

## General Medical Conditions EXRS 3240

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### **Catalog Description:**

Recognition and treatment of general medical conditions and disabilities of athletes and others involved in physical activity. Application of pharmacological principles in the treatment of illness, injury, and disease for an athletic population.

### **Course Objectives:**

1. Recognize the general concepts and legal regulations of non-prescription and classified pharmaceutical agents.
2. Recall and access the laws governing the administration and dispensing of pharmaceutical agents.
3. Describes the kinetic process of absorption, distribution, metabolism and elimination of medications.
4. Describes how physical activity may influence a drug's therapeutic dose effect.
5. Describes the general indications, contraindication, side effects, dosing, warning and the generic and brand name for the following pharmaceutical classes:
  - a. Anti-inflammatory (steroids and non-steroidal)
  - b. Antiarthritic
  - c. Analgesics
  - d. Local anesthesia
  - e. Antibiotics
  - f. Respiratory medications
  - g. Anaphylaxis medications
  - h. Gastrointestinal medications
  - i. Beta-blockers and antihypertensive medications
  - j. Prescription and nonprescription topical applications
  - k. Performance enhancing drugs
6. Doping Control
7. Describe congenital or acquired abnormalities, physical disabilities and diseases.
8. Identifies common illnesses and diseases of the body based on contemporary epidemiological studies.
9. Recognizes the coming signs and symptoms for the following conditions and/or body parts:
  - a. Eye pathology
  - b. Ear pathology
  - c. Mouth, sinus, oropharynx, and nasopharynx
  - d. Respiratory infection
  - e. Asthma
  - f. Cardiopulmonary conditions
  - g. Internal organs (gall bladder, kidneys, bladder etc.)
  - h. Male and female reproductive organs
  - i. Sexual transmitted diseases
  - j. Skin lesions
  - k. Contagious viral diseases
  - l. Diabetes
  - m. Seizures
  - n. Sleep apnea

- o. Cancer
10. Sudden death syndrome in athletics

The following clinical skills should be obtained during the semester

1. Use of otoscope to examine ears and nasal passages
2. The use and interpretation of urine diagnostics chemstrips
3. Use of a stethoscope for heart, lung and bowel sounds

### **Textbook**

Landry, G.L. Bernhardt, D. T. (2003). Essentials of Primary Care Sports Medicine. Human Kinetics.

Davis's Drug Guide for Nurses. FA Davis.

### **Supplemental Text**

Bahrke, MS Yesalis, CE (2004). Performance Enhancing Substances in Sport and Exercise. Human Kinetics.

Houglum J., Harrelson G., Leaver-Dunn- D. (2005). Principles of Pharmacology for Athletic Trainers. SLACK Inc.

Physicians Desk Reference (2005).

### **University Honor Code and Academic Honesty Policy**

Students in this course are expected to conform to the UGA Student Honor Code: " I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." Academic honesty means performing all academic work without plagiarism, cheating, lying, tampering, stealing receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge. Examples of academic dishonesty are copying answers from another student during an exam, giving a false excuse for failing to show up for an exam, obtaining advance exam copies by unauthorized means, and damaging a computer disk to prevent evaluation of the work on that disk. Students who assist other students in academically dishonest acts are in violation of the policy. Consequences of academic dishonesty may include receiving a lower grade, community service, a notation on the student's transcript, or suspension or expulsion from the University. Students have the responsibility for knowing the University's policy and procedures on academic dishonesty, which are described in the publication, A Culture of Honesty. Copies of this publication can be obtained from the Office of the Vice President for Instruction or may be viewed at the following web site: <http://www.uga.edu/ovpi/>.

All academic work must meet the standards contained in "A Culture of Honesty." Students are responsible for informing themselves about those standards before performing any academic work.

The link to more detailed information about academic honesty can be found <http://www.uga.edu/ovpi/honesty/acadhon.htm>

## Research Paper

You are to select a specific medical condition and describe the pathomechanics, clinical history, common signs and symptoms, clinical course and pharmacological treatment. The paper should be 4-7 pages in length (types and double spaced) and have at least 5 scientific references. **Topic is due on Sept 26, outline is due on October 15 and paper is due November 19.**

## Grading

Grading will be based on course projects, quizzes, research paper, class assignments and tests.

|                       |                  |
|-----------------------|------------------|
| Test 1                | 75 Points        |
| Test 2                | 75 Points        |
| Test 3                | 75 Points        |
| Quizzes (2)           | 20 Points        |
| Final Examination     | 100 Points       |
| Quick Hitter          | 10 Points        |
| Research Presentation | 20 Points        |
| <u>Research Paper</u> | <u>30 Points</u> |
| Total Points          | 405 Points       |

Final Grade will be based on points earned in the course as follows:

A=93% or better

A-=90%-93%

B+=87%-90%

B=83%-87%

B-=80%-83%

C+=77%-80%

C=73%-77%

C-=70%-73%

D+=67%-70%

D=63%-67%

D-=60%-63%

F=<60%

**Final Examination is Wednesday, Dec 17 from 8-11AM and is comprehensive**

## Course Outline

### Proposed Class Schedule:

The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

| Week | Monday   | Wednesday   | Friday   |
|------|--|---|--|
| 1    | Course Introduction  | Environmental Concerns – LB Chapter 16                          | Environmental Concerns – LB Chapter 16                                 |
| 2    | Drug Terminology and Legal Issues                              | Legal Issues  | Management of Pharmacological Products in the Athletic Training Room   |
| 3    | <b>No Class</b>  | Kinetics and Absorption of Pharmacological Products             | Analgesics<br><b>QUIZ 1</b>  |
| 4    | Analgesics   | Anti-Inflammatory – LB 12                                       | Heart, Lung and Bowel Sounds Lab – Dr. Reifsteck                       |
| 5    | Anti-Inflammatory  | Anti-Inflammatory   | <b>Test 1</b>  |
| 6    | Performance Enhancing Drugs – LB 14                            | AAS – LB 14   | Blood Doping, Epo Ephedrine  |
| 7    | Doping Control – LB 15   | Traditional Chinese Medicine                                    | Traditionnel Chinese Medicine Lab.                                     |
| 8    | Doping Control – UGA Policy and Procedures                     | Pre-Participation Physical Examination – LB 19<br><b>QUIZ 2</b> | Diabetes – LB Chapter 4  |
| 9    | Diabetes – LB Chapter 4  | Sudden Cardiac Death – LB Chap 1                                | Blood Glucose and Urine dip stick Measurements and Peak Flow Meter Lab |
| 10   | Respiratory Pathologies – LB Chapter 8 – David Wright, PA, ATC | Gastroenterological Pathologies – LB Chapter 2                  | <b>Test 2</b>  |
| 11   | Gender Based Pathologies – LB Chapter 6                        | Gender Based Pathologies – LB Chapter 6                         | <b>No Class</b>  |
| 12   | Interpretation of Lab Values - Dr. Elliott                     | Weight Control – LB Chapter 12                                  | STD– LB Chapter 9, Dr. Russo   |
| 13   | UTI/URI – Kelly Ward, PA, ATC                                  | Eye Injuries – Dr. Stuart Thomas                                | Ear, Eye and Maxillofacial Pathologies – LB Chapter 5                  |
| 14   | Growth and Maturation – LB Chapter 18                          | <b>Test 3</b>   | Class Presentations  |
|      | <b>No Class – Thanksgiving</b>                                 |   |  |
| 15   | Skin Conditions – Dr. Elliott                                  | Cancer  | Poisons, stings and bites  |
| 16   | Course Review  |   |  |

**Final Examination is Wednesday, Dec 17 from 8-11AM**