BIOL 2104 Tentative Class Schedule-Fall 2014			
Week Of:	Day	Lecture Topics	Lab Manual Exercises
1. 8/20	Wed Fri	Intro to class & lab (station check sheet); Syllabus Ch.1 Introduction & History	
2. 8/25	Mon **LAB** Wed Fri	 **Basic Micro Lab Safety Quiz** (lab manual xi-xiii); **Turn in Signed Safety Contract** (print from Bb); Ch. 2 Microscopy **MICROSCOPY (1, 2, 3, 4 & 5)** **MICROSCOPY & STAINING (10-17)**	 **Safety Quiz,** Turn in Safety Contract **MICROSCOPY** **MICROSCOPY & STAINING**
3. 9/1	Mon **LAB** Wed Fri	 **STAINING/SURVEY OF MICROORGANISMS (6)** Ch. 19 Evolution & Taxonomy **Literature Review sign-up sheet**	 **STAINING/SURVEY OF MICROBES (6)**
4. 9/8	Mon **LAB** Wed Fri	 ***Exam 1 Ch. 1, 2, & 19 + LAB*** Ch. 3 Bacterial Cell Structure	
5. 9/15	Mon **LAB** Wed Fri	Ch. 5 Eukaryotic Cell Structure **MEDIA PREP & ASEPTIC TECHNIQUE (18, 8, & 9)** Ch. 7 Microbial Growth	 **MEDIA PREP & ASEPTIC TECHNIQUE**
6. 9/22	Mon **LAB** Wed Fri	**MICROBIAL GROWTH (19, 24-33)** Ch. 8 Controlling Microbial Growth	**MICROBIAL GROWTH**
7. 9/29	Mon **LAB** Wed Fri	**Literature Review Due** ***Exam 2 Ch. 3, 5, 7, & 8 + LAB*** Ch. 10, 11, & 12 Metabolism: Catabolism & Anabolism	
8. 10/6	Mon **LAB** Wed Fri	**MULTI-SYSTEM TESTS (40-43)** **Lab Skills Assessment Due**	**MULTI-SYSTEM TESTS**
9. 10/13		**FALL BREAK**	
10. 10/20	Mon **LAB** Wed Fri	**BACTERIAL UNKNOWN (34-39)** ***Exam 3 Ch. 10, 11, & 12 + LAB*** Ch. 13 & 14 Replication, Transcription, & Translation	**BACTERIAL UNKNOWN**
11. 10/27	Mon **LAB** Wed Fri	Ch. 16 Genetic Variation **GENETICS & BIOTECHNOLOGY H.O.** Ch. 17 & 18 Recombinant DNA & Genomics	**GENETICS & BIOTECHNOLOGY**
12. 11/3	Mon **LAB** Wed Fri	 ***Exam 4 Ch. 13, 14, 16, 17, & 18 + LAB*** Ch. 25 Protists Ch. 26 *Fungi*	
13. 11/10	Mon **LAB** Wed Fri	**FUNGI: YEASTS & MOLDS (7 & 20)** **VIRUSES (21 & 23)** Ch. 6 & 27 Viruses	**FUNGI: YEASTS & MOLDS** **VIRUSES**
14. 11/17	Mon **LAB** Wed Fri	**KIRBY-BAUER (31)** Ch. 9 Antimicrobials **Lab Report Due**	**KIRBY-BAUER**
15. 11/24	Mon **LAB** Wed Fri	 ***Exam 5 Ch. 6, 9, 25, 26, & 27 + LAB*** Ch. 41, 42, & 43 Application	
16. 12/1	Mon **LAB** Wed Fri	Ch. 33, 34, 35, & 36 Pathogenicity & Host Defense **ELISA ASSAY** **Lab Skills Assessment Due**	**ELISA ASSAY**
17. 12/8	**Final Exam Week**	***Exam 6 Ch. 41-43 & 33-35 + LAB*** **TBD/TBA**	

Biology 2104-01—Microbiology with Lab—Fall 2014
Arranged Course for Luke Royal
Class Times TBD/TBA

Instructor Information
Tabitha Ellis
Fugitte Science Center Room 220
Office hours: MTWF 7:30-8:30; MWF 10:30-11:30; W 1:30-4:30
Phone # 384-8195
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Required Materials
Textbook: Prescott, Harley, & Klein's Microbiology 9th edition. ISBN: 978-0-07-340240-6
Register for textbook website to access multiple study tools: www.mhhe.com/willey9
Lab Manual: Benson's Microbiological Applications 12th edition, short version. ISBN: 978-0-07-337527-4
Student Handbook: A Student Handbook for Writing in Biology 3rd edition. ISBN: 978-1-4292-3491-7

Lab coat & disposable gloves

I reserve the right to change, add or delete any portion(s) (including assignments) of this syllabus. You will be notified.

Course Description
Deals with the fundamental microbiological principles and techniques including structure, function, cultural characteristics; plus, evolutionary and ecological relationships among microorganisms with a human perspective. The laboratory is a two-hour series that correlates with the lecture. Activities include aseptic techniques for use of microorganisms, cultural characteristics and biochemical reactions of microorganisms, classification and identification of unknown microorganisms.

Education Program Preparation
This course is required for content preparation in the Biology Education (8-12) Program and prepares teacher candidates with the knowledge base for microbiology depth of knowledge 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 and Behavioral Science 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 (8th-12th) grade students and meet requirements for Unbridled Learning.

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

Biology Program SLOs
2.1 Demonstrate basic laboratory bench skills and field techniques (Assessed by *Lab Skills Rubric*)
3.1 Apply the scientific method (Assessed by *Inquiry and Analysis Rubric*)
4.1 Communicate in an acceptable scientific manner (written) (Assessed by *Written Communication Rubric*)

Course SLOs
Upon completion of this course you will be expected to:
- ✓ Understand the importance of microbiology as both a basic and applied science;
- ✓ Be familiar with the anatomic, metabolic, and genetic principles of microbiology;
- ✓ Appreciate the impact of microbiology on medicine, industry, and society;
- ✓ Become competent in the laboratory skills required to culture, examine, and identify microbial organisms in a safe manner;
- ✓ Be able to interpret data and utilize thinking/problem solving skills in microbiology;
- ✓ Be able to write effectively through the composition of laboratory reports.

Grading

- **Exams=60% of your final grade.**
  There will be 6 exams worth 100 points each. The exams will consist of matching, multiple choice, fill-in-the-blank, labeling, short answer, & short essay covering lecture and lab material. There will also be 4 lab skills assessment; demonstrating mastery level of application. **Make-up exams are available to students who provide a valid, signed, excused absence (doctor/hospital note, school related activity, or funeral announcement), and, who makes up the exam the first day returned to class after the absence. If you know you will miss an exam due to a scheduled event, you may take the test early.**
- **Literature Review & Lab Report=40% of your final grade.**
  A lab report (worth 100 points) on an unknown organism will be performed to demonstrate your knowledge of effective scientific written communication. To help understand proper scientific writing you will conduct a literature review on an assigned organism worth 50 points. After reading the paper you will evaluate and discuss (in written format) the components of the paper. No late literature review or lab report will be accepted (don't ask). **You must upload your paper to Turnitin.com on 11/19/13 and turn in a paper copy. If you fail to submit your paper to Turnitin.com by 11/19/14, your grade is ZERO.**

Class notes

- **Academic Integrity**
  If I think you are cheating, you are cheating (on any given assignment/assessment).
  Cheating=0. Plagiarism=0. No questions asked; no excuses accepted!
  When you begin your exam you will not be excused from the testing room.
  If you witness a classmate cheating you may report that information to me as soon as possible.
- Prepare for each class session/assessment by studying your text/lab materials, SLOs, videos and applying your knowledge to the questions at the end of each section/chapter.
- Starfish notices will be sent periodically throughout the semester regarding your attendance, grades, etc.
- Honors projects are available for this class.
- I do not keep your graded work. You need to pick up ALL of your graded work.

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 unites, 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 mush 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 2013 semester on **December 9-13 and May 5-9** for the Spring 2014 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:

Course	Deadline	Submitted by the Student to

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.