

George Mason University
College of Education and Human Development
Athletic Training Education Program
ATEP 600 DL1– 001 Pathopharmacology
3 Credits, Spring 2023
T 10.30 – 11.45 am, K Johnson Hall Room 247, SciTech (PW) |
AND Asynchronous 1/10/2023 - 4/25/2023

Faculty

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Prerequisites/Corequisites

Basic human anatomy and physiology and Functional Anatomy knowledge needed.

University Catalog Course Description

Examines the assessment and management techniques of general medical conditions and pharmacological principles and interventions.

Course Overview

Not Applicable.

Course Delivery Method

This course will be delivered using a hybrid format. This online part of the course will be delivered using online using an asynchronous format via the Blackboard learning management system (LMS) housed in the MyMason portal. You will log in to the Blackboard course site using your Mason email name (everything before “@mason.gmu.edu) and email password. The course site will be available on **January 10 2023**.

Technical Requirements

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with a standard up-to-date browser, either Internet Explorer or Mozilla Firefox is required (note: Opera and Safari are not compatible with Blackboard).
- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
 - Adobe Acrobat Reader: <http://get.adobe.com/reader/>
 - Windows Media Player: <http://windows.microsoft.com/en-US/windows/downloads/windows-media-player>

Expectations

- Course Week: See syllabus
- Log-in Frequency: Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least **3 times** per week.

- **Participation:** Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- **Technical Competence:** Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- **Technical Issues:** Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues. Do not wait until Saturday, there is no technical support on the weekend with reliable communication.
- **Workload:** Please be aware that this course is **not** self-paced. Students are expected to meet specific deadlines and due dates listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- **Instructor Support:** Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- **Netiquette:** The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. Be positive in your approach with others and diplomatic in selecting your words. Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- **Accommodations:** Online learners who require effective accommodations to ensure accessibility must be registered with George Mason University Disability Services.

Learner Outcomes or Objectives

The course is designed to enable students to do the following:

1. Discriminate body systems as a series of interrelated functional systems;
2. Appraise acute and chronic physiological and pathological responses of the body to various stimuli e.g. environment, drugs, pathogens, and physical activity;
3. Describe mechanisms of general medical conditions in the physically active including the etiology, pathogenesis, pathomechanics, signs, symptoms, and epidemiology of these conditions;
4. Plan basic principles of management of general medical conditions in physically active populations;
5. Interpret and use appropriate medical terminology and employ medical documentation techniques;
6. Summarize legal regulation of pharmaceuticals, and the athletic trainer's responsibility in storing, transporting, dispensing, and recording of prescription and non-prescription medications;
7. Demonstrate the use of the Physician's Desk Reference the Drug Facts and Comparisons and other pharmacy resources;
8. Assess general pharmacodynamic and pharmacokinetic principles and the influence of physical activity on these processes;
9. Compare and contrast common routes used to administer medications; and
10. Critique performance-enhancing substances and identify which ones are banned in physically active settings

Required Texts

1. Flanagan-Walsh KM., Cuppett M, (F&C) General Medical Conditions in the Athlete, 3rd edition. St. Louis, MO: Elsevier Mosby; 2017
2. Houglum, JE, Harrelson G & Seefeldt TM. (H,H,&S) Principles of Pharmacology for Athletic Trainers, 3rd Edition. Slack Inc. 2016
3. Caduceus Website: Graduate Medical Terminology and Introductory Human Physiology: (MT & HP) Course e-text book access will be purchased at <https://gmu.cipcourses.com/> Students will need to register on the website and then purchase the course online

