## **CHEMISTRY 105 - All About the AIDS Virus**

## **COURSE INFORMATION**

Term: Fall 2000, M Hour

Text: AIDS the Biological Basis by Edward Alcamo, 2nd edition.

Professor: Dr. Darlene M. Loprete

Office: 108 Kennedy Hall

Phone Numbers: X3905 or 278-8571(home). Please call before 9pm.

Email: Loprete@rhodes.edu

Lecture Number	<u>Topic</u>	Chapter(s)
1 2 3 4-6 7-8 9 10 11-13 14-17 18-21 22	Introduction Atomic Structure Ions, Compounds and Formulas Chemical Bonding Proteins Carbohydrates Lipids and Membranes Nucleic Acids Replication, Transcription, Translation Life Cycle of HIV, Therapies The Immune System and HIV Defining AIDS	Chapter(s)  Chapter 1 Reserve Reserve Reserve Reserve Reserve Reserve Reserve Reserve Chapter 2, 8 Chapter 3 Chapter 4
23 24-25	Epidemiology HIV Testing	Chapter 5 Chapter 7

# DESCRIPTION

This course covers the molecular aspects of AIDS.

# **GOALS**

- 1. To learn about the biochemistry of carbohydrates, fats, nucleic acids and proteins.
- 2. To understand the life cycle of HIV, the molecular structure of the virus and why they are important for designing drug therapies.
- 3. To understand the relationship between the biochemistry of molecules and the pathogenesis of AIDS
- 4. To gain a basic understanding of how the immune system functions.

### **EVALUATION**

1. Daily Quizzes

A 10 minute quiz will be given each class period. You will be quizzed on the material covered in the previous lecture and the assigned reading. I will specify the pages in the text that will be covered on the quiz and any problems pertaining to the quiz at the end of each class period. In some instances I may email you with this information.

2. Exams: A tentative exam schedule is given below:

Exam 1 October 3 Exam 2 November 21

The exams will cover all the material given in class as well as any assigned reading and problems.

- 3. **Final Exam:** The final exam is December 8<sup>th</sup> at 5:30 pm.
- 4. Final Average: You grade will be calculated as follows:

2 exams 40%
Quizzes 20%
Paper/Project 20%
Final Exam 20%

100%

5. **Final Grade:** The following is a guide in determining your final letter grade:

Final average: 90-100 A 80-89 70-79

80-89 B 70-79 C 60-69 D Below 60 F

Pluses and minuses will be assigned within the ranges given above.

#### **POLICIES**

- 1. Daily Quizzes: If you arrive late to class you will not be able to take the quiz for that day.
- Assigned Problems: Problem sets will be handed out in class and the answers will be
  posted outside my office and are available on reserve in the main library. I may also
  assign problems at the end of a chapter and the answers are found in the back of the text.
- 3. Use of old exams: You are NOT to obtain, read or use copies of old exams or quizzes at any time during the semester for this course. If you ignore my policy you will be violating the Honor Code and appropriate action will ensue.
- **4. Make-ups:** If you are unable to take a quiz or an exam because of an illness or an athletic event you must notify me prior to the time of the scheduled exam or quiz. Failure to notify me will result in a zero for that exam or quiz. A missed quiz must be taken within 8 days of the date it was scheduled to be taken. For example, if you miss a Tuesday quiz you have until the following Tuesday to make up the quiz. After that Monday a zero grade will be recorded for that quiz. Also note that a missed quiz must be taken two days prior to the exam if that quiz pertains to the exam.
- 5. **Email:** During the semester I will give you information via email; therefore you will be required to check you email between classes. You will be responsible for any problems or reading I assign over email.