PHAR 7299 Viruses and Antiviral Treatments
Spring 2026

Course Description
This course will provide students with foundational concepts in virology. This course provides an overview of viruses' origin, definition, classification, life cycle, and structure. Students will be introduced to fundamental concepts in virology. Important topics will include discussions on antiviral treatments, viral pandemics, and the significance of vaccination against viral diseases.

Additional Course Information
This course combines the study of viral infections and the therapeutic agents used to treat them. It comprises studying how drugs can prevent or improve disruptions to viral processes that cause infection and effects.

Course Credit
2 credit hours

Pre-Requisites
PHAR 7202 and PHAR 7613

Class Meeting Days, Time
Wednesdays 4:30 – 6:30 pm by Zoom

Course Coordinator
Joseph S. Glavy, Ph.D.; Office: WTB364; jglavy@uttyler.edu
Office hours: Tuesday and Thursday, 12:00-1 pm.

Required Materials*
Most course required materials are available through the Robert R. Muntz Library. These materials are available either online (http://library.uttyler.edu/) or on reserve.
1. Principles of Pharmacology: The Pathophysiologic Basis of Drug Therapy (4th Edition). Golan. DE, Armstrong, EJ, Armstrong AW. Wolters Kluwer. ISBN: 9781451191004, 2016.
2. **Jawetz, Melnick, & Adelberg's Medical Microbiology, 28e** Stefan Riedel, Jeffery A. Hobden, Steve Miller, Stephen A. Morse, Timothy A. Mietzner, Barbara Detrick, Thomas G. Mitchell, Judy A. Sakanari, Peter Hotez, Rojelio Mejia. McGraw Hill. ISBN-13 : 978-1260012026

   *Other required materials will be posted on the classes' Canvas site (uttyler.edu/canvas)

Course Format

The course may include, but are not limited to, the following activities:
1. Independent study of selected readings
2. Zoom Lectures and Discussions

Course Learning Outcomes (CLOs)

CLOs	PLO(s) (1-15)	EPAs (1-13)	ACPE Appendix 1	ACPE Std. 11 & 12 (1-4)	Assessment Methods	Grading Method
1. Basics of Virology.	1,2	4	1.1.1 1.1.4	-	1-3	ES
2. Identify therapeutic targets and vaccine targets, and pharmacological agents that can modify or prevent viral infections.	1,2	4-5	1.1.4 1.1.7	-	1-3	ES
3. Learn the disease pathogenesis, therapeutic targets and public opinions of treatments	1-3	4-5	1.2.8	-	1-3	ES

Course Assessment Methods:

	Assessment Method	Description
1	Book Reports	Assigned Readings
2	Team Project	A team project/report .

Grading Policy & Grade Calculation:

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During the time the course is in progress, students whose cumulative course percentage falls below 70.0% may receive an academic alert and be subject to periodic course content review in special sessions with the course instructor(s). The student's faculty advisor may receive an academic alert to act upon on the student's behalf.

All examinations, tests, and assignments, including the final examination, may be cumulative. Students are responsible for material presented during the prior courses. The grading scale for all graded material is below. The final course grade will be assigned according to the calculated percentage and the percentages will not be rounded upward or downward. For additional information, see examination/assessment policy below.

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Standard Grade Calculation*

Reports	50%
Team Applications	50%
Total	**100%**

The final course letter grade will be determined according to the following grading scheme:

