

## BIOL 3103: CELL BIOLOGY – Spring 2015

**Instructor:** Dr. Melissa Philley Clauson, Fugitte 216, x8229 [clausonm@lindsey.edu](mailto:clausonm@lindsey.edu)  
**Office Hours:** MWF 8:00-9:20; T 8:00AM-1:30 PM or by appointment (please email).  
**Course Description:** An integration of biological, chemical, and physical aspects of the cell. Lectures emphasizes molecular processes in the cell including organelle structure and function, membranes, cytoskeleton, respiration, trafficking, and signaling. **Prerequisites:** BIOL 1204 with the grade of a "C" or better and one year of Chemistry.

**Required Text:** *Cell and Molecular Biology*, 7<sup>th</sup> ed., Gerald Karp, John Wiley & Sons, Inc., 2013. Website: <http://bcs.wiley.com/he-bcs/Books?action=index&itemId=1118206738&bcsId=7816>

**Learning Outcomes:** **LWC Essential SLOs:**

1. Communicate effectively
2. Develop effective skills in inquiry and analysis
3. Become culturally aware, engaged, citizens of the nation and the world
4. Learn to apply and integrate knowledge

**Course SLOs** – a result of this course, students will be able to:

1. Understand the basic concepts of cell biology such as cell structure, organelle function, cell division, cell transport, and cell communication.
2. Apply their knowledge of the basic concepts of cell biology.

**Education Program Preparation:**

This course is required for content preparation in Secondary Education Program and prepares teacher candidates with the knowledge base for Biology required in the Kentucky Core Academic Standards and the College Career Readiness Standards. The Conceptual Framework for the Education Program, "Teacher as Leader for the 21st Century", is incorporated. The Division of Natural & Behavioral Sciences works with the Education Program in preparing the teacher candidates with the knowledge base required to meet Kentucky Teacher Standard I and the Education Program Student Learning Outcome for Content Knowledge. Teacher candidates will be equipped to teach high school students and meet requirements for Unbridled Learning.

**Attendance:** Attendance is highly encouraged & required for full success. Attendance is mandatory for exam, quizzes and presentations; these events can only be made up with a valid excuse. A valid excuse is defined an absence due to a school sponsored event, documented illness or death in the family. Make-up events must be scheduled as soon as possible, if not before the absence.

**Exams:** There will be five exams during the semester that will cover material presented in class and from assigned textbook readings (see schedule). Exams will contain a mix of question types – multiple choice, short answer, fill in the blank, true/false, matching, essay, etc.

**Quizzes:** Quizzes are possible during the semester and may be unannounced. In cases of missed class time due to bad weather, sick children etc., reading assignments will be communicated through BLACKBOARD followed by a quiz over the assignment at the **next** class period. Points possible will be indicated and calculated into the total points at the end of the semester. **Do your homework and keep up with your reading!**

**Presentations:** **Short slide presentations** may be done throughout the semester. Presentations will be worth approximately 5 points each. An unexcused absence of a scheduled presentation will result in a 5 point deduction. In addition, an **oral presentation** (50pts) on a selected topic in cell biology may be done during the last week of class and/or during the finals time slot. Presentation should be approximately 15 minute in duration. Students will be assessed using the Biology Oral Communication rubric (handed out on a later date).

<b>Grading:</b>	5 Exams (100 pts each)	500 points each
	Quizzes & Homework	~100 points
	Total Points	~600 points

Grading is conducted on the standard 10pt scale with +/-:

93-100%	A	77-79%	C+
90-92%	A-	70-76%	C
87-89%	B+	60-69%	D
83-86%	B	<60%	F
80-82%	B-		

**\*\*\*Note:** We will cover a significant amount of material during this semester and you are encouraged to keep current with your reading & with your homework. I expect a minimum 2 hours study time per lecture & lab class period. You will not be able to understand all the material presented in class & lab if you wait until the night before an exam to study – DO NOT do this – it will not work!!

