapter 8)	How do plants maintain Life?
Week 7	**EXAM 2**	
Week 8	What do Life's units divide to? (Chapter 5)	How do we make Life?
	What does Life propagate? (Chapter 5)	How do we understand Life?
Week 9	Who is Mendel? (Chapter 23)	How do we inherit Life?
	Why I am Like Mom and Dad? (Chapter 24)	How do we preserve Life?
Week 10	Who discovered the secret of Life?	How is science done?
	What is the secret of Life? (Chapter 25)	How does Life work?
Week 11	What are the nuts and bolts of Life? (Chp 25)	How do we repair Life?
	What is the engineering of Life? (Chapter 26)	How do we engineer Life?
Week 12	**EXAM 3**	
	Who is Darwin?	How do we see Life's workings?
Week 13	What are the Origins of Life's units?	How do we understand origins?
	What are the origins of Life? (Chapter 27)	How did Life evolve?
Week 14	What is our ancestry? (Chapter 27)	How did we evolve?
	THANKSGIVING	
Week 15	What are the domains of Life? (Chp 28-32)	How do we classify Life?
	What is the web of Life? (Chp 35-37)	How do we conserve Life?
Week 16	What did we learn in BIOL 113?	
	FINAL EXAM	

Grading and Evaluation

Regular attendance and active learning will be your key to success in this course. Every lecture will be followed by a discussion forum worth 10 points.

The assessments in this course are as follows:

Exams (1-3 @100 points each)	300 points	A = 90% and above
Final Exam	100 points	B = 80% - 89%
In-class quizzes (20 @5 pts)	100 points	C = 70% – 79%
Discussion Forums (20 @ 10 pts)	200 points	D = 60% -69%
TOTAL	**700 points**	**F = 59% and less**

Additional Information and Resources

University Policies/Information: As a WKU student enrolled in this course you have certain rights, entitlements and responsibilities established by federal law and/or set forth in University policies. These are summarized at: https://www.wku.edu/syllabusinfo/

Information on requesting an accommodation under the Americans with Disabilities Act can be found by clicking on the “ADA Accommodation” tab.

Information regarding the reporting of discrimination or harassment under Title IX of the Equal Opportunity in Education Act can be found by clicking on the “Title IX Discrimination/Harassment” tab.

Information regarding academic integrity and the student code of conduct as described in the Student Handbook can be found by clicking the “Things you should know” tab. Additional information on university resources and support available to you can be found by clicking on the various tabs.

Schedule Changes: The Undergraduate Catalog provides information on withdrawing from the course; the process is summarized here. Be aware that it is your responsibility to drop the course if you desire, and that doing so may have implications for tuition refunds and/or financial aid. If you wish to withdraw from the course you should do so by the dates printed in the Registration Guide for the semester.