PHA 5554  Clinical Toxicology I - Pharmaceuticals  
2 Semester Credit Hours

Course Purpose:
The purpose of this course is to provide students the opportunity to learn how to manage toxicity from common pharmaceutical products. The course will cover: assessment of the toxic patient, monitoring, creation of the management plan including stabilization, antidotal therapy, and elimination enhancement.

Course Faculty and Office Hours
Course Coordinator:
Dawn R. Sollee, Pharm.D., DABAT
Email: sollee@poison.ufl.edu  Office: Florida Poison Information Center – Jacksonville
Phone: 904-244-4465

Office Hours
Available via email or via discussion board on course website (on Sakai)
Available in office (in Jacksonville) by appointment

Refer to Appendix A for entire list of course faculty

Place and Time of Class Sessions
Gainesville:
Clinical Toxicology I is scheduled for Thursdays, 3-5 pm in G-114 (unless otherwise advised by facilitator)

Distance campuses:
Please refer to your campus-specific calendar for your discussion session dates and times.

All lectures will be available on Sakai at least one week prior to their scheduled discussion.

How This Course Relates to the Learning Outcomes You Will Achieve in the Pharm.D. Program:
This course prepares the Pharm.D. student to accomplish the following abilities and the related Student Learning Outcomes (SLOs) upon graduation:

1. Assess, evaluate, formulate and communicate a pharmacotherapy plan for the poisoned patient (1.1, 4.1, 6.1, 8.1, 8.3)
2. Determine a monitoring scheme for the patient-individualized pharmacotherapy plan (1.2, 6.1, 8.1, 8.3)
Course Objectives
Upon completion of this course, the student will:

- Discuss the epidemiologic and demographic parameters that characterize toxic exposures in the United States.
- Discuss the role of the pharmacotherapist in the evaluation and management of poisoned patients.
- Utilize historical information and clinical patient assessments in the evaluation of the poisoned patient.
- Formulate a treatment plan based on history, time course of the exposure, presenting symptomatology, toxidrome recognition, and assessment of toxic potential.
- Discuss current philosophies, and cite the risks associated with, the use of various methods of gastrointestinal decontamination for ingested toxins. Choose the appropriate modality for specific poisoned/overdosed patients.
- Initiate appropriate diagnostic laboratory analyses and recommend the appropriate laboratory and physical assessments to aid in monitoring the progress of the toxic or suspected toxic exposure, correctly interpreting the results of such interventions.
- Discuss the indications for use and the risks associated with the various methods utilized to enhance elimination in the poisoned patient. Select the appropriate therapy based on the exposure and symptoms.
- Develop a therapeutic management and monitoring plan when the use of a pharmacologic antidote is indicated for the poisoned/overdosed patient.
- Define economic and therapeutic outcomes in poisoned patients.

Pre-Requisite Knowledge and Skills
There is not a specific prerequisite. This course is offered as an elective during the Spring 3PD year.

Course Structure & Outline

Course Structure.

Multiple self-directed learning activities are required (eg, video lectures, assigned activities) and at selected intervals students come to class for a face-to-face learning session (case discussion/group session); students must come to class for exams.

Course Outline/Activities. Refer to Appendix B

Textbooks
Recommended textbook:

Other useful resources:


Active Learning Requirements
During the discussion sessions, the students are expected to participate by answering questions concerning the assignments and course content.

Feedback to Students
Feedback on the first examination is usually provided during the following discussion session. The exam answers are reviewed and any student questions answered. Students can post questions to the discussion board for the course website on Sakai, and they will be answered by Dr. Sollee.

Student Evaluation & Grading

Evaluation Methods

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<tr>
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<tbody>
<tr>
<td>1st examination</td>
<td>35%</td>
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<tr>
<td>Final examination</td>
<td>45%</td>
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<tr>
<td>Class participation</td>
<td>20%</td>
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Grading Scale
The grading scale, based on percent of total points, is:

A+ = 100
A  = 90-99
B+  = 85-89
B   = 80-84
C+  = 75-79
C   = 70-74
D+  = 65-69
D   = 60-64
E   = <60

Class Attendance Policy
Attendance at discussion sessions is mandatory since class participation is a portion of the grade. Students must notify the course coordinator and the location facilitator prior to class to receive an excused absence.

Quiz/Exam Policy
Two examinations (including the final exam) will be scheduled during the semester. See Appendix B for dates and times of the examinations. The examinations will be in a multiple-choice, case-based format. The final examination will be cumulative for the material covered in the course. The majority of the final examination will consist of questions on the last half of the course. Students must be on time to take the examinations. Examinations will begin promptly at the time designated for the class period. Students arriving late may take the exam if NO other student has completed the examination and left the room. Exams must be turned in at the time the course coordinator designates as the end of the examination period. An unexcused absence from an exam will result in a "zero" score for that exam. Students should inform the course coordinator at least 24 hours in advance of an exam if they have a possible problem with taking the exam at the scheduled time. Missing an exam without informing the course coordinator prior will result in a zero score for that exam and no opportunity for a make-up exam.

