### GEORGE MASON UNIVERSITY School of Recreation, Health and Tourism

### ATEP 270—General Medication Conditions and Pharmacology in Physically Active Populations (3) Spring 2016

DAY/TIME:	M/W 1:30pm-2:45pm	LOCATION:	Robinson B102
INSTRUCTOR:	Dr. Lucy Chung, PharmD	EMAIL ADDRESS:	Lchung@gmu.edu
OFFICE LOCATION:	N/A	PHONE NUMBER:	703-993-2060
OFFICE HOURS:	By appointment	FAX NUMBER:	703-993-2025
SCHOOL WEBSITE:	rht.gmu.edu	COURSE WEBSITE:	mymasonportal.gmu.edu

### **PRE/COREQUISITES**

Formal acceptance to the professional phase of the ATEP; ATEP 150, 180, 250, 255, 256, 260, 265, 266; BIOL 124, 125; HEAL 110, 230; PHED 300

#### **COURSE DESCRIPTION**

An examination of assessment and management techniques of general medical conditions and pharmacological principles in physically active populations. This didactic course will focus on developing the cognitive competencies necessary for students to understand common general medical conditions commonly seen in the physically active population. Students will also learn pharmacological principles and the role of athletic trainers in medication dispensation.

#### **COURSE OBJECTIVES**

At the completion of this course students should be able to complete the following:

- 1. Differentiate body systems as a series of interrelated functional systems;
- 2. Recognize 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. Describe 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. Recognize 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 and other pharmacy resources;
- 8. Explain 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. Discuss performance-enhancing substances and identify which ones are banned in physically active settings

### **ACCREDITATION STANDARDS**

This 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.

### NATURE OF COURSE DELIVERY

Face to face.

### **REQUIRED READINGS**

- 1) Cuppett M, Walsh KM. *General Medical Conditions in the Athlete*, 2<sup>nd</sup> edition. St. Louis, MO: Elsevier Mosby; 2011.
- 2) Houglum, JE & Harrelson G. Principles of Pharmacology for Athletic Trainers, Second Edition. Healio/SLACK. 2011. Required reading selections will be posted on Blackboard.
- 3) Any additional handouts (as stated in the schedule) posted on Blackboard.

### 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 <u>before</u> the course meeting via e-mail or telephone. At the next attended class meeting the student will discuss material that is to be completed. *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.

### Guest Lecturer(s)

Any time a guest lecturer is expected to present course material, students are expected to be on time, attend the class in its entirety and display professional courtesy. Points may be deducted or awarded according to attendance/participation during lectures given by guest presenters.

### **TECHNOLOGY USE DURING CLASS**

As per GMU policy, all sound emitting technology is required to be turned off during the class meeting time. Additionally, *no laptop computers, Smart Phones, or other technology* will be permitted for use during class time; the exceptions are for use during presentations/projects, and technology deemed as necessary by the Office of Disability Services. Students utilizing various technology devices during class 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**

Only messages that originate from a George Mason University address will be accepted. The following is an appropriate professional format:

Dear Dr. Chung, (Beginning salutation)

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

Regards, (Ending Salutation)

First Name Last Name (Your name)

### MEDICAL PROFESSIONALISM

It is critical each student conduct themselves in an appropriate manner and decorum fitting of a health care provider. 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 information and comply with Health Insurance Portability & Accountability Act (HIPPA) regulations.

### NAME

Your name MUST be on your papers, quizzes, exams, scantrons, etc. when you turn them in. Failure to put your name will result in a 0 for the assignment/quiz/test/etc.

### **EVALUATION**

Students will be evaluated on content standards (knowledge gained) and performance (demonstration of the content). Content standards will be assessed via written assignments, quizzes, and exams. Performance will be assessed through completion of class participation activities and competency testing.

#### Assignments

Various assignments and in-class activities will be used to provide learning opportunities related to topics covered in class. Guidelines and directions will be provided in class for each assignment.

### Quizzes

According to the schedule in the Course Calendar, three quizzes will be administered. Each quiz is worth 20 points. The format of each quiz will be a brief multiple choice, true-false, short answer, matching and fill the blank type questions. If you are late to class, you cannot make up the quiz at the end of class.

#### **Lecture Examinations**

Two written examinations and a *cumulative* final, for a total of three exams, will be administered. The format of the examinations will be multiple choice, true/false, short answer, matching, and fill in the blank type questions. Each of the examinations will test material covered during the prior class meetings and previous reading assignments. Exams will also cover material in the textbook and activities completed during class sessions. Each examination is worth 100 points. *You are required to bring a Scantron to each examination*.

#### MAKE UP WORK

Students who are absent or who arrive late without an official university or a medical doctor's excuse will not be permitted to participate in the class activities for credit the day of the absence or tardy event. There will be <u>no</u> make-up quizzes or exams unless an excused absence has been warranted. Students who miss an examination, quiz or other class activity because of an excused absence must complete the assignment *within a week of the excused absence*. It is the student's obligation to pursue any make-up work.

### LATE ASSIGNMENTS

All work is due at the beginning of class time on the indicated day. NO LATE WORK WILL BE ACCEPTED

### GRADING

Every attempt will be made to grade and return assignments in a timely manner to provide students with constructive feedback. To provide students the opportunity to fully assess the feedback provided on graded assignments, the professor will be happy to answer any questions at the next class period following the return of the assignments or during the professor's office hours. The professor acknowledges the passion with regards to grades, but unprofessional and uncivil behavior either in person or through other modes of communication will not be tolerated.