Course Performance Evaluation

- **Physicians’ Desk Reference (PDR) Assignment** – Students will be provided names of different medications. They will use the PDR to search information about these medications. More information will be provided in class.
- **Attendance/Participation** – Students are expected to attend and actively participate in class.
- **Caduceus Course Content** – Students are expected to complete caduceus course content as per schedule
- **Clinical Case Scenarios (CCS)** – Students will be given a clinical scenario and will be evaluated on content standards (knowledge gained) and performance (demonstration of the content). Performance will be assessed through completion of assignment, class participation, and competency testing. More information will be provided in class. Assignments are due at the beginning of class on the dates specified in the schedule.
- **Examinations** – Students will take five exams over the semester. The examinations may include multiple choice, true/false, fill in the blank, matching, labeling short answer, and essay questions. Each examination will test material covered during the prior class meetings, reading assignments, and activities completed during class. Exams will be administered via Blackboard and will require Respondus Lockdown Browser AND a webcam. Exams will open on Blackboard at 11:30 pm on Thursday and will close on Sunday at 11:30 pm. (All times ET) Each exam will be allotted 2 hours, subject to change based on the unit. Students must take exams in a single sitting and cannot be saved and continued later.
- **Clinical Handbook Assignment (CHA)**- Throughout the class, students will create a “clinician’s guide” for each topic that is covered. At the conclusion of the class, the collection of assignments will come together to serve as a helpful handbook for students’ reference as they transition into clinical practice. More information will be provided in class and the rubric can be found on Blackboard. Each handbook assignment guide will be due Sunday at 11:30 pm on material from the previous classes.

Grading Scale

ASSESSMENT METHOD	NUMBER	POINTS	POINTS
PDR Assignment	1	25	25
Attendance/Participation	Variable	15	15
Caduceus Course Content	Variable	10	10
Clinical Case Scenarios	4	25	100
Examinations	5	30	150
Clinical Handbook	20	10	200
TOTAL	—	—	500

The student's final letter grade will be earned based on the following scale:

Grade	Percentage	Grade	Percentage
A	93%	B-*	80%
A-	90%	C	73%
B+	87%	F	<73%
B	83%	* Although a B- is a satisfactory grade for a course, students must maintain a 3.00 average in their degree program and present a 3.00 GPA on the courses listed on the graduation application.	

Professional Standards

The course meets Commission on Accreditation of Athletic Training Education (CAATE) competencies and proficiencies in one or more of the following content areas: evidence-based practice, prevention and health promotion, clinical examination and diagnosis, acute care of injury and illness, therapeutic interventions, psychosocial strategies and referral, healthcare administration, professional development and responsibility. Students are expected to submit all assignments on time in the manner outlined by the instructor. Students must adhere to the George Mason Honor Code. Any infractions will be appropriately reported and a grade of zero will be awarded for the assessment/assignment.

Academic Load

Although many students must work to meet living expenses, employment and personal responsibilities are not a consideration for missed classes, late or incomplete assignments, the course content, or the course schedule (see <http://catalog.gmu.edu>). Student employment does not take priority over academic obligations. It is recognized that many students need to work in order to meet living expenses, however, there are distinct guidelines for students in terms of the number of credit hours which should be attempted based on how many hours per week a student has outside employment. For additional information on this subject, please see the GMU Academic Catalog (http://catalog.gmu.edu/content.php?catoid=5&navoid=104#Registration_attendance) for further information. Students who fail to observe these guidelines may expect no special consideration for academic problems arising from the pressures of employment.

Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. It is critical each student conduct themselves in an appropriate manner and decorum fitting of a health care provider within and outside class. Making light of injuries, conditions, or illnesses that is not respectful to the class, instructor, or patient study will not be tolerated. Submission of documents or assignments should not include personal identifiable information and comply with Health Insurance Portability & Accountability Act (HIPAA) regulations. If you choose to be a part of a professional organization or club i.e., National Athletic Trainers' Association, GMU Athletic Training Club, etc.; you will be expected act and perform your duties according to those organizational values or code of ethics. See <https://cehd.gmu.edu/students/policies-procedures/> for further details.

