

## **BIOL 1441 – Cell and Molecular Biology Fall 2011 Syllabus**

**Instructor:** Dr. Maeli Melotto  
B29 Life Science  
Office phone: 817-272-1122  
E-mail: [melotto@uta.edu](mailto:melotto@uta.edu)

**Time and place of class meetings:** Tue and Thr, 11am to 12:20 pm - LS 124

**Office Hours:** Tuesdays 09 a.m. – 11 a.m., Thursdays 10 a.m. – 11 a.m.

### **Course description:**

BIOL1441 - Cell and Molecular Biology - The first of a three-part introductory biology sequence, this course focuses on the chemical and molecular basis of life, including metabolism, cell structure and function, and genetics. Laboratory experiments are designed to complement theory presented in lecture. Formerly listed as BIOL 1449; credit will not be given for both.

**Textbook:** Biology, 8<sup>th</sup> or 9<sup>th</sup> Ed, Campbell and Reece

### **Student Learning Outcomes:**

You are expected to gain knowledge about the fundamentals of cell structure and function, metabolism, genetics, and inheritance.

### **Grading Policy:**

1/3 of course grade will be earned in laboratory

**2/3 of course grade will be earned in lecture**

|                              |                    |                 |
|------------------------------|--------------------|-----------------|
| <b><u>Lecture Grade:</u></b> | Exam 1:            | 100 pts.        |
|                              | Exam 2:            | 100 pts.        |
|                              | Exam 3:            | 100 pts.        |
|                              | <u>Final Exam:</u> | <u>100 pts.</u> |
|                              | Lecture Total      | 400 pts.        |

### **Grading Scale:**

90-100% = A;    80-89% = B;    70-79% = C;    60-69% = D;    Below 60% = F

**Exam Day:** Students are required to bring #2 pencils and a form 882E scantron to each exam. Mark answers firmly on scantron. Exams will not be re-graded if you take exam incorrectly. Avoid erasures as much as possible. Erasures should be called to the attention of the professor at the time the scantron is turned in on the exam day.

**Make-up Exam Policy:** The instructor must be notified prior to your missing an exam for a legitimate, documented reason. If we have not heard from you prior to the exam, you will not be able to make it up. **The make-up exam will be the final exam.**

**Attendance Policy:** Regular attendance is strongly recommended. You are responsible for obtaining missed information.

**Tentative Course Schedule:**

|                          |  |
|--------------------------|--|
| Aug 25 & 30              | Chapter 2 The Chemical Context of Life                 |
| Sep 01                   | Chapter 3 Water and the Fitness of the Environment     |
| Sep 06 & 08              | Chapter 4 Carbon and Molecular Diversity               |
| Sep 13 & 15              | Chapter 5 The Structure and Function of Macromolecules |
| Sep 20 & 22              | Chapter 6 A Tour of the Cell                           |
| <b>Sep 27</b>            | <b>Exam 1 = 1/4 of lecture grade (Chapters 2-6)</b>    |
| Sep 29                   | Chapter 7 Membrane Structure and Function              |
| Oct 04 & 06              | Chapter 8 An Introduction to Metabolism                |
| Oct 11 & 13              | Chapter 9 Cellular Respiration                         |
| Oct 18                   | Chapter 10 Photosynthesis                              |
| Oct 20                   | Chapter 10 Photosynthesis continued                    |
| <b>Oct 25</b>            | <b>Exam 2 = 1/4 of lecture grade (Chapters 7-10)</b>   |
| Oct 27                   | Chapter 11 Cell Communication                          |
| Nov 01                   | Chapter 11 Cell Communication continued                |
| Nov 03                   | Chapter 12 The Cell Cycle                              |
| Nov 08 & 10              | Chapter 13 Meiosis and Sexual Life Cycles              |
| Nov 15 & 17              | Chapter 14 Mendel and the Gene Idea                    |
| <b>Nov 22</b>            | <b>Exam 3 = 1/4 of lecture grade (Chapters 11-14)</b>  |
| <i>Nov 24</i>            | <i>Thanksgiving Holiday</i>                            |
| Nov 29                   | Chapter 15 The Chromosomal Basis of Inheritance        |
| Dec 01                   | Chapter 16 The Molecular Basis of Inheritance          |
| Dec 06                   | Chapter 17 From Gene to Protein                        |
| Dec 08                   | Review   |
| <b>Dec 13, 11-1:30pm</b> | <b>Comprehensive Final Exam = 1/4 of lecture grade</b> |

