

# Syllabus Fall Biochemical Mechanism of Toxicology

## Online Lectures Through Canvas

All Communication will be through Canvas or Email

[cooper@sebs.rutgers.edu](mailto:cooper@sebs.rutgers.edu)

Due to the unusual situation, we find ourselves in teaching this semester, I have redesigned the course so that the lectures are pre-recorded. The Power Point slides are narrated and can be viewed at times other than previous designated class time. There may be supplemental reading assignments that are fair game for the exams.

**Be sure to set a schedule for viewing as the time is comparable to in class lectures.**

The course has been broken into 4 sections. At the end of each section an exam will be given to be taken online during a specified period and submitted through Sakai. The exams will be primarily essay or problem solving based on information provided and based on the material within the specific section (60% of grade). The questions may incorporate previous covered material to build on previous information. The answers will be submitted through Sakai and will be run through a plagiarism program to insure it is your own work product. There will be a Final Exam that will be based on **all the covered material** (40% of grade).

On Canvas, a reference resource will be provided that can be used to explain concepts that are covered in the lectures but might be unclear. The information provided is for your reference and the materials covered on the slide presentations is what you will be tested on. Instead of having specific office hours, questions can be submitted directly to my email at [cooper@sebs.rutgers.edu](mailto:cooper@sebs.rutgers.edu) be sure to include in the subject line Biochemical Mechanism of Toxicology. If there are still questions an online or telephone call can be arranged.

**Grading:** Four sectional exams (15% each for 60% grade) and a Comprehensive Final (40%). Grades are based on total accumulated points and are weighted to reflect their percentage of the grade. No curving has been used in the past so 90-100 A, 80-89 B, 70-79 C, 60-69 D, <60 F.

**Goal:** The goal of the course is to provide the students with a basic understanding of Toxicology and how it integrates basic sciences in the understanding of how chemical and physical agents impact on organisms. The course will also provide an opportunity to integrate the course information into a case study type of format.

## September

1-15 Section 1: General introduction to Toxicology and an overview of basic principles. Comprised of a series of narrated Power Points covering general discussions of overarching disciplines and areas of research covered in toxicology.

Sept. 17 Exam #1 covering topics discussed in Section 1 and any additional material.

## Sept./Oct.

22-13 Section 2: This section will concentrate on the discussion about **A**bsorption, **D**istribution, **M**etabolism and **E**limination (ADME) and the role each plays in toxicological effects.

Oct. 15 Exam #2 covering topics discussed in Section 2 and any additional material.

## Oct./Nov.

20-10 Section 3: This section will concentrate on general cellular and tissue responses and then will cover individual organ systems which will include CNS/PNS, Liver, Kidney, and blood systems.

Nov. 12 Exam #3 covering topics discussed in Section 3 and any additional material.

## Nov./Dec.

17-8 Section 4: This section will continue to concentrate on tissue specific responses and toxicants. These will include the lung/respiratory system, cardiovascular, gastrointestinal, pancreas and skin.

Dec. 10 Exam #4 covering topics discussed in section 4 and any additional material.

Final Exam. The final exam will be due the day of the scheduled exam date. This is **cumulative** and can draw from previous materials covered in Exams 1 through 4.

***\*Note the course schedule is subject to change: dates, time, location. The updated information will be available to students on the canvas site and the course schedule site.***