#### Important Dates:

January 19 – MLKing Day – No Class  
 January 21 – Last day to register or add a class (Day Classes)  
 March 9-13 – Spring Break – No Class  
 April 6 – Last day to drop or withdraw from a class  
 April 3 – Good Friday – No Class  
 May 4-8 – Final Exams

#### Academic Integrity

Academic integrity is essential to the existence of an academic community. Every student is responsible for fostering a culture of academic honesty, and for maintaining the integrity and academic reputation of Lindsey Wilson College. Maintaining a culture that supports learning and growth requires that each student make a commitment to the fundamental academic values: honesty, integrity, responsibility, trust, respect for self and others, fairness and justice.

To foster commitment to academic integrity, faculty are asked to require each student to place and sign the following Honor Code on tests, exams and other assignments as appropriate: **On my honor as a student, I have neither given nor received any unauthorized aid on this assignment/exam.**

Violations of the academic integrity policy include cheating, plagiarism or lying about academic matters. Plagiarism is defined as any use of another writer's words, concepts, or sequence of ideas without acknowledging that writer by the use of proper documentation. Not only the direct quotation of another writer's words, but also any paraphrase or summary of another writer's concepts or ideas without documentation is plagiarizing that writer's materials. Academic dishonesty is a profoundly serious offense because it involved an act of fraud that jeopardizes genuine efforts by faculty and students to teach and learn together. It is not tolerated at Lindsey Wilson College.

Students who are determined to have plagiarized an assignment or otherwise cheated in their academic work or examinations may expect an "F" for the activity in question or an "F" for the course, at the discretion of the instructor. All incidents of cheating or plagiarism are reported by the instructor to the Academic Affairs Office along with copies of all relevant materials. Each instance of cheating or plagiarism is counted separately. A student who cheats or plagiarizes in two assignments or tests during the same semester will be deemed guilty of two offenses. If the evidence is unclear, or if a second offense occurs, the VP for Academic Affairs or Associate Dean will work in cooperation with the Dean of Students to move the student before the campus Judicial Board for review. Violations will ordinarily result in disciplinary suspension or expulsion from the College, depending on the severity of the violation involved. **Note:** The College has purchased Turnitin.com, a web product used to detect plagiarized documents.

#### Questioning a Grade -- The Student Academic Complaint Policy

A student, who wishes to question **an assignment grade, or other academic issue**, should follow the procedure below:

1. Whenever possible, the student will first go to the faculty member who has assigned the disputed grade. Complaints regarding grades should be made within seven (7) days of receipt of the disputed grade and, if possible, will be decided by the faculty member within seven (7) days of receipt. If the disputed grade is the final grade for the course, "receipt" is defined by when the final grade is posted online by the registrar. (Please refer to the next section for appealing a final grade.)

2. Unless there are extenuating circumstances, the student may, within seven (7) days request in writing a review of such decision by the Chair of the division in which the grade was assigned. Upon receipt of such request, that Chair will direct the faculty member and the student to each submit, within seven (7) days, if possible, a written account of the incident, providing specific information as to the nature of the dispute.
3. Upon receipt of these written accounts, the Chair will meet, if possible, within seven (7) days with the faculty member and the student in an effort to resolve the dispute and will render his or her decision in writing.
4. If either the student or the faculty member desires to appeal the decision of the Division Chair, the student or faculty member may, within seven (7) days by written request to the chair, ask that the matter be reviewed by a Grade Appeals Panel convened by the Academic Affairs Office.
5. If the disputed grade is assigned at the end of a fall or spring semester and the student and faculty member cannot meet to resolve the issue, the student should contact the faculty member by e-mail within seven (7) days of receipt of the disputed grade. If the issue cannot be resolved by e-mail within the time limit, steps 2, 3 and 4 of the appeal may extend into the beginning of the semester immediately following receipt of the disputed grade by following the timeline above.

