

Biology 101- Concepts of Biology

Syllabus, Summer Session I, 2016

Hybrid class (Mon & Wed 10 am -12 noon)
Biological Sciences (IT 102)

General Information:

Biology 101, Concepts of Biology provides a broad overview of contemporary biological science topics. Major concepts covered include evolution, chemical bonding, water, cell structure and function, plasma membrane structure and function, bioenergetics, cell division, genetics, protein synthesis, mutation, cancer, genetic modification and biotechnology.

This lecture course is designed for **PRE-ALLIED HEALTH** students (pre-pharmacy & pre-nursing students, for example) who need a rigorous introductory biology course to prepare them for future coursework in Microbiology, Nutrition and Human Anatomy & Physiology. This course is **NOT** suitable for students majoring in Biological Sciences, Biochemistry & Molecular Biology, Bioinformatics & Computational Biology, Chemistry, Computer Science, Engineering, Psychology (B.S.) or Environmental Science.

BIOL101 does **NOT** include a lab or discussion section.

Instructor Information:

Your instructor: Jennifer Hughes PhD

Office location: Room 468 in Biological Sciences Bldg.

Office phone number: 410-455-2876

Email: jhughes@umbc.edu (*Make sure you are emailing the right person-look for my picture*)

Office Hours: Fridays 11 am – 1 pm in BS006

Or by appointment (Email me for an appointment)

**Office hours may change during the semester as other commitments arise*

Email note: I will make every effort to respond to your emails quickly (within 24-48 hours). Please include **BIOL 101** in the subject line of your email.

Required/Recommended Materials:

- *Textbook: **Campbell Essential Biology, 6th edition** (Older editions are OK!)*

Note: *You may hear from a friend who took Biol 101 that they didn't use the textbook much. Remember, they did NOT take the hybrid version of the class. You absolutely need the textbook for the hybrid class. You should bring your textbook to class.*

Blackboard:

Lecture PowerPoints and other course information will be posted on Blackboard. It is your responsibility to check blackboard regularly for course announcements and information. Make sure your UMBC email is working and check it frequently. This is a hybrid course so it is expected that you will be logging into Blackboard daily to view announcements and posted course materials.

What does it mean when it says my course is “hybrid”?

Hybrid courses blend in-person and online learning. If you take Biol 101 during regular semester, you would come to class for thirty two, 75 minute sessions, equaling about 40 hours of face to face instruction. Our class meets for ten, 2 hour sessions, equaling only 20 hours of face to face instruction. As we must teach exactly the same course in summer that we do in regular semester, that means that this hybrid courses is going to require much more self-directed learning.

So what is an average day in this hybrid class going to look like?

Before coming to class you will watch videos on you tube where I go through the slides for each chapter. You will be able to print the PowerPoint slides from Blackboard to follow along. The videos are short and usually address only one objective or concept. However, we do have a lot of concepts and objectives to cover, so there will be a lot of videos to watch for each chapter. You should watch the videos as if you were sitting in a lecture class. You should have notebook as you would in a regular face to face class and you should be making notes as you watch the videos. **Note:** *For two of our individual in class quizzes, I will allow you to use your handwritten notes during the quiz so if you don't make any, you'll be missing out on a great opportunity!* You will also be provided with study questions that you should answer before coming to class.

At the start of each class, we will have time for questions about the material and to go through a limited number of concepts that people are having trouble understanding from the videos. We will then use the knowledge from the videos to do in class exercises, solve problems and answer practice questions. Some of these exercises will involve working as a group. At the end of each class, there will be a group quiz which you will work on with your assigned group. The group quizzes will be worth 5 points. Once that is completed, I will give you a second individual quiz worth 10 points. The quizzes are pen and paper. Therefore, each day in class, you will have a chance to earn 15 points from quizzes. You will be allowed to drop your two lowest individual & group quizzes. **There are NO quiz make ups. If you miss a quiz, you get 0 which is later dropped as your lowest quiz.** It also means that if you skip class, you will lose those points. **So if you were planning on never coming to the face to face portion of this class, well that won't work!**

Discussion board in Blackboard

Blackboard has a feature called “Discussions”. If you have questions about the course material or study questions, you can post them there. I will check the discussion board regularly and answer questions. The Blackboard message board can also be a good way to communicate with other students in the class about meeting up to study or to confer about study guide questions.