Make-up Quiz/Exam Policy
Missing an exam without informing the course coordinator prior will result in a zero score for that exam and no opportunity for a make-up exam. Students who miss an exam due to unforeseeable circumstances, such as a family emergency or illness, should report this information prior to administration of the exam. A make-up exam will be scheduled for the student within a reasonable timeframe. The make-up exam will cover the same subject areas but it may be in a different format (e.g., all short answer questions rather than multiple choice questions)

Policy on Old Quizzes and Assignments
Students are not provided old quizzes or tests

General College of Pharmacy Course Policies
The College of Pharmacy has a website that lists course policies that are common to all courses. This website covers the following:

1. University Grading Policies
2. Academic Integrity Policy
3. How to request learning accommodations
4. Faculty and course evaluations
5. Student expectations in class
6. Discussion board policy
7. Email communications
8. Religious holidays
9. Counseling & student health
10. How to access services for student success
11. Faculty Lectures/Presentations Download Policy

Please see the following URL for this information:

Complaints
Should you have any complaints with your experience in this course please contact your course coordinator. If unresolved, contact the COP Senior Associate Dean-Professional Affairs. For unresolved issues, see:

http://www.distancelearning.ufl.edu/student-complaints to submit a complaint.
Appendix A: Directions for Contacting Faculty & Course Faculty List

Directions for Contacting Course Faculty
Please post all questions on the discussion board on Sakai. Please contact the course coordinator and your facilitator if there are any attendance issues. Do not contact the lecturer directly.

Thomas A. Kunisaki, MD, FACEP, ACMT (lecturer)
Medical Director, Florida /USVI Poison Information Center-Jacksonville
Clinical Associate Professor,
Department of Emergency Medicine, College of Medicine

Jay L. Schauben, Pharm.D., DABAT, FAACT (lecturer)
Director, Florida/USVI Poison Information Center-Jacksonville
Clinical Professor, College of Pharmacy and
Department of Emergency Medicine, College of Medicine

Mark Schreiber, Pharm.D, DABAT (lecturer)
Emergency Medicine Practitioner
Shands Jacksonville Clinical Center
Clinical Assistant Professor, College of Pharmacy

Joe Spillane, Pharm.D., DABAT (lecturer)
Emergency Medicine Practitioner
Shands Jacksonville Clinical Center
Clinical Assistant Professor, College of Pharmacy

Patrick Aaronson, Pharm.D. (lecturer)
Emergency Medicine Practitioner
Shands Jacksonville Clinical Center
Clinical Assistant Professor, College of Pharmacy

Sven A. Normann, Pharm.D., DABAT (facilitator)
Assistant Dean, Distance, Continuing and Executive Education
Director, Working Professional Pharm.D. Program
Clinical Associate Professor, Pharmacy Practice
College of Pharmacy
Email: normann@cop.ufl.edu
Phone: 352-273-6305

Adam Wood, Pharm.D. (co-facilitator)
Clinical Pharmacist Specialist – Emergency Services
Nemours Children’s Hospital
Email: Adam.Wood@Nemours.org

Rachel O’Geen, Pharm.D. (lecturer, co-facilitator)
Clinical Toxicology Fellow
# APPENDIX B. Schedule of Course Activities/Topics

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<thead>
<tr>
<th>Week of</th>
<th>Topic</th>
<th>Lecturer(s)</th>
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<tbody>
<tr>
<td>Jan 7 group</td>
<td>Introduction to course</td>
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<tr>
<td></td>
<td>Lectures for week 1</td>
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<td>Epidemiology of poisonings; General OD management</td>
<td>Schreiber</td>
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<td>Assessment of the poisoned patient; Toxidromes</td>
<td>Schauben</td>
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<td>14 group Cases from week 1 and toxidrome chart</td>
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<td>Lectures for week 2</td>
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<td>Anticonvulsants</td>
<td>Aaronson</td>
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<td>Psychotropics</td>
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<td>21 group Cases from week 2</td>
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<td></td>
<td>Lectures for week 3</td>
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<tr>
<td></td>
<td>Analgesics</td>
<td>O’Geen</td>
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<td>28 group Cases from week 3</td>
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<td>Lectures for week 4</td>
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<td>Sympathomimetics (cocaine, amphetamines, decongestants, theophylline, caffeine)</td>
<td>Spillane</td>
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<td>Feb 4 group Cases from week 4</td>
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<td>Jan 31st Exam 1 3-5 pm</td>
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<td>Lectures for week 5</td>
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<td></td>
<td>Cardiovascular agents</td>
<td>Kunisaki</td>
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<td>Review of exam</td>
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<td>Feb 11 group Cases from week 5</td>
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<td></td>
<td>Lectures for week 6</td>
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<td>Hypoglycemic agents</td>
<td>Kunisaki</td>
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<td>Feb 18 group Cases from week 6</td>
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<td></td>
<td>March 1st Final Examination 1-3 pm</td>
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