Assignments	Points
PDR Assignment	20
Guest Lecture Attendance/Participation	10
Quizzes	
#1	20
#2	20
#3	20
Examinations	
#1	100
#2	100
#3 Final - CUMULATIVE	100

ASSESSMENT METHOD	NUMBER	POINTS EACH	POINTS TOTAL
Assignments	1	20	20
Guest Lecture Attendance/Participation	2 (subject to change)	10	20
Quizzes	3	20	60
Lecture Examinations	3	100	300
TOTAL			400

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

A: 370 – 400 pts. (93-100%)	C+: 306 – 317 pts. (77-79%)
A-: 358 – 369 pts. (90-92%)	C: 290 – 305 pts. (73-76%)
B+: 346 – 357 pts. (87-89%)	C-: 278 – 289 pts. (70-72%)
B: 330 – 345 pts. (83-86%)	D: 250 – 277 pts. (63-69%)
B-: 318 – 329 pts. (80-82%)	F: $< 250$ pts. ( $\le 62\%$ )

\* Faculty reserves the right to alter the grading scale as necessary

ATEP 270 Calendar Faculty reserves the right to alter the schedule as necessary

DATE		E	ΤΟΡΙΟ	READINGS	
W	Jan	20	Syllabus Review Introduction to General Medicine Elements of a Prescription	C&W Ch. 1-2 & Appendix A	
М	Jan	25	Introduction to Pharmacology Drug References – Physician's Desk Reference (PDR)	C&W Ch. 4 H&H Ch. 1	
W	Jan	27	Pharmacokinetics	H&H Ch. 2	
М	Feb	1	Pharmacodynamics	H&H Ch. 3 C&W Ch. 4	
W	Feb	3	<b>QUIZ #1 - Covers all material through &amp; including 2/1</b> Allergic Reactions and Anaphylaxis		
М	Feb	8	Inflammatory Disorders	C&W Ch. 17	
W	Feb	10	PDR Project Due Review PDR Project Anti-Inflammatory Drugs	H&H Ch. 6	
М	Feb	15	Diabetes Mellitus & Treatment Systemic Disorders (Cancers, Hyper/Hypothyroidism) Thermoregulatory Disorders, Cushing's Syndrome, Chronic Fatigue Syndrome & Osteoporosis	C&W Ch. 14	
W	Feb	17	EXAM I – Covers all material from 1/20 - through & including 2/15		
М	Feb	22	Gastrointestinal Disorders & Drugs for Gastrointestinal Disorders	C&W Ch. 9 H&H Ch. 11	
W	Feb	24	The Eye - ONLINE	C&W Ch. 12	
М	Feb	29	Infectious Diseases	C&W Ch. 15	
W	Mar	2	Anti-Infectives	H&H Ch. 5	
	Mar	7&9	SPRING BREAK		
М	Mar	14	Cardiovascular Disorders and Treatment	C&W Ch. 8 H&H Ch. 12	
W	Mar	16	QUIZ #2 - Covers all material from 2/22 through and including 3/14 Clotting and Hematological Conditions	C&W Ch. 8 H&H Ch. 12	
М	Mar	21	Skeletal Muscle Relaxants Analgesics & Local Anesthetics	H&H Ch. 7 & 8	
W	Mar	23	Concussions* Guest Lecturer: Scott Ross, MD		
М	Mar	28	Dermatological Conditions - ONLINE	C&W Ch. 16	

DATE		C	ΤΟΡΙΟ	READINGS	
W	Mar	30	Neurological Disorders – <u>ONLINE</u> Psychological Disorders - <u>ONLINE</u>	C&W Ch. 11 & 14 H&H Ch. 13	
М	Apr	4	Genitourinary and Gynecological Conditions* Guest Lecturer: Andrew Chung, MD	C&W Ch. 10	
w	Apr	6	EXAM II - Covers all material from dates 2/22 through & including 4/4		
М	Apr	11	Respiratory Disorders	C&W Ch. 7	
W	Apr	13	Respiratory Drugs & Proper Inhaler Technique	H&H Ch. 9	
М	Apr	18	Ear, Nose, Throat & Mouth Disorders - ONLINE	C&W Ch. 13	
w	Apr	20	QUIZ #3 - Covers all material from 4/11 through and including 4/18 Colds & Allergies	H&H Ch. 10	
М	Apr	25	Natural & Ergogenic Supplements Diuretics Drug Testing	H&H Ch. 15 & 17	
W	Apr	27	Muscle Building Agents (Anabolics) Blood Doping Stimulants	H&H Ch. 16	
М	May	2	NO CLASS		
w	May	4	FINAL EXAM <u>CUMULATIVE</u> 1:30 PM – 4:15 PM		

#### Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See <u>http://oai.gmu.edu/honor-code/</u>].
- Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See <u>http://ods.gmu.edu/]</u>.
- Students must follow the university policy for Responsible Use of Computing [See <a href="http://universitypolicy.gmu.edu/policies/responible-use-of-computing/">http://universitypolicy.gmu.edu/policies/responible-use-of-computing/</a>].
- Students are responsible for the content of university communications sent to their George Mason University 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 must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

#### Campus Resources

- The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu/].
- The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See <a href="http://writingcenter.gmu.edu/">http://writingcenter.gmu.edu/</a>].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See <a href="http://rht.gmu.edu">http://rht.gmu.edu</a>].

**PROFESSIONAL BEHAVIOR**: Students are expected to exhibit professional behaviors and dispositions at all times.

**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.



## Student Acknowledgement of Syllabus for ATEP 270, Spring 2014

I, \_\_\_\_\_, by signing below, attest to the following:

\*I have read the course syllabus for ATEP 270 in its entirety, and I understand the policies contained therein. This syllabus serves as an agreement for ATEP 270 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)

(Student Copy: This copy should remain attached to your syllabus)

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(Signature)

(Date)

(Instructor Copy: Submit to the instructor at the end of the first class meeting)