A student who wishes to question a **final grade** should follow the procedure below:

1. Confer with the faculty member who assigned the disputed grade.
2. If the disputed grade cannot be resolved, a written request for a grade appeal must be submitted to the Academic Affairs Office before the first day of the semester following the one in which the grade was issued. The written request must include the specific basis for the appeal.
3. The Academic Affairs Office will convene a Grade Appeals Panel, comprised of the Vice President for Academic Affairs, the Associate Academic Dean, and the chair of the academic unit which houses the course for which the grade is appealed. If one of the members is the faculty member who issued the grade, an alternate will be appointed. The student and the faculty member may appear separately before the panel to explain their positions. The hearing is non-adversarial. Neither the faculty member nor the student may be accompanied by other individuals to the meeting of the Grade Appeals Panel. The Grade Appeals Panel will notify the student of its decision, if possible, within seven (7) days of the meeting.

#### **Policy for Verification of Student Identity and Protection of Privacy**

In compliance with United States Federal Higher Education Opportunity Act (HEOA), Public Law 110-315, all credit-bearing courses and programs offered through distance learning methods must verify that the student who registers for a distance education course or program is the same student who participates in and completes the course or program and receives academic credit. One or more of the following methods must be used:

- a) A secure login and pass code;
- b) Proctored examinations; and/or
- c) Remote proctoring of one of more examinations using Tegrity or other technologies

Verification of student identity in distance learning must protect the privacy of student information. Personally identifiable information collected by the College may be used, at the discretion of the institution, as the basis for identity verification. For instance, a student requesting that their learning system password be reset may be asked to provide two or more pieces of information for comparison with data on file. It is a violation of College policy for a student to give his or her password to another student.

Detailed information on privacy may be located at:

<http://www.lindsey.edu/media/319883/Online%20Services%20Privacy%20Policy%204.20.12.pdf>

#### **Institutional Review Board (IRB) Policies**

The Lindsey Wilson College Institutional Review Board (IRB) safeguards the rights and welfare of human participants in research and other research activities. Lindsey Wilson College faculty, staff, and students, which comprise its academic units, and facilities, are subject to the IRB policies. This includes any research for which a research agreement (e.g. MOU) identifies Lindsey Wilson College Institutional Review Board (IRB) as the IRB of record. All student-led human subject research must have a LWC faculty sponsor. All faculty members and students conducting human subject research are required to submit documentation of training on research involving human subjects that has been completed within two years of the onset of the proposed research. Online training is available at <http://php.nihtraining.com/users/login.php>.

#### **Statement on Learning/Physical Disabilities**

Lindsey Wilson College accepts students with learning disabilities and provides reasonable accommodation to help them be successful. Depending on the nature of the disability, some students may need to take a lighter course load and may need more than four years to graduate. Students needing accommodation should apply as early as possible, usually before May 15.

Immediately after acceptance, students need to identify and document the nature of their disabilities. It is the responsibility of the student to provide to the College appropriate materials documenting the learning disability, usually a recent high school Individualized Education Program (IEP) and results from testing done by a psychologist, psychiatrist, or qualified, licensed person. The College does not provide assessment services for students who may be learning disabled. Although LWC provides limited personal counseling for all students, the College does not have structured programs available for students with emotional or behavioral disabilities. For more information, call Ben Martin at 270-384-7479.

### **Academic Success Center**

The Academic Success Center, located in the Everett Building, offers peer tutoring to aid students in completing class assignments, preparing for exams and improving their understanding of content covered in a particular course. In addition, computers are available for student use.

Students are encouraged to utilize this Center as a resource for improving study strategies and reading techniques. The Center also offers assistance with other academic problems resulting from documented learning disabilities. All services are free of charge to all Lindsey Wilson College students (students with learning disabilities are responsible for providing documentation from an appropriate outside professional source such as a professional evaluation or school IEP). Please contact Maretta Garner, Tutor Coordinator at 384-8037 for further information and assistance.

### **Writing Center and Mathematics Center**

The Writing Center (located in the Slider Humanities & Fine Arts Building), and the Mathematics Center (located in the Fugitte Science Building) are available for specialized tutoring at no charge to students. Please contact Jared Odd, Writing Center Coordinator, at 384-8209 or Linda Kessler, Math Tutor Coordinator, at 384-8115 for further information and assistance.