A	90 - 100 %
B	80 - 89.999 %
C	70 - 79.999 %
D	65.0 - 69.999 %
F	< 65.0 %

WEEK	DAY	TOPIC	Instructor	CLO
1	W	Introduction to Virology.	Glavy	1
2	W	Define viruses and reflect on theories of their origin. Break down the life cycle of a virus. Explain the basic structural components of a virus.	Glavy	1
3	W	Virology: HIV & Treatments*	Glavy	1,2
4	W	Virology: Ebola & Treatments*	Glavy	1,2
5	W	Virology: Influenza & Treatments*	Glavy	1,2
6	W	Virology: Pox & Treatments*	Glavy	1,2
7	W	Virology: Herpes & Treatments*	Glavy	1,2
8	W	Virology: Corona & Treatments*	Glavy	1,2
9	W	History of Vaccines**	Glavy	1,2
		Spring Break		
10	W	History of Vaccines: Modern approaches.**	Glavy	1,2
11	W	Scientific consensus on vaccine safety and efficacy.**	Glavy	1,2
12	W	Effective Communication: Surveys, polls etc. on vaccines**	Glavy	1,2,3
13	W	Effective Vaccine Communication: Tailoring messages and addressing concerns with empathy and evidence. **	Glavy	1,2,3
14	T	Compare and contrast historic viral pandemics**	Glavy	1,2,3
15	TBD	**Final Report Individual and Team**		
• *Assigned individual report **Assigned Team report*				

College of Pharmacy Policies

Examination Policies

The term exam in this document refers to any assessment (e.g. RAT, CAT, midterm examination, final exam, OSCE, skills test/assessment) used for formative or summative student learning outcome evaluations.

Most exams will be taken using ExamSoft. It is the students' responsibility to have a device that is compatible and works with ExamSoft under exam conditions. Each student will use a privacy screen on the device used to take the exam.

- Students will be allowed entry to the classroom after an exam has started ONLY at faculty or proctors' discretion.
- Exams using ExamSoft will be available for downloading 24 hours in advance of the exam. All students must have the exam downloaded and be prepared to start the exam at the scheduled exam time. Students will NOT receive additional time if the exam was not downloaded in advance and the student has technical difficulties as a result. The password to access the exam will be given at the time the exam is scheduled to begin.
- Some exams are administered on multiple days (i.e., laboratory assessments or assignments) or throughout the day (i.e., OSCEs). In such instances, students already completing the exams shall not share the questions or activities with students yet scheduled to take the exams. Sharing of any part of the exams with those who have not yet taken the exam is considered academic dishonesty and the person(s) receiving the information will receive a score of zero (0), as well as the person(s) sharing the information about the exams.
- All personal items, such as Google glasses, purses, books, backpacks, cellphones, pagers, notebooks, and briefcases will be left in the front or back of the room during testing.
- Silence will be enforced during exam time. No one may be enter or leave the room during the exam without the permission of the exam proctor(s) to avoid distracting other students during the exam.
- Students will not share calculators during exams. Calculators will be provided by the college during the exam period if required.
- Course exams will not be returned. A review of the exam will be conducted at the discretion of the faculty. Exam reviews may be scheduled with faculty during office hours and within TWO (2) business days from the return of the exam grades.
- Official notification of exam scores will be posted on Canvas after faculty analysis and review. Every effort will be made to post the scores in a timely manner.
- Any student achieving an exam grade <70% MUST schedule an appointment with the course coordinator within two business days from the official notification of the exam grades.
- If an absence for an exam is necessary, the student is responsible for notifying the course coordinator PRIOR to the exam with an acceptable reason. Failure to meet this requirement may result in denial of opportunity to make up the exam at a later date. Make-up exams may be given at the time designated by the course coordinator.
- Exams missed for medical/emergency will require official documentation and the documentation must be given to the coordinator no later than five (5) business days after the exam.
- Make-up exams may only be given at the discretion of the course coordinator or relevant faculty and may be in a different format from the original exam.
- Any student suspected of cheating may be immediately removed from the testing area. Strict enforcement of the college Honor Code is maintained.

Appeals Policy
All grading related appeals for a particular project or assignment must be submitted IN WRITING to the responsible instructor and course coordinator within TWO (2) business days of the publication of that grade on Canvas. All appeals must be defended with relevant evidence from appropriate current textbooks and primary literature, and must be properly referenced.

A student can file an appeal if there is a disagreement with a final course grade. The appeal must be submitted within TWO (2) business days of online posting of final course grades. The student must initiate a formal grade appeal process by completing the Course Grade Appeal form available on the College web page and by submitting this form to the course coordinator.

Course Reassessment Policy
Please see the Student Handbook (https://www.uttyler.edu/pharmacy/student-handbook/index.php).