Tentative Schedule for Biology 101, Summer 2016

<u>Date</u>	<u>Topics*</u>	<u>Readings**</u>	<u>Quizzes</u>
Wed Jun 1 st	Introduction to the Course Life, Taxonomy & Evolution Overview	Syllabus & Ch. 1	Yes
Mon Jun 6 th	Water, pH & Organic molecules	Ch. 2 & 3	Yes
Wed Jun 8 th	Organic molecules and Cells	Ch. 3 & 4	Yes
Mon Jun 13th	10 am – 11 am Exam 1 on Ch 1, 2, 3 & 4 Then start: The working cell	100 points	No
Wed Jun 15 th	The working cell & Cell respiration	Ch. 5 & 6	Yes
Mon Jun 20 th	Cell respiration	Ch. 6	Yes
Wed Jun 22 nd	Cell reproduction: Mitosis and Meiosis	Ch. 8	Yes
Mon Jun 27th	10 am – 11 am Exam 2 on Ch 5, 6 & 8 Then start: Patterns of inheritance	100 points	No
Wed Jun 29 th	Patterns of Inheritance	Ch. 9	Yes
Mon Jul 4 th	**Independence day, No classes** Cover DNA structure and function & Protein synthesis at home with video	Ch. 10	Yes (online)
Wed Jul 6th	Cumulative Final Exam	160 points	No

* Topic dates are tentative, but EXAM DATES ARE FIXED. The dates for exams will **NOT** change.

** Chapters in Textbook: Campbell, *Essential Biology*, 6th Edition, Pearson Benjamin Cummings, 2016.

Other important dates

Last day to withdraw without a grade of "W":
 Last day to withdraw with a grade of "W":
 Last day to switch from Regular Grade to Audit:

Friday, June 3rd
 Tuesday, June 28th
 Friday, June 3rd

Grading:

- Final grades are based on the following:

▪ Grades from Exams 1 & 2	200
▪ Cumulative final exam	160
▪ In class quizzes	<u>90</u>
	450 pts
- NOTE: There are **NO EXTRA CREDIT** assignments in this course.
- Grading scheme
 - To get an A, you need 90 % or above (405 or more points out of 450)
 - To get a B, you need 80 % or above (360 or more points out of 450)
 - To get a C, you need 70 % or above (315 or more points out of 450)
 - To get a D, you need 60% or above (270 or more points out of 450)
 - Anything below 60% (270 points) is considered an F and a failure of the course.
- Exams will consist mainly of objective type questions (multiple choice and True/False). Most of the questions will be derived from the class presentations, although questions may also come from the assigned readings.
- You are more likely to be highly successful in this class if you prepare for class by reading the textbook and watching the videos, **attend every class** and actively participate in class activities. Review after class, paying particular attention to concepts you find difficult. You should plan to spend a great deal of time outside of class working on this course. Do not wait until the night before an exam to study or watch videos. There are just too many. You will have to keep up with the material all along if you want to do well.
- Please let me know if you are having problems with class material as soon as the problem is felt. Don't wait till the end of the semester to address your difficulties. Please take advantage of my office hours and come with questions or to ask for further explanations. You can also email me your questions or post them on the Discussion Board on Blackboard where both I and the other students in the class can answer them.

Lecture Exams & Make Up Policy:

- Over the course of the semester, two lecture exams and a final exam will be administered. These exams have already been scheduled to take place during regular class time and are required to be taken on the date and time specified in the syllabus. **Check your calendar NOW** and clear it to avoid conflict later!
- Make-up exams will be given if an exam is missed **due to a documented medical or other emergency** (i.e. you must provide verifiable documentation from a physician or hospital that is signed and dated). All makeup exams are to be completed within a week of the missed exam. There are NO make-up quizzes. Missed individual or group quizzes get 0.
- A comprehensive final exam covering content from the entire semester will be administered on **Jul 6th 10 am – 12 noon** in the usual classroom.

