

CHEMISTRY OF DANGEROUS DRUGS
Lecture Syllabus

Instructor: Dr. Ellen Hondrogiannis

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Office hours: By appointment or anytime my door is open. I encourage you to visit my office with any questions throughout the semester. *Please note that because of other obligations in the department/college, I am often not available the few days before the final exam.*

Blackboard course site: Enroll in the course site on <http://www.towson.edu/learnonline>.

The course ID is FRSC363.

Schedule: TR (SM 508) 12:30-1:45 pm.

Purpose of course: A study of the chemistry, methods of detection and analysis of narcotics, depressants, stimulants and hallucinogens. Also, the influence of physiochemical properties upon the pharmacological effects of drug receptor interactions. Historical, forensic and socio-economic implications associated with drug abuse will also be reviewed.

Course prerequisite: CHEM 332

Required text: Julien, R.M., *A Primer of Drug Action*, any edition. I will use the 12th edition. If your edition does not have the figures/tables I reference then please let me know and I will write these out on the board and/or upload to BB.

Course Evaluation: During the semester three 60 minute in-class exams, worth 100 points each will be given. If you miss an exam for any reason, your final (50 points) will count a proportionally higher percentage. There are no makeups for any reason. You do not need to notify me that you are not taking the exam. If you miss the final exam your grade will be recorded as zero unless you have made prior arrangements with me or supply me with an acceptable (my decision) documented excuse. There will also be 6 unannounced quizzes given at the beginning of the period, each worth 20 points. If you show up late, then you will not be allowed to take the quiz. The quiz material will be on the past lecture material. There are no makeups for the quizzes. Your lowest quiz score will be dropped.

Point corrections to quizzes/exams will be made only within one week from the date the quiz/exam was returned.

Course Grading Standards:

A	(94.10-100%)
A-	(90.10-94.00%)
B+	(87.10-90.00%)
B	(83.10-87.00%)
B-	(80.10-83.00%)
C+	(77.10-80.00%)
C	(70.10-77.00%)
D+	(68.10-70.00%)
D	(60.10-68.00%)

F (< 60.10%)

Policy on Attendance: Attendance will not be taken. However, attending lectures is highly advantageous for learning the material and succeeding in the course. If you miss a class you are responsible for obtaining all missed material from another student.

Policy on Cheating: Before an exam is handed out, you must put books, notes and cell phones away. You must have nothing in your lap or on your desk including purses and/or clothing. If you need to use the restroom you should do so before the exam/quiz, since you will not be allowed to leave the room once the exam/quiz are handed out. It is assumed that if a cell phone is in use or out during an exam/quiz then the student is cheating and the exam/quiz score will be zero. (Cell phones are not to be used as calculators.) Please avoid the appearance of dishonest behavior by looking only at your paper or straight ahead. You are further not allowed to talk to any student once the exam/quiz is passed out. If you have a question then remain in your seat and raise your hand. Cases of academic dishonesty will be handled in compliance with the Towson University Student Academic Integrity Policy (<http://wwwnew.towson.edu/studentaffairs/policies/>). Depending on the offense, the penalty may be a failing grade on the particular exam/quiz or for the entire course. If you observe another student cheating, I encourage you to let me know. I will keep your information strictly confidential. Students sharing the same “wrong” answer on a quiz or exam will both be given zeros for that quiz or exam.

Copyright Notice:

Your instructor retains all copyrights to all original materials distributed in this course (including, but not limited to, hard copies and electronic copies of lecture slides, notes, practice problems, worksheets, assignments, lab materials, and exams). Reposting, selling, or otherwise distributing these materials in any fashion at any time is prohibited.

Chemistry Department Statement on Classroom Diversity and Inclusion

The students, faculty, and staff at Towson University represent a diverse and vibrant community of learners and scholars. As a community, we value the unique contributions of each individual and promote active participation in all aspects of the learning process by each community member. Your instructor supports Towson University’s goal of fostering a diverse and inclusive educational setting. Your instructor strives to create a classroom environment built upon the principles of mutual respect and support. Toward this end, all members participating in this course are expected to demonstrate respect for all other members of the class. If you feel these expectations have not been met, please speak with your instructor or the designated diversity liaison, Dr. Cindy Zeller (czeller@towson.edu).

For further information regarding the diversity and inclusion policies of Towson University, please see the [Towson University Commitment to Diversity](#), the [Fisher College of Science and Mathematics Diversity Action Website](#), and the [Chemistry Department Diversity Action Plan](#).

Laboratory Policy for Pregnant Students: Pregnant students should consult their physicians for advice on whether or not to perform experiments in the laboratory. Students are encouraged to provide their physician with a list of the chemicals that they might be exposed to while in lab. They should also check the MSDS sheets (available in the Department) to be aware of the hazards of the chemicals.

If a student is advised against performing laboratory work, then faculty must make accommodations for the student. Any accommodations should comprise a workload that is approximately equivalent to the regularly scheduled laboratory work. These accommodations may include:

- performing “dry” experiments only, in a place free from exposure to ongoing experiments;
- performing the wet chemistry at a later date;
- receiving an incomplete grade in the course pending completion of experimental work

Disabilities: Students with approved accommodations should submit their memos to the instructor the first week of class, or as soon as possible thereafter. It is the student's responsibility to present this paperwork in a timely fashion and to follow up regarding accommodations that require instructor participation (eg testing accommodations). If you think you need accommodations but do not yet have them, please contact Disability Support Services (410-704-2638).

Course Communications: Relevant course materials will be available on Blackboard. You are responsible for anything sent by the instructor via email or posted on Blackboard. All email communication will be sent to university email accounts; you are responsible for checking your university email account frequently. I will usually respond within 24 hours of receiving an email (48 hours on weekend). However, if you are requesting an appointment, then please email me at least three days prior.

Tentative Lecture Schedule
All exams are given on Thursdays

<u>Week of</u>	<u>Topics</u>
Aug 26	Introduction to the course Pharmacokinetics
Sept 2	LAB: Drug Testing lab – screening techniques and drug extraction techniques (liquid-liquid extraction and solid phase extraction).
Sept 9	LAB: GC/MS lab – demonstration of instrument, using software to develop methods, analysis of data using Chemstation
Sept 16	Exam 1 ; Pharmacodynamics, The Neuron
Sept 23	The Neuron, Synaptic Transmission, NTs
Sept 30	Brain Imaging, Ethyl Alcohol, Inhalants
Oct 7	Barbiturates, Benzodiazepines
Oct 14	Exam 2 ; Antidepressants
Oct 21	Intro to Stimulants; Caffeine, Nicotine
Oct 28	LAB: Cocaine, Amphetamines – laboratory –analysis of cocaine and its metabolites after solid phase extraction

Nov 4	Designer Drugs
Nov 11	Exam 3 ; NSAIDs, Opiates
Nov 18	Opiates
Nov 25	Cannabinoid Agonists
Dec 2	LAB: cleaning the M.S. inlet; Psychedelic Drugs
Dec 12 Thursday	12:30 – 2:30 pm; Cumulative Final Exam