Classroom Behavior Expectations
Overall, students are expected to exhibit professional behaviors as described in the Student Handbook.

UT Tyler Policies and Further Information

Student Rights and Responsibility
All students are responsible for reviewing the syllabus and abiding by all that is within it. Students are encouraged to seek clarification within the first week of the course. The student is responsible to know and understand the policies that affect her or his rights and responsibilities as a student at UT Tyler. Please follow this link: http://www2.uttyler.edu/wellness/rightsresponsibilities.php.

Course Website
Course faculty and coordinators will use Canvas course management tools (uttyler.edu/canvas) to facilitate communication and to provide access to materials, assessment scores, and other resources. Materials will be posted to the website before formal student engagement and readiness assessment tests.

Instructor Communication and Response
Course faculty-strive to have open communication with students both in and outside of the classroom. Students are encouraged to contact faculty to discuss questions or other issues related to the course. Responses to phone or email messages will be transmitted during regular working hours. If you do not have a response within a reasonable time, please check to assure you have used the correct email address or phone number and follow up if with course faculty if needed. Faculty will respond to student questions received during evenings and weekends once they are back in the office during regular business hours. Communications from faculty and course coordinators to students, regarding the course, will be made via the Canvas website and/or UT Tyler email.

Attendance and Make-up Policy
Given the importance of classroom discussion to successful learning in the class, classroom absences will only be excused under exceptional circumstances. In such cases, students are required to make every reasonable effort to notify the course coordinator in advance.

> **Late Arrival:** A student may be given credit for classroom participation and contribution if they arrive late and the late arrival was due to circumstances beyond the student's control. In all cases, the decision of the course coordinator with input from the instructor for the day is final. Students will

not be allowed to enter the room after the beginning of iRATs until after its conclusion to avoid distracting other students during the exam.

Known Excused Absence: A student may request an excused absence from class/pharmacy practice experiences for known personal, compassionate, professional, or health-related reasons. Known excused absence requests are initiated in writing to the course coordinator. Generally, *known* excused absences are for one or two academic days. Known excused absences greater than five academic days in a session may require a student to withdraw from the course. Students will be required to present appropriate documentation to support a request for a known excused absence. ***The decision to grant a known excused absence is at the discretion of the course coordinator and is final.***

Unexpected Excused Absence: In the event of unexpected circumstances, students are responsible for submitting a request to the course coordinator requesting the unexpected absence be considered excused within three (3) days of the absence. Students will be required to present appropriate documentation to support a request for an unexpected excused absence. It will be the student's responsibility to make arrangements for making up missed assignments and/or examinations. If the assignment and/or examination cannot be made-up but is considered excused, then the missed activity should not count against the student's final grade; however, this is at the discretion of the course coordinator*. **The decision to grant an unexpected excused absence is at the discretion of the course coordinator and is final.***

The course coordinator(s) in conjunction with instructors will determine if a student's absence results in the need for the completion of additional/supplemental work in order to satisfy course requirements. No makeup assignments or exams will be given outside the attendance and make-up policy outlined in the syllabus. Students will receive a score of zero (0) for assignments not completed within the time frame established by the course coordinator, generally not more than 5 days (including weekends).

Unexcused Absence: Students will receive a ZERO (0) for all missed assignments or projects.

Appropriate Use of Artificial Intelligence
For this course, **AI is encouraged during the course, and appropriate acknowledgment is expected.** Students can use AI platforms to help prepare for assignments and projects. You can use AI tools to revise and edit your work (e.g., identify flaws in reasoning, spot confusing or underdeveloped paragraphs, or correct citations). When submitting work, students must identify any writing, text, or media generated by AI. In this course, sections of assignments generated by AI should appear in a different colored font, and the relationship between those sections and student contributions should be discussed in a cover letter that accompanies the assignment when submitted.

Course Withdrawal and Census Date
The last day to withdraw from the course without academic or financial penalty is January 27th 2020. The last day to withdraw from the course with an automatic grade of "W" is **March 30th 2020**. To withdraw from the course, students should initiate withdrawals with the course coordinator. The course coordinator is not responsible for officially withdrawing you from the class. If you do not withdraw by the official dates you will automatically receive a letter grade of "F".

