BIOL 115 Survey of Biology Lab: Spring 2006
Syllabus and Course Outline

Course: Biol 188-100 When and Where: Tues 8:40-12, Science 145
Instructor: Dr. Jocelyn Elson-Riggins, Office – Room 118 Science Building
Phone: 657-1645
Please e-mail rather than call if you have questions – you will receive a faster response!
Office Hours: MWF 9:20-10:20 or by appointment
Email: jelsonriggins@msubillings.edu When using e-mail, please identify yourself in the subject heading with Biol 115 and a brief description of the e-mail.
Web Site: http://www.msubillings.edu/ScienceFaculty/Elson-Riggins/
Textbook: None. Handouts may be posted on the class web site prior to the lab. Please check the web site and print any handouts prior to class.
Teaching Assistant: Justin Gifford

Expected Outcomes and Assessment (i.e. objectives and grading): The objectives of this course are to familiarize you with basic laboratory skills and to use hands-on exercises to reinforce basic biological concepts. To assess your knowledge and understanding, you will be graded on lab quizzes and a final lab exam. The Lab exam will be comprehensive and consist of both a written and practical portion. The quiz will be given each week at the beginning of lab. It is your responsibility to be on time, since there will not be an opportunity to make up a quiz. If you arrive after the quiz has been completed, you will not be permitted to take it. If you arrive partway through a quiz you will be allowed to start the quiz, but will not be allowed additional time to finish. Attendance (including completing the ENTIRE lab) will be monitored occasionally and taken into account when determining your final course grade. You will also be expected to clean your lab equipment/benches after completing the lab – students leaving a mess will have points deducted from that week’s quiz...

Grading - 80% Quizzes - Best 8 of 10 quizzes (A missed quiz counts as a low score). 20% Final Comprehensive Exam - covers all labs.
Your final grade will be determined by your total percentage for the entire course.
90-100% = A    80-89% = B    70-79% = C    60-69% = D    Below 60% = F
Letter grades will be appended with a + or – at the instructor’s discretion.

Make Up Quizzes and Exams: There will be absolutely no make up quizzes or exams, so please do not ask for them! You can drop your lowest 2 quiz scores, so there is no reason for make up quizzes. It is YOUR responsibility to be present for the final exam. It takes a great deal of time and effort for your instructor and TA to set up a laboratory exam - it is therefore an unreasonable request to ask us to set up a replacement exam if you miss the final.

Extra Credit: There will be extra credit questions on the quizzes and exams. However, extra credit assignments will not be permitted.

Academic Misconduct: It is YOUR responsibility to familiarize yourself with the Student Affairs Handbook. In particular, note Part IX, B.1, Academic Misconduct. You
are expected to be entirely responsible for your own work. Any student cheating in a quiz or an exam will receive a zero for that assignment, and possibly an “F” for the course. Plagiarism in any form will not be permitted. Also, verbal abuse in any form will NOT be tolerated. Any student indulging in such behavior will be reported to the Dean of Arts and Sciences and The Office of Student Affairs.

**Class Etiquette:** Consumption of food or drink will not be permitted in the laboratory. Food and drink must be placed outside the room and consumed there. Backpacks/bags must be tucked neatly under the bench during lab, where they cannot be tripped over. Cell phones must be turned off prior to lab. If you need to use a cell phone please do so outside the room.

**Students with a Documented Disability:** Students with a documented disability requiring academic accommodation should make an appointment with the instructor. You should also contact Disability Support Services for assistance.

**HOLIDAY AND TENTATIVE EVENT SCHEDULE**

<table>
<thead>
<tr>
<th>Date</th>
<th>Lab</th>
<th>Event</th>
<th>Quiz</th>
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<tbody>
<tr>
<td>Jan 24</td>
<td></td>
<td>Review Syllabus</td>
<td>None</td>
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<tr>
<td>Jan 31</td>
<td>1</td>
<td>Measurement and Light Microscopy</td>
<td>None</td>
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<tr>
<td>Feb 7</td>
<td>2</td>
<td>Cells: Structure and Function</td>
<td>1</td>
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<tr>
<td>Feb 14</td>
<td>3</td>
<td>Scientific Method</td>
<td>2</td>
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<td>Feb 21</td>
<td>4</td>
<td>Cell membranes, Osmosis, and Diffusion</td>
<td>3</td>
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<tr>
<td>Feb 28</td>
<td>5</td>
<td>Photosynthesis, Respiration, and Fermentation</td>
<td>4</td>
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<td>Mar 7</td>
<td>None</td>
<td>Spring Break</td>
<td>None</td>
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<tr>
<td>Mar 14</td>
<td>6</td>
<td>Mitosis and Meiosis</td>
<td>5</td>
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<tr>
<td>Mar 21</td>
<td>7</td>
<td>Genetics</td>
<td>6</td>
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<td>Mar 28</td>
<td>8</td>
<td>Vertebrate Histology and Skeletal Structure</td>
<td>7</td>
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<td>Apr 4</td>
<td>9</td>
<td>Evolution and Population Genetics</td>
<td>8</td>
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<td>Apr 11</td>
<td>10</td>
<td>Molecular Genetics</td>
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<td>Apr 18</td>
<td>11</td>
<td>Animal Diversity/Ecology</td>
<td>10</td>
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<tr>
<td>Apr 25</td>
<td>12</td>
<td><strong>Final Comprehensive exam</strong> (during class time)</td>
<td>None</td>
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SAFETY RULES and LAB HYGIENE

A copy is posted on the bulletin board in front of lab.

Please read this, sign it and return in class today. Thanks.

Each student is responsible for cleaning up the materials used during lab and returning the equipment and materials to their original places. In this way, all students will be able to begin with clean materials and equipment in good order. Some chemicals are hazardous. Although these will be identified as such, you are encouraged to develop good lab technique by treating all materials as potentially hazardous.

1. Food or drink is prohibited in the lab at all times. No exceptions.
2. In case of fire or accident, take emergency action and notify the instructor at once.
3. You must go to the infirmary for treatment of cuts, burns, or inhalation of fumes. Your instructor will arrange for transportation if needed.
4. Unless instructed to do so, never taste anything in the laboratory. This applies to all food as well as chemicals.
5. Exercise great care in noting the odor of fumes and avoid breathing fumes.
6. Never use mouth suction in filling pipettes with chemical reagents. Use a suction bulb or pipette pump.
7. Don't force rubber stoppers into glass tubing. Protect your hands with a towel when inserting tubing into stoppers; lubricate hole and tube well with water, glycerol, or some other slippery substance.
8. Confine long hair when in the laboratory (use rubber bands if necessary).
9. Perform no unauthorized experiments.
10. Never work in the laboratory alone.
11. Do not smoke in the laboratory or building at any time.
12. Chemicals and solutions are not to leave the science building without your instructor's consent. If any solution, reagent, etc., is needed, see your instructor.
13. Before lighting a flame or turning on a hot plate, see that volatile, flammable liquids are not in the vicinity. Before pouring volatile liquids, be certain that none of your neighbors are using a flame. Never leave a burner unattended.
14. No one may be in a laboratory earlier than 8 a.m. or later than 5:40 p.m. Monday through Friday unless an instructor has issued written permission. Labs are not open on Saturdays, Sundays, or during holiday periods.
15. Material Data Safety Sheets for any chemical used in this laboratory can be obtained from Science Technical Services in Sci 241. These sheets contain information on the hazards associated with the chemical as well as information on its proper handling and storage.
16. Use of a cell phone in lab is not permitted. As a courtesy to your classmates, please turn off your cell phone before entering the lab.

I have read the above rules and will observe them at all times.

Your name: Date: