GEORGE MASON UNIVERSITY School of Recreation, Health and Tourism

ATEP 270—General Medication Conditions and Pharmacology in Physically Active Populations (3) Spring 2014

DAY/TIME: M/W 10:30am-11:45pm LOCATION: Lecture: BRH 249
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

NATURE OF COURSE DELIVERY

Face to face

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)

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.

REQUIRED READINGS

- 1) Cuppett M, Walsh KM. General Medical Conditions in the Athlete. St. Louis, MO: Elsevier Mosby; 2005.
- 2) Mangus, B, Miller, M. *Pharmacology Application in Athletic Training*. Philadelphia, PA: F. A. Davis Company: 2005.
- 3) Any additional handouts (as stated in the schedule) posted on Blackboard.

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.*

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

GRADING

ASSESSMENT METHOD	NUMBER	POINTS	POINTS
		EACH	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%)

A: 369 – 358 pts. (90%)

B: 358 – 346 pts. (87%)

B: 345 – 330 pts. (83%)

B: 329 – 318 pts. (80%)

C: 305 – 290 pts. (73%)

C: 289 – 278 pts. (70%)

D: 277 – 250 pts. (63%)

F: < 249 pts.

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!**

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

	DATE	Ε	ТОРІС	READINGS
W	Jan	22	Syllabus Review Introduction to Pharmacology Drug References – Physician's Desk Reference	C&W Ch. 3 M&M Ch. 1
М	Jan	27	Introduction to General Medicine & CBC Elements of a Prescription	C&W Ch. 1-2 C&W Appendix A &B
W	Jan	29	Pharmacodynamics	M&M Ch. 2
М	Feb	3	PDR Project Due Review PDR Project Pharmacokinetics	M&M Ch.2
w	Feb	5	QUIZ #1 - Covers all material through & including Allergic Reactions & Anaphylaxis	g 2/3
М	Feb	10	Dermatological Conditions*	C&W Ch. 13
W	Feb	12	Infectious Diseases	C&W Ch. 12 M&M Ch. 9
М	Feb	17	Inflammatory Disorders and Anti-Inflammatory Drugs	C&W Ch. 14 M&M Ch. 3
W	Feb	19	EXAM I – Covers all material through & including	g 2/12
М	Feb	24	Cardiac & Vascular Disorders and Treatment	C&W Ch. 5 M& M Ch. 6
W	Feb	26	Clotting & Hematological Conditions	C&W Ch. 5

^{*} Faculty reserves the right to alter the grading scale as necessary

	DATE	E	ТОРІС	READINGS
M	Mar	3	Respiratory Disorders	C&W Ch. 4
W	Mar	5	Respiratory Drugs + Proper Inhaler Technique	M&M Ch. 7
M	Mar	10&13	SPRING BREAK	
M	Mar	17	Colds & Allergies	Handout
w	Mar	19	QUIZ #2 - Covers all material from 2/17 through and including 3/5 Analgesics & Local Anesthetics	M&M Ch. 10
M	Mar	24	Eye Disorders	C&W Ch. 9
9W	Mar	26	Ear, Nose, Throat & Mouth Disorders*	C&W Ch. 10
М	Mar	31	Gastrointestinal Disorders & Drugs for Gastrointestinal Disorders	C&W Ch. 6 M&M Ch. 8
W	Apr	2	Diabetes Mellitus & Treatment	C&W Ch. 11 M&M Ch. 5
M	Apr	7	Psychological Disorders	C&W Ch. 15
W	Apr	9	EXAM II - Covers all material from dates 2/29 through & including 4/2	
M	Apr	14	Neurological Disorders	C&W Ch. 8
W	Apr	16	Systemic Disorders (Cancers, Hyper/Hypothyroidism, Marfan's Syndrome) Thermoregulatory Disorders, Cushing's Syndrome, Chronic Fatigue Syndrome & Osteoporosis	C&W Ch. 11 C&W pg. 396
M	Apr	18	Genitourinary and Gynecological Conditions	C&W Ch. 7
М	Apr	21	Antispasticity Agents Skeletal Muscle Relaxants	M&M Ch. 4
w	Apr	23	QUIZ #3 - Covers all material from 3/7 through and including 4/21 Poison Control	
М	Apr	28	Natural & Ergogenic Supplements Stimulants	M&M Ch. 12 and 13
W	Apr	30	Muscle Building Agents (Anabolics) Blood Doping	M&M Ch.11 Handout
М	May	5	Recognition & Rules Diuretics	M&M Ch. 15 Handout
	May	TBD	FINAL EXAM <u>CUMULATIVE</u> 10:30 AM -1:15 PM	1

Student Expectations

- Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/honor-code/].
- 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 http://ods.gmu.edu/].
- Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responible-use-of-computing/].
- 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 http://writingcenter.gmu.edu/].
- For additional information on the College of Education and Human Development, School of Recreation, Health, and Tourism, please visit our website [See http://rht.gmu.edu].

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

(Print Fir	st and Last Name), by signing bel	low, attest to the following:
policies containe and the ins	ined therein. This syllabus serves structor.	70 in its entirety, and I understand the as an agreement for ATEP 270 between
	ir understanding of the due dates sibility for the material.	for assignments and examinations, and
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*I understand and I am resp version of the	the instructor reserves the right to consible for the assignments and syllabus schedule.	alter the provided schedules as necessary examination dates for the most curren
		nts that are sent to me via e-mail through lackboard e-mail for announcements and
	(Signature)	(Date)
(Stu	dent Copy: This copy should ren	nain attached to your syllabus)
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