The Census Date (**is January 27th 2020)** is the deadline for many forms and enrollment actions that students need to be aware of. These include:

- Requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit;
- Receiving 100% refunds for withdrawals. (There is no refund after the Census Date);
- Schedule adjustments (section changes, adding a new class, dropping without a "W" grade);
- Being reinstated or re-enrolled in classes after being dropped for non-payment;
- Completing the process for tuition exemptions or waivers through Financial Aid.

Handling of Student Accommodations
In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including non-visible a diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The **Student Accessibility and Resources** (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at http://www.uttyler.edu/disabilityservices, the SAR office located in the University Center, # 3150 or call 903.566.7079.

Students with disabilities must register with the Student Accessibility and Resources office to receive accommodations under ADA(AA) provisions. Students are encouraged to submit application for services 3 weeks prior to need so that eligibility, notification of instructor, possible exam scheduling, and other accommodations can be effectively coordinated. Once approved, exams should be scheduled no less than three (3) days prior to test date. Authority for disability accommodation can be found in the Handbook of Operating Procedures, Section 5.14.1 and can be found at:
http://uttyler.smartcatalogiq.com/en/UTTyler/2015-2016-HOP/Series-500-Student-Affairs/5-14-1-Disability-Accommodation.

Notice of Permission / Non-Permission
All course materials (including but not limited to; audio, visual, print and electronic) are copyrighted. External distribution outside of Canvas or for purposes other than classroom use is prohibited without first gaining permission. For additional information regarding the use of copyrighted materials, please refer to the Handbook of Operating Procedures, 2.3.1. Copyrighted materials
http://uttyler.smartcatalogiq.com/en/UTTyler/2015-2016-HOP/Series-200-General-Policies-and-Procedures/2-3-1-Copyrighted-Materials.

Holidays and Religious Observations
Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second class meeting. Authority for approved absence policy can be found in the Handbook of Operating Procedures, Section 5.10.1 and can be found at:
http://uttyler.smartcatalogiq.com/en/UTTyler/2015-2016-HOP/Series-500-Student-Affairs/5-10-1-Approved-Student-Absences.

Professionalism Expectations / Handling of Academic Misconduct
Academic Misconduct and Consequences
- The University policies regarding academic misconduct will be strictly enforced. Student suspected of cheating during a quiz or examination will receive zero points for the assessment and will be reported to the College's Office of Academic Affairs and/or the University of Texas at Tyler Office of

Judicial Affairs for further sanctions. (See Examination and/or Major Assignment Policies and Procedures). Upon confirmation of academic misconduct in these circumstances of serious disregard for academic integrity, course faculty may recommend sanctions including that the student be awarded a failing grade in the course.

- Course faculty will adhere to a no tolerance policy for cheating and expect students to abide by university, college and program policies. ***The Honor Code will apply at all times.*** Students also are expected to help enforce this code.
- Students are expected to work independently on all individual assignments, quizzes and exams. Group projects will be clearly identified. The use of any resources other than the student's own recollection and reasoning ability on an individual assignment, paper, quiz, or exam is cheating. Inappropriate use of electronic or wireless technology (e.g., cellular telephone, pagers, PDA's, laptops) during quizzes or examinations is considered academic misconduct. Students must be honest when reporting on work completed within the course. Putting a student's name on a report that he/she did not actually contribute to in a meaningful way is dishonest and is considered cheating. Both the student whose name is placed on the report or assignment and the student(s) doing so will be sanctioned.
- Plagiarism, another form of cheating that occurs when another person's work is used or copied without proper acknowledgement, is not condoned and will not be allowed.
- Students may be asked to move during an examination if proctors believe a student is knowingly committing or unknowingly contributing to academic misconduct.

Students are encouraged to obtain a copy of *A Student Guide to Conduct and Discipline at UT Tyler*, available in the Office of Student Affairs.

