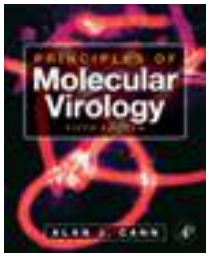
**Virology 4312-001 Summer II 2012**
**MTWTh ; 8-10 AM**
**July 10-31**
**August 1-9**
**Final Exam Monday August 13, 8-10 AM**




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**Course Number, Section Number, and Course Title: Virology 4312-001/5304-001**

**Time and Place of Class Meetings:**

**MTWTh ; 8-10 AM**
**July 10-31**
**August 1-9**
**Final Exam Monday August 13, 8-10 AM**

**Description of Course Content:** This course is an introduction to molecular virology and the importance of viruses in human disease. It covers the methods available to study virus architecture, genome structure, replication strategies and virus interactions with cellular factors. Viruses have a major impact on humanity. They cause a number of acute diseases which can be serious or even life-threatening, but can also cause long-term complications such as paralysis, are involved in the induction of some cancers and may even cause some forms of diabetes and heart disease. The introduction of molecular approaches over the past 20 years has transformed our understanding of viruses and has provided a number of routes to the development of vaccines and anti-virus therapy. This course will give an introduction to the unique nature and importance of viruses then will show, using a number of detailed, specific examples, how molecular approaches are used in their study and what are the results of these approaches. The course will highlight molecular features which are critical in the induction of disease and also which current approaches are likely to lead to novel ways of controlling virus infections.

**Student Learning Outcomes:**

The intended **learning outcomes** are as follows. By the end of this course you should be able to:

- Describe the differences in virus architecture and how these may be used to classify viruses

- Demonstrate the principles of molecular virology using specific examples
- Explain how gene expression is modulated in different virus – host cell systems
- Discuss some of the strategies adopted by viruses to replicate and express their genetic information
- Discuss the role of viruses in disease and how this relates to molecular interactions with the infected cell
- Discuss how an understanding of virus infections opens up the possibility of novel therapeutic approaches
- Design viral vectors for use in gene therapy
- Apply newly acquired knowledge of virus replication and host cell interactions in the development of antiviral agents

**Assessment of Student learning outcomes may include**;

- Performance on multiple choice examination questions
- Performance on short answer essay questions included on each examination
- Performance on take home examinations

**Required Textbooks and Other Course Materials:**

- Principals of Molecular Virology, Cann., Fifth Edition

**Grading Policy**: Final course grades will be based on 2 exams spread across the semester, **or** the final exam. Grades will be calculated as follows: if you have taken Exams 1 and 2 and are satisfied with your grade, you do not need to take the comprehensive final exam. If you elect to take the final exam, your grade on the final exam or your grade on the first two (2) exams, whichever is greater, will be the grade you earn for this course. The optional final exam gives a student an opportunity to "redeem" a poor exam 1 or 2 performance, or "replace" an unexcused missed exam. Please remember the final exam is COMPREHENSIVE and requires significantly more effort than the two (2) regular exams! Students are encouraged to study and complete the two exams during the regular course period and not depend on the final exam.

**Grading for section 5304-001 (Graduate Credit): In addition to the in class exams,** graduate students will be required to complete 2 take-home exams. Note: if you have registered for 5304-001, you must meet the graduate requirements.

**Attendance Policy:** Students are strongly encouraged to attend **all** lectures.

**Audio Recording Policy:** Students may record class lectures if they have the express consent of the professor. Consent will be granted via email to the professor (roner@uta.edu). **Students who have the express consent of a professor to record a class must make their own arrangements to record the class.** Permission to record a class applies exclusively to the student who received permission from the professor. The recording may not be accessed or utilized by any other individual. No replication of the recording or posting to the Web is permitted.

**Lecture Notes Policy:** Copies of lecture notes and exams that may be provided to the students may not be accessed or utilized by any other individual. The student may print a copy or maintain an electronic copy for use during the course, but no additional replication of the lecture notes and exams, or posting to the Web is permitted.

**Drop Policy:** The final course drop date has been included in the syllabus for your information. Undergraduate students may drop with a 'W' up until the final drop date (with permission of instructor).

**Important University Policies:**

**Americans With Disabilities Act:** The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

**Academic Integrity:** It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

**Student Support Services Available:** The University of Texas at Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

**Final Review Week:** A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week unless specified in the class syllabi. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. Classes are held as scheduled during this week and lectures and presentations may be given.

**Drop for non-payment of tuition:** Payment must be received by the term due date or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes but only is seats are available.

**Bomb Threats**: If anyone is tempted to call in a bomb threat, be aware that UTA will attempt to trace the phone call and prosecute all responsible parties. Every effort will be made to avoid cancellation of presentations/tests caused by bomb threats. Unannounced alternate sites will be available for these classes. Your instructor will make you aware of alternate class sites in the event that your classroom is not available.

The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

**After Hours Safety Escort**

**The Sam Mav Escort service** provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 p.m. to 1:00 a.m., Sunday through Saturday. 817-272-3381

**MavMail:**
All students are assigned an email account and information about activating and using it is available at www.uta.edu/email. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly. The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

**Make-up Exam Policy**: Make-up exams will be allowed only in extreme circumstances. You should have a doctor's note in case of illness. Notify me (by email, phone, note etc. AS SOON AS you are aware of a problem.

**Grade Grievance Policy**: As per University policy as outlined in the current student catalog.

## Tentative Lecture Schedule

| | |
|---|---|
| **July 10** | **Chapter 1** |
| **July 11** | **Chapter 1** |
| **July 12** | **Chapter 2** |
| **July 16** | **Chapter 2** |
| **July 17** | **Chapter 3** |
| **July 18** | **Chapter 3** |
| **July 19** | **Chapter 4** |
| **July 23** | **Chapter 4** |
| **July 24** | **Exam 1** |
| **July 25** | **Chapter 5** |
| **July 26** | **Chapter 5** |
| **July 30** | **Chapter 6** |
| **July 31** | **Chapter 6** |
| **Aug 1** | **Chapter 7** |
| **Aug 2** | **Chapter 7** |
| **Aug 6** | **Chapter 8** |
| **Aug 7** | **Chapter 8** |
| **Aug 8** | **Extra** |
| **Aug 9** | **Exam 2** |
| **Aug 13** | **Final Exam** |

## Student grading

**Option 1**
2 exams 50 points each — 100 points
Grade based on 100 points

**Option 2**
Final exam — 75 points
Final grade based on 75 points

**FINAL GRADES WILL BE ASSIGNED AS FOLLOWS:**

| | | | |
|---|---|---|---|
| **100%** | **-** | **89.51%** | **A** |
| **89.50%** | **-** | **79.51%** | **B** |
| **79.50%** | **-** | **69.51%** | **C** |
| **69.50%** | **-** | **59.51%** | **D** |
| **<59.50%** | | | **F** |