- **Communication** – When communicating with the instructor and classmates, either face-to-face or via email, students should address the other person appropriately, use appropriate language and maintain a civil demeanor.
- **Responsibility/Accountability/ Honesty/Integrity**– Professionals take responsibility for their actions and are accountable. This can occur at multiple levels but generally consists of being on time, completing assignments on time, submitting work that is of the appropriate quality, honoring commitments and owning up to mistakes. Students are expected to interact with the instructor and classmates in appropriate, respectful and civil behaviors. Professionals keep their word when committing to something and act in an ethical and respectful manner. See George Mason University policy for further guidance.
- **Virtual Video Expectations**- If the student chooses or is required to attend class virtually, the video feed will be live during class time. Turning video off and leaving off will result in a 1%age point deduction of points from the final grade.
- **Professionalism Evaluation** – Any professionalism violation will be documented by the instructor. Violations will result in a 1%age point deduction from the final grade
- **Attendance** - Students are expected to be on time, attend all class meetings, and be prepared for in class assignments and projects. Excused absences include the following: illness (must bring a receipt or note from a doctor), family death, athletic/academic event (contact instructor **in advance**), and others at the discretion of the instructor. For known upcoming absences, students must contact the instructor at least **one** week in advance to the missed class to make up work. In the case of illness or some other unforeseen absence, the student must contact the instructor via e-mail or the same day of the absence. At the next attended class meeting the student will discuss material that is to be completed with the instructor. *Students will have one week from the excused absence*

to complete any missed assignments. It is the student's obligation to pursue any make-up work.

- **Assignments - Late assignments will not be accepted.** Assignments should be submitted at the beginning of the class meeting on the due date. **Late assignment will result in a zero (0) for the assignment.** This applies to electronic submissions as well. Your name **MUST** be on your papers when you turn them in. Failure to put your name will result in a zero (0) for the assignment.
- **Technology Use During Class** - As per GMU policy, all sound emitting technology is required to be turned off during the lecture and laboratory class meeting times. Laptop computers or tablets will only be permitted for use during class time for classwork. Students utilizing various technology devices during class for other reasons beyond class work and emergencies will be asked to leave class and will not be permitted to complete course work or receive any points for assignments that day.
- **E-Mail Correspondence** - Please allow 48 hours for an email return during work hours (8am – 5pm) during the work week (M-F). If an email is received in the evening (after 5pm) or on the weekend, please allow 48 hours following the start of the next business day for a response. Only messages that originate from a George Mason University address will be accepted. All email correspondences must follow a professional format (including a subject, beginning salutation, appropriate text body, ending salutation and signature) with correct grammar/spelling and must follow proper netiquette guidelines. **Emails that do not follow the specified guidelines will be returned to the student for revision before a response is issued.** The following is an appropriate professional format:

Subject: Course Inquiry

Dear Professor Doe, (Beginning salutation)

I am looking forward to your class. (Text body)

Regards, (Ending Salutation)

J. Doe (Your name)

Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

GMU Policies and Resources for Students

Policies

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/>)
- Students must follow the university policy for Responsible Use of Computing (see <http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <http://ods.gmu.edu/>)
- Students must follow the university policy stating that all sound emitting devices shall be silenced during class unless otherwise authorized by the instructor.

Campus Resources

- Support for submission of assignments to Tk20 should be directed to tk20help@gmu.edu or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <http://coursessupport.gmu.edu/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/>.