Authority for handling of academic misconduct can be found in the Handbook of Operating Procedures, Sections 5.5.1 and 5.5.2 and can be found at:
Section 5.5.1 – Student Conduct: http://uttyler.smartcatalogiq.com/en/UTTyler/2015-2016-HOP/Series-500-Student-Affairs.

Section 5.5.2 – Student Conduct Code, Student Disciplinary Hearing and Appeals Procedures:
http://uttyler.smartcatalogiq.com/en/UTTyler/2015-2016-HOP/Series-500-Student-Affairs/5-5-2-Student-Conduct-Code-Student-Disciplinary-Hearings-and-Appeals.

Social Security and FERPA Statement
It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.
FERPA Statement for Courses That Utilize Plagiarism Detection Software
The University of Texas at Tyler has an account with an automated plagiarism detection service, which allows instructors and students to submit student assignments to be checked for plagiarism. Faculty reserve the right to 1) request that assignments be submitted as electronic files and 2) electronically submit assignments to SafeAssign, or 3) ask students to submit their assignments to SafeAssign through the LMS course management program of UT Tyler. Assignments are compared automatically with a database of journal articles, web articles, and previously submitted papers. The instructor receives a report showing exactly how a student's paper was plagiarized. For more information about the University's policies regarding plagiarism, go to Subchapter 8-800-Student Standards of Conduct in the Manual of Policies and Procedures for Student Affairs. It can be found at:
http://www.uttyler.edu/mopp/documents/8Student%20Conduct%20and%20Discipline.pdf.

Please remove your name from the body of your paper and replace it with your UT Tyler ID#. Also remove your name from the file name and replace it with your UT Tyler ID# (e.g., "U12345678 Essay 1.docx") before submitting it to SafeAssign. Pursuant to the provisions of the Family Educational Rights and Privacy Act (FERPA), students are requested to maintain confidentiality as a way to keep their personal contact information (i.e. name, address, telephone) from being disclosed to vendors or other outside agencies. By your submission, you are also agreeing to release your original work for review for academic purposes to SafeAssign.

Student Absence for University-Sponsored Events and Activities
If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Emergency Exit and Evacuation
Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services.

Emergency Preparedness for Academic Continuity
In the event of an emergency, it may be necessary for UT Tyler to suspend normal operations. During this time, UT Tyler may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Skype, and email messaging and/or an alternate schedule. It's the responsibility of the student to monitor Canvas site for each class for course specific communication, and the main UT Tyler, College, and department websites and emails for important general information.

Syllabus Content Change Disclaimer
The course coordinator retains the right to make adjustments to the course content, schedule or grading policy as deemed necessary to enhance student learning.

Instructional Technology Assistance
If you experience technical problems or have a technical question about this course, you can obtain assistance by emailing itsupport@patriots.uttyler.edu or call 903.565.5555.

When you email IT Support, be sure to include a complete description of your question or problem including:
- The title and number of the course
- The page in question
- If you get an error message, a description and message number
- What you were doing at the time you got the error message

Netiquette Guide
"Netiquette" is network etiquette, the do's and don'ts of online communication. Netiquette covers both common courtesy online and informal "rules of the road" of cyberspace. Review and familiarize yourself with the guidelines provided. (http://www.learnthenet.com/learn-about/netiquette/index.php)

Course and Instructor Evaluations
Evaluations are a professional responsibility. Constructive evaluation is a valuable tool utilized by the faculty as a method for quality control of the curriculum. Student evaluations are viewed by the faculty and administration as one method for maintaining high, consistent levels of quality education in the College. As a professional pharmacy student, evaluation requires maturity and objectivity. This evaluation tool is the

student's opportunity to participate in the on-going evaluation process. The evaluations will be online and links to the tool will be provided on Canvas toward the end of the term. Evaluations are collated and presented in a composite format after final grades are submitted to the Registrar's Office.

Dress Code
Please refer to the Student Handbook

Handgun Policy
We respect the right and privacy of students who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at http://www.uttyler.edu/about/campus-carry/index.php.

Tobacco-Free University
All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors.

Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products.

There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.