SYLLABUS - CHEM 3802 - BIOCHEMISTRY II

Spring 2011 – Tues / Thurs – 11:30 – 12:45 – SC 2504

Instructor – Dr. Brent Feske
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Attendance Policy – Students are not required to come to lectures, but they will be responsible for all that is covered in the lecture. Students will be required to attend the presentation portion of the class at the end of the semester.

Exams – No make up exams will be given. You will be tested on material taken directly from the notes, the chapters covered in the book, and your ability to answer critical thinking questions that applies to this material.

- 4 – 100 point in class exams (including ACS final)
- 75 point presentation
- 25 point presentation quiz

Grading Scale
90 – 100 A
80 - 89 B
70 - 79 C
60 - 69 D
0 - 59 F

Tentative Exam Dates
January 27th
February 15th
March 1st
March 3rd ACS Final

Rolling Schedule (Probably WILL Change)
Review/Laboratory Techniques
CH. 4
CH. 5

CH. 10 – nucleotides/nucleic acids
CH. 11 – Structure of Nucleic acids
CH. 12 – Recombinant DNA: Cloning and creation of chimeric genes
CH. 26 – The synthesis and degradation of nucleotides
CH. 28 – DNA Metabolism: Replication Recombination and Repair
CH. 29 – Transcription and the Regulation of Gene Expression
CH. 30 – Protein Synthesis
CH. 31 – Completing the Protein Life Cycle: Folding, Processing, and Degradation
Special Topics – HIV – Virus (Retrovirus)
Presentation Instructions

The presentation will be a 15 minute power point presentation on the **BIOCHEMISTRY** of a specific disease and/or treatment of the disease. Each topic must be cleared by Dr. Feske by **February 17th**. If you want to give a presentation on the Biochemistry of something other than a disease it will be considered, so feel free to ask.

1. This presentation should focus on a brief introduction of the disease (symptoms, etc.)
2. Then a description of why the disease occurs (the biochemistry of the disease, pathways, etc.)
3. The treatment of the disease (how the drug affects the pathway, etc.) Possibly on the development of the drug and the present strategy to develop new drugs or treatments and how they work.
4. Brief Conclusion

*Note – this is a general outline for your presentation. This may not be suitable for all topics. Do what you think is the best way to present your specific topic.*

You will be graded on proper length (13 – 17 min). If your presentation goes over or under this projected time you will be docked points (1 point per minute). You will also be graded on how professional your presentation looks, is arranged, and your ability to clearly present the topic.

You will also generate a ~5 question quiz that will be handed out to the class at the end of the period. The audience will get a grade from your quiz and your quiz will be graded by me (for your ability to ask reasonable questions (not too hard/easy ~average 80%) and ability to test people on the important or ‘take home’ messages of your talk. Feel free to be as creative as you like. The test must have single answers (multiple choice, matching, very short answer, or draw a structure) You can not ask essay type questions. Sharing of quiz’s between students is **not acceptable**. Students can take notes and use their notes to answer the quiz questions.

Presentation Do’s and Don’ts

- No index cards to read from, your presentation should be bulleted form to remind you of what to talk about, but ultimately you should have what you want to say in your head.
- Avoid figures that are blurry or unreadable. Don’t be afraid to make your own figures/images. If you do use someone else’s figure, be sure to reference it under the figure.
- Be sure to show biochemistry – aka: structures of compounds, enzymes, or compound/enzyme interactions. Pathways, mechanisms, etc. are all good things to try and add.
- Look at the grading rubric to see what I am looking for.