Biology 363  Molecular Biology

Time and Location of Class: MWF 10:30-11:30 in SCI 104
Textbook: Molecular Biology of the Cell, Fifth edition
Instructor: Dr. Kurt Toenjes,
            Room 133 Science Hall
            Phone: 896-5940
            Email: ktoenjes@msubillings.edu
            Office Hours: MWF 9:00-10:00 and by appointment

Course Introduction and Objectives: During this semester we are going to explore in detail the fascinating molecular biological world. Throughout this course we will immerse ourselves in the wonder of the molecular and cellular world that brings life to us and threatens us. We will start our exploration with a review of chemistry and genetics. We will continue on to discuss the structure, replication, processing, degradation, and regulation of DNA, RNA, Proteins and chromosomes. Hopefully much of this will be initially familiar to you and this course will serve to expand your understanding of these topics. During the semester it will become clear to you the impact that molecular biology has on your life now and will have in the future. This impact is realized through interaction with your environment, modern medical treatment, and the impact of ethical controversies.

Assessment: The exams and discussions will allow you to demonstrate your understanding of the subject matter that we have covered in class and your comprehension of the related material in your textbook. They will also test your ability to apply what you have learned to solve problems. The exams will consist of essay style questions and one extra credit question.

There will be three graded discussions, a written midterm and a written comprehensive final exam. This will allow you to clearly demonstrate your understanding of the subject matter that we will cover in this class. Each graded discussion will be worth 50 points. The midterm exam will be worth 100 points and the comprehensive final will be worth 150 points. The graded discussions will be based on a set of review questions given out in advance and conducted outside of regular class time. Discussion groups of three or four students will sign up for a time slot and participate in the discussion together. These discussions will take around 45-60 minutes for each group. One student in the group will be asked a question and given time to answer before the other students in the group can earn additional points by expanding on the original student’s answer. At the end of the discussion you will each receive your own score. The written mid-term exam will be conducted in class but please keep in mind that students often require additional time to complete the exam. The final exam will also be a written exam and consist of questions based on the material covered throughout the course with emphasis placed on new material.

No makeup exams will be given except for university-approved absences and I must be informed BEFORE the scheduled time of the exam. Makeup exams must be completed within one week of the regular scheduled exam or on
April 25th. You will not receive the same exam as the rest of the class and it may consist of long essay style questions.

**Extra Credit:** There will be extra credit questions on each of the written exams worth a maximum of 5% of your grade. No additional extra credit will be given.

**Grading:** The standards for awarding your grades will be no higher than: A= 90%-100%, B= 80%-89%, C= 70%-79%, D= 60%-69%, and F= 0%-59%. Minuses MAY be used for your benefit at my discretion to adjust for the performance of the class. For example, if you earn 69% of the total points possible in the course you MAY be awarded a C- rather than a D.

**Academic Honesty:** You are expected to meet the highest standards of academic honesty and ethics. All work you turn in must be entirely the result of your own effort and represent your understanding of the subject matter. Any cheating or assisting someone else in cheating will result in you receiving 0 pts for the assignment or exam.

**Attendance:** Material will be presented in the lectures that cannot be obtained from your textbook. Lectures will also provide potential answers to the extra credit questions. Therefore, if you desire to be successful in this class, it is recommended that you attend lectures and pay attention to the material being presented and discussed.

**Classroom Etiquette:** During class you must respect the rights of your classmates and stay focused on the material we are discussing. Therefore, please conclude any social conversations before class and abstain from any cell phone use during the lecture. IF you must take a cell phone call or text message during class, leave the room BEFORE doing so. If you need to arrive at class late or leave early, please sit near an exit and be as quiet as possible.

**Schedule:**

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<tr>
<th>DATE</th>
<th>Event</th>
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<tbody>
<tr>
<td>2/4 to 2/8</td>
<td>Discussion 1</td>
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<tr>
<td>2/25 to 2/29</td>
<td>Discussion 2</td>
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<tr>
<td>3/12</td>
<td>Mid-term Exam</td>
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<tr>
<td>4/7 to 4/11</td>
<td>Discussion 3</td>
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<tr>
<td>4/28</td>
<td>FINAL EXAM 10:00-11:50</td>
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Discussion Groups:

Group 1 members
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Time slot_______________

Group 2 members
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Time slot_______________

Group 3 members
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Group 4 members
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Time slot_______________