## **Important University Policies:**

### **Mandatory Online Safety Training:**

1. Go to <http://www.uta.edu/training>.
2. Log on using your network log-on ID and password (what you use to access email). If you do not know your NetID or need to reset your password, visit <https://webapps.uta.edu/oit/selfservice/>.
3. The available courses for completion will be listed under “Training I’m Enrolled In”. Complete the course entitled ‘Student Lab Safety Training – General.’ \*\*\*NOTE: If you completed Wet, Dry or Biology Lab Safety Training course last semester for another class, that training is still applicable until the end of this academic year. Please follow instructions in #4 to print the certification page for your TA.
4. Go to ‘Training I’ve Completed’ and print the displayed page for your TA. Verify that it shows clearly your name, and that ‘General, Wet, Dry or Biology’ training is completed/passed and the date when the training was completed. If you have just completed the training but it is not updated on the ‘Training I’ve Completed’ page, please log out of the system and log back in. If the training still does not show up on this page, call the Helpline at 817-272-5100.
5. If you were enrolled in a course with a lab last semester and did not complete the training or if you do not see training for this academic year listed, email [compliance@uta.edu](mailto:compliance@uta.edu) providing your name, a contact phone number, NetID and course (e.g. BIOL 1441-005) and request the appropriate training for your course.
6. Students who have not completed the training by census date may be dropped from the lab (and consequently the lecture).
7. Lab Safety Training is required to be completed once every academic year. Training completed in the Fall semester is valid for the Fall, Spring and Summer sessions. It is your responsibility to print your training certification page and turn it in each semester to your TA for each course with a lab you are enrolled in.

For training specific questions, contact the Environmental Health and Safety office at 817-272-2185.

For technical assistance with the training, please contact the Office of Institutional Compliance at 817-272-5100 or email [compliance@uta.edu](mailto:compliance@uta.edu)

**Drop Policy:** Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising

Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. Contact the Financial Aid Office for more information.

**Americans with Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at [www.uta.edu/disability](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

**Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. According to the UT System Regents' Rule 50101, §2.2, "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts."

**Student Support Services Available:** The University of Texas at Arlington has established a variety of programs to help students meet the challenges of college life. Support to students includes advising, counseling, mentoring, tutoring, supplemental instruction, and writing assistance. For a complete list of academic support services, visit the Academic Assistance resource page of the Office of Student Success Programs, [www.uta.edu/uac/studentsuccess/academic-assistance](http://www.uta.edu/uac/studentsuccess/academic-assistance). To help students address personal, academic and career concerns, individual counseling is also available. For more information, students are encouraged to contact Counseling Services [www.counseling.uta.edu](http://www.counseling.uta.edu) at (817) 272-3671 or visit a counselor in 216 Davis Hall.

**Electronic Communication Policy:** The University of Texas at Arlington has adopted the University "MavMail" address as the sole official means of communication with students. MavMail is used to remind students of important deadlines, advertise events and activities, and permit the University to conduct official transactions exclusively by electronic means. For example, important information concerning registration, financial aid, payment of bills, and graduation are now sent to students through the MavMail system. All students are assigned a MavMail account. ***Students are responsible for checking their MavMail regularly.*** Information about activating and using MavMail is available at <http://www.uta.edu/oit/email/>. There is no

additional charge to students for using this account, and it remains active even after they graduate from UT Arlington.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabus. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

*This course outline is tentative and subject to change.*