

# **Biology 101- Concepts of Biology**

## **Syllabus, Summer Session I, 2015 , Hybrid class (Tu,Th 1 pm - 3 pm)**

### **Biological Sciences (BS 120)**

#### **General Information:**

Biology 101-Concepts of Biology provides a broad overview of contemporary biological science topics. Major areas include the biochemistry of energy transformation, cell structure and function, Mendelian, molecular and population genetics, development and differentiation, plant and animal physiology & evolution.

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

**Office Hours:** Tuesday & Thursday Noon- 1pm\* in BS 468

Or by appointment (Email me for an appointment)

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

#### **Required/Recommended Materials:**

- **Textbook: Campbell Essential Biology, 5<sup>th</sup> edition**

You may see a new 6<sup>th</sup> edition of the text if shopping online, which will also be fine for this class.

**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 newly posted course material.

## **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 twelve, 2 hour sessions, equaling only 24 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 an individual quiz worth 10 points. The quizzes are pen and paper. After I collect the individual quizzes, I will give you a second quiz which you will work on with your assigned group. The group quizzes will be worth 5 points. 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!**

## **Essential Biology text and Mastering Biology:**

An online resource called “Mastering Biology” is available that accompanies the textbook. This is **NOT** required for this course. However, it contains self-quizzes, tutorials, videos, etc. that may be a helpful addition for you in this class. When you go to the Mastering biology website, it will ask for a course ID.

**The course ID is: HUGHESBIOL101**

There are additional options that you should know about:

- If you have already purchased an older used edition, of the textbook, and would like to purchase an access code for Mastering Biology, you can buy one from the publisher for ~\$60. Remember, it is **NOT** required that you purchase this access for this course.
- If you feel you do not need an actual physical copy of the book, you can choose to purchase the online (eText) version of the text with an access code for Mastering Biology from the bookstore or the publisher. This is an interactive form of our textbook that is all online. The total for this is ~\$91.

The only downside to this is that access to the eText expires sometime after the course is over, so if you want to keep your textbook for the future, I suggest you buy a hard copy.

## Tentative Schedule for Biology 101, Summer 2015

<u>Date</u>	<u>Topics*</u>	<u>Readings**</u>	<u>Quiz</u>
Tues May 26 <sup>th</sup>	Introduction to the Course Life, Taxonomy & Evolution Overview	Syllabus & Ch. 1	Yes
Thurs May 28 <sup>th</sup>	Biological chemistry	Ch. 2	Yes
Tues June 2 <sup>nd</sup>	Organic molecules and Cells	Ch. 3 & 4	Yes
Thurs June 4 <sup>th</sup>	The working cell	Ch. 5	Yes
<b>Tues June 9<sup>th</sup></b>	<b>Exam 1 on Unit 1</b>	<b>100 points</b>	<b>No</b>
Thurs June 11 <sup>th</sup>	Cell respiration	Ch. 6	Yes
Tues June 16 <sup>th</sup>	Cell reproduction: Mitosis and Meiosis	Ch. 8	Yes
Thurs June 18 <sup>th</sup>	Patterns of Inheritance	Ch. 9	Yes
<b>Tues June 23<sup>rd</sup></b>	<b>Exam 2 on Unit 2</b>	<b>100 points</b>	
Thurs June 25 <sup>th</sup>	DNA structure and function & Protein synthesis	Ch. 10	Yes
Tues June 30 <sup>th</sup>	Gene control, DNA technology	Ch. 11 & 12	Yes
<b>Thurs July 2<sup>nd</sup></b>	<b>Cumulative Final Exam</b>	<b>100 points</b>	<b>No</b>

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

\*\* Chapters in Textbook: Campbell, *Essential Biology*, 5<sup>th</sup> Edition, Pearson Benjamin Cummings, 2013.

### 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, May 29<sup>th</sup>

Monday, June 23<sup>rd</sup>

Monday, June 23<sup>rd</sup>

## Grading:

- Final grades are based on the following:
  - Grades from Exams 1 & 2 200
  - Cumulative final exam 100
  - In class quizzes 100

**400 pts**
- NOTE: There are **NO EXTRA CREDIT** assignments in this course.
- Grading scheme
  - To get an A, you need 90 % or above (360 or more points out of 400)
  - To get a B, you need 80 % or above (320 or more points out of 400)
  - To get a C, you need 70 % or above (280 or more points out of 400)
  - To get a D, you need 60% or above (240 or more points out of 400)
  - Anything below 60% (240 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 **July 2<sup>nd</sup> from 1- 3 pm** 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](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 Tuesday May 26<sup>th</sup> at 3 pm. You can turn it in to the instructor at the start or end of class.*

**UMBC SUMMER 2015  
BIOLOGY 101**

I \_\_\_\_\_  
(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)

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