Policy on Academic Misconduct:

- “By enrolling in this course, each student assumes the responsibilities of an active participant in UMBC’s scholarly community in which everyone’s academic work and behavior are held to the highest standards of honesty. Cheating, fabrication, plagiarism, and helping others to commit these acts are all forms of academic dishonesty, and they are wrong. Academic misconduct could result in disciplinary action that may include, but is not limited to, suspension or dismissal.”
 - ***Cheating:*** Intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise which includes all forms of work submitted for credit.
 - ***Fabrication:*** Intentional or unauthorized falsification or invention of any information or citation in an academic exercise.
 - ***Plagiarism:*** The deliberate adoption or reproduction of ideas or words or statements of another person(s) as one's own, without acknowledgment.
 - ***Facilitating Others Academic Dishonesty:*** Intentionally or knowingly helping or attempting to help another to violate any provision of the institutional policy on academic dishonesty.
- Any evidence of cheating will be dealt with firmly under the Policy for Resolving Cases of Academic Misconduct. To read the full Student Academic Conduct Policy, consult the UMBC Student Handbook or read this PDF document: http://www.umbc.edu/undergrad_ed/ai/documents/ACC2011.pdf
- If you are observed cheating during an examination, your answer sheet will be confiscated and you will receive a score of zero for the exam. Furthermore, the Chair of the Academic Misconduct Committee will be consulted regarding appropriate penalties including, but not limited to, a grade of “F” in the course. This policy applies to all activities in the course.
- Having a cellphone out during an exam is considered cheating. Cell phones must be silenced and kept in your bag during exams.

Students with disabilities:

UMBC is committed to eliminating discriminatory obstacles that may disadvantage students based on disability. If you have a disability and want to request accommodations, contact Student Support Services (SSS). If you are eligible for accommodations for this class, make an appointment to meet with me to discuss your SSS-approved accommodations so I can make sure you have what you need to be successful in the class.

Classroom Behavior:

- Leaving the classroom during lectures is distracting to both students and instructor. Please take care of personal needs before entering the classroom.
- Please refrain from talking (**NOT INCLUDING QUESTIONS**) during formal presentation, either by the instructor or by another student.
- You are welcome to ask questions during class - that is a wonderful way to clarify information and make new connections.
- Cellphones must be set to silent during class. Unless you are using your cellphone to research something related to class, you may NOT have it out during class. Cellphones must be stored in your backpack or bag during exams. If you have a cellphone out during an exam, it will be considered cheating and you will receive a "0" on the exam.

College Closing:

- If the college is closed due to hurricane or any other reason, the material that was to be covered during the class will be covered the next class. If an exam is scheduled on that day, that exam will be given the next time the class meets.
- Sign up for UMBC alerts to stay informed with what is going on here on campus.
 - Go to <http://my.umbc.edu/go/alerts>
 - Click the link labeled **Manage e2Campus alerts**
 - Click the word **Services** on the orange toolbar
 - Enter the telephone number you want to receive alerts on your mobile phone AND/OR Enter the email address you want to receive alerts
 - Click the **Add SMS** AND/OR **Add Email** button

***Please sign this document, detach this last page and turn it in to your instructor on Wed June 1st.
You can turn it in to the instructor at the start or end of class.***

**UMBC SUMMER 2016
BIOLOGY 101**

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(PRINT YOUR NAME)

I have read and I understand the syllabus and course policies. I agree to follow the policies and procedure of this course as outlined in the syllabus provided by Jennifer Hughes.

SIGNATURE: _____ COURSE BIOL 101

DATE: _____

GOAL/MAJOR (e.g., Nursing, PA, EMT, etc)

LIST SCIENCE COURSES ALREADY TAKEN (AT UMBC OR TRANSFERRED FROM THE OTHER INSTITUTIONS): LIST ALL BIOLOGY, CHEMISTRY AND MATH CLASSES)