### **Final Exams**

Final Exams for day classes are scheduled for the Fall 2014 semester on **December 8-12 and May 4-8** for the Spring 2015 semester. The academic calendar, which contains the schedule for finals, is in the College Catalog and course schedule listing. Please make any necessary flight arrangements **after** the final exam week. **Students will not be permitted to take early finals** unless extenuating circumstances exist. "Extenuating circumstance" means illness, a verified family emergency or participation in officially sponsored travel in support of an event arranged by the College. **Travel arrangements must be made in sufficient time** that tickets may be obtained after final exams and the semester is officially over. All requests for early finals must be made in person to the Academic Affairs Office.

### **Email Policy**

All Lindsey Wilson College students are required to communicate with LWC faculty and staff via LWC (Lindsey.edu) email addresses only. Alternative email addresses should not be used when communicating with LWC faculty and staff.

### **Cell Phone Policy**

Student cell phones will be off during class time unless prior arrangement is made with the instructor.

### **Adding/Dropping a Course**

Students enrolled in the following courses cannot drop these classes during the semester: READ 0713, 0723, 0733, 0903, 1013 and 1023; STSK 1003; ENGL 0903 and 0904; and ESL 0803, 0804 and 0854.

For undergraduate classes at the Columbia campus, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the advisor and the instructor for each course involved as indicated on the Add/Drop Form. The change must be reported to the Business Office and the Registrar's Office on an Add/Drop Form, which may be obtained from the Registrar's Office. For AIM courses, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Director of the Evening Program. For courses taught at Community sites, adding a course, dropping a course, or changing from one section of a course to another section of the same course requires the approval of the Site Coordinator for the campus. Permission to add courses will not be given after the last date for late registration. Authorization for dropping a course will not be approved after more than 75% of the instructional days for a course are completed, as outlined below:

<b>Course</b>	<b>Deadline</b>	<b>Submitted by the Student to</b>
Columbia undergraduate and graduate full semester courses	Not later than 30 days before the end of the semester	Registrar
AIM courses	By the sixth week of class	Registrar
Courses at Community Campuses	By the third weekend of class	Site Coordinator or the Registrar

If changes are not properly approved and officially reported as stated above, students will receive a grade of F in the courses for which they are officially registered, and they will be charged for all such courses. Students will not receive credit for changed or added courses unless they officially register for those courses.

**Any changes to the syllabus will be announced in class.**

**BIOL3103 TENTATIVE LECTURE SCHEDULE:**

<b>Week of:</b>	<b>Topic and Reading Assignment:</b>
1/14	Ch1 - Introduction to the Study of Cell Biology
1/19	Ch2 - The Chemical Basis of Life
1/26	Ch4 - The Structure and Function of the Plasma Membrane
2/2	Ch4 - cont'
2/9	<b>Exam 1: Ch 1, 2, 4;</b> Ch3 - Bioenergetics, Enzymes & Metabolism
2/16	Ch5 - Aerobic Respiration & the Mitochondrion
2/23	<b>Exam 2: Ch 3 &amp; 5;</b> Ch8 - Cytoplasmic Membrane Systems: Structure, Functions, & Membrane Trafficking
3/2	Ch8 - cont'
<b>3/9</b>	<b>SPRING BREAK</b>
3/16	Ch8 - cont'; Ch12 - The Cell Nucleus (only)
3/23	Ch12 - The Cell Nucleus; <b>Exam 3: Ch8, 12</b>
3/30	Ch9 - The Cytoskeleton & Cell Motility;
4/6	Ch7 - Interactions Between Cells and Their Environment;
4/13	<b>Exam 4: Ch 7, 9;</b> Ch15 - Cell Signaling & Signal Transduction: Communications Between Cells
4/20	Ch15 - cont'; Ch14 - Cellular Reproduction
4/27	Ch14 - Cellular Reproduction; Presentations?
5/4	<b>Final Exam - Ch 14, 15;</b> Presentations?

**Powerpoint Lectures, Study Guides, and Videos are available on Blackboard.**