Tentative Class Schedule

WK	DATE		TOPIC	READINGS	DUE Sun 11:30pm
1	Jan	10	Syllabus Review, Introduction to General Medicine, Elements of a Prescription	F&C Ch. 1-2	Syllabus Contract
			Introduction to Pharmacology, Drug References – PDR	F&C Ch. 4, H,H,&S Ch. 1	
2	Jan	17	Pharmacokinetics	H,H,&S Ch. 2	
			Pharmacodynamics	H,H,&S Ch. 3, F&C Ch. 4	
3	Jan	24	Pharmacodynamics	H,H,&S Ch. 3, F&C Ch. 4	PDR & CHA#1
			Anti-Inflammatory Drugs	H,H,&S Ch. 6 MT & HP Ch. 10 MT & HP Ch. 2	Exam 1 CHA#2
4	Jan	31	Skeletal Muscle Relaxants, Analgesics & Local Anesthetics	H,H,&S Ch. 7 & 8 MT & HP Ch. 6	CHA#3
			Infectious Diseases	F&C Ch. 15	CHA#4
5	Feb	7	Infectious Diseases	F&C Ch. 15	
			Anti-Infectives	H,H,&S Ch. 5	CHA#5
6	Feb	14	CCS#1 Dermatological Conditions	F&C Ch. 16 MT & HP Ch. 10	CHA#6
			Gastrointestinal, Genitourinary, and Gynecological Conditions	F&C Ch. 10 MT & HP Ch. 11 12 13	CHA#7
7	Feb	21	CCS#2 LAB: Abdomen		
			Flex Date		Exam #2
8	Feb	28	Respiratory Disorders	F&C Ch. 7 MT & HP Ch. 6	CHA#8
			Respiratory Drugs LAB: Auscultation & Peak Flow	H,H,&S Ch. 9 MT & HP Ch. 9	
9	Mar	7	Colds & Allergies	H,H,&S Ch. 10	CHA#9
			Ear, Nose, Throat & Mouth Disorders The Eye	F&C Ch. 12, 13 MT & HP Ch. 9	CHA#10
10	Mar	13-19	SPRING BREAK – No Class Meeting		
11	Mar	21	Musculoskeletal & Neurological Disorders	F&C Ch. 11 & 18, H,H,&S Ch. 11 MT & HP Ch. 7	CHA#11 (Eye)
			CCS#3 LAB: Otoscope & Ophthalmoscope		Exam 3 CHA#12 (MSK&N DO)
12	Mar	28	Psychological Disorders	F&C 17	CHA#13
			Cardiovascular Disorders and Treatment	F&C Ch. 8, H,H,&S Ch. 12 MT & HP Ch. 8	CHA#14
13	Apr	4	Clotting and Hematological Conditions	F&C Ch. 8	CHA#15
			Diabetes Mellitus & Treatment, Systemic Disorders, (Cancers, Hyper/Hypothyroidism) Thermoregulatory Disorders, Cushing’s Syndrome, Chronic Fatigue Syndrome & Osteoporosis LAB: Glucose	H,H,&S Ch. 14 MT & HP Ch. 14	Exam 4 & CHA#16
14	Apr	11	Natural & Ergogenic Supplements	H,H,&S Ch. 15 & 17	CHA#17
			Diuretics, Drug Testing LAB: Urine Specific Gravity	H,H,&S Ch. 15 & 17	CHA#18
15	Apr	18	Performance Enhancing Drugs, Stimulants, Muscle Building Agents (Anabolics) Blood Doping, Psychological and Substance Abuse Disorders CCS#4	H,H,&S Ch. 16, F&C Ch. 18	CHA#19 CHA# 20
			EXAM 5		Exam 5

PDR = Physician's Desk Reference; **H,H&S** = Houglum, JE, Harrelson G & Seefeldt Textbook; **F&C**= Flanagan-Walsh,& Cuppett Textbook; **MT & HP** = Medical Terminology and Human Physiology Caduceus; **CHA**= Clinical Handbook Assignment, **CCS**= Clinical Case Scenario; **Exam** = Examination; **LAB**= Laboratory

****Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.*

Student Acknowledgement of Syllabus

I, _____, by signing below, attest to the following:
(Print First and Last Name)

*I have read the course syllabus for ATEP 600 in its entirety, and I understand the policies contained therein. This syllabus serves as an agreement for ATEP 600 between me and the instructor.

*I have a clear understanding of the due dates for assignments and examinations, and I accept responsibility for the material.

*I am aware that failure to submit assignments by the dates assigned will result in no points awarded as late work will not be accepted.

*I understand the instructor reserves the right to alter the provided schedules as necessary and I am responsible for the assignments and examination dates for the most current version of the syllabus schedule.

*I accept responsibility for reading announcements that are sent to me via e-mail through Blackboard; it is my responsibility to access Blackboard e-mail for announcements and assignments.

(Signature)

(Date)

Take a photo of this signed copy and upload to Blackboard by 11:30 pm Sunday January 15, 2023