

**\*Course Instructor:** Abraham Kovoov ([abekovoor@uri.edu](mailto:abekovoor@uri.edu))

**Credit Hours:** 3

**Course Days, Times and Locations:** ONLINE

**Email(s):** [abekovoor@uri.edu](mailto:abekovoor@uri.edu)

**Phone:**

**Office Hours:** Zoom meetings by prior appointment

\*Students should address all course-related questions such as missed classes and exams to the Course Instructor or the Teaching Assistant

## Course Overview and Description

What is a drug? How does it produce the desired effect? Why can it cause undesirable side effects? This course aims to help students answer the above questions by introducing basic and general principles of how drugs are administered, absorbed, distributed, metabolized, excreted and act through receptors to produce both desired and toxic effects. These general principles of drug action will be further illustrated by studying a few examples of different drug classes, particularly those that act in the brain and spinal cord, i.e. the Central Nervous System (CNS). The course aims to provide students with basic tools to allow them to educate themselves and become better informed about drugs that they encounter so that they can make informed decisions about drugs that may be prescribed to them or those which they may acquire for self-treatment or recreation.

## Textbook(s) and Course Materials

There is no official book for this course; all of the material will be provided on the BrightSpace site.

## Course Learning Objectives

By the end of this course, the student will be able to:

1. Communicate and apply general principles involved in the action of drugs.
2. List and explain the basic mechanisms underlying pharmacokinetic processes of drug administration, absorption, distribution, metabolism and excretion.
3. Demonstrate knowledge of basic pharmacological principles including the important aspects of the receptor theory of drug action. The student will also be able to list several

important classes of drug receptors, describe the common biochemical and cellular pathways that are modulated by these receptors and describe how the modulation of such pathways leads to the physiological effects of drugs that target these receptors.

4. Describe and communicate the different actions and uses of a few classes of psychotropic drugs (i.e. drugs that can affect a person's mental state) in a manner that demonstrates an understanding the general principles of how drugs work. .

## TECHNOLOGY REQUIREMENTS

To successfully complete this course, you will need access to a computer with reliable, high-speed Internet access and appropriate system and software to support the Brightspace learning platform. Typical technical requirements for users are:

Windows 10 2 Gb RAM Internet speed 5mbps SoundCard & Speakers External headphones with built-in microphone Mozilla Firefox 9.0 or higher	Mac 10.12 or higher 2Gb RAM Internet speed 5mbps SoundCard & Speakers External headphones with built-in microphone Mozilla Firefox 9.0 or higher; Safari 5.0 or higher
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Also requires Word 2007 (PC) 2011 (MAC) or newer, PowerPoint, Excel, Html 5, and Adobe Acrobat Reader.

## BRIGHTSPACE HELP

Here is the link to access Brightspace <https://brightspace.uri.edu> as well as the Brightspace resource page <https://web.uri.edu/brightspace/> . You may also access Brightspace 24/7 chat help from the URI Brightspace homepage (where you find your courses).

## CLASSROOM PROTOCOL

This course will move quickly, so be prepared to check this site daily, take note of deadlines and participate fully.

For this online course, Brightspace is our “classroom.” Please refer to the [Brightspace YouTube video tutorials](#) before you get started and refer back to them as a resource as needed while you complete this course.

In the online learning environment, “attendance” is measured by your PRESENCE in the site as well as your CONTRIBUTIONS to the site. The importance of regular log-ins and active participation cannot be overstated.

## DESCRIPTIONS OF ASSIGNMENTS

### MULTIMEDIA PRESENTATIONS

- Every day students will be provided multimedia presentations , YouTube videos and articles to read or watch. They may be asked to review a slide deck corresponding to the presentations for the day.

**QUIZZES (approximately 8 quizzes for a total of 40 points, divided evenly between the Quizzes)**

- Almost every day, students will be asked to take a QUIZ (anywhere from 10-20 multiple choice questions per quiz) to test that the student has reviewed the material provided for that day.

**ASSIGNMENTS (3 Assignments, 10 points/Assignment X 3 for a total of 30 points):**

There will be **3** Assignments. The assignments serve as important indicators of your learning and comprehension of the course material. You will be asked to answer questions/prompts directly related to that content and to make connections and provide analysis. A rubric will be posted to use as a guide

## GRADING

<u>Assignment</u>	<u>Points per unit</u>	<u>Total</u>
Quizzes (~8 Quizzes)	6.5	52
Assignments (3)	16	48
<b><u>TOTAL</u></b>		<b><u>100</u></b>

### Letter grade

A	94.0 - 100
A-	90.0 - 93.9
B+	87.0 - 89.9
B	83.0 - 86.9
B-	80.0 - 82.9
C+	77.0 - 79.9
C	73.0 - 76.9
C-	70.0 - 72.9
D+	67.0 - 69.9
D	60.0 - 66.9
F	< 60.0

\*grades will not be rounded

All work is expected to be turned in on time by the agreed upon deadline).

This is a College course and one of the goals of College is to prepare you for real life and your future workspace. Late work will NOT be accepted without a legitimate excuse and a physician's or health care provider's note. You will NOT be offered alternative assignments to compensate for not doing well in the course or for missing or submitting a late assignment.

## COLLEGE AND UNIVERSITY POLICIES

## **ACCOMMODATIONS FOR SPECIAL NEEDS**

“Section 504 of the Rehabilitation act of 1973 and the Americans with Disabilities Act of 1990 require the University of Rhode Island to provide academic adjustments or the accommodations for students with documented disabilities. The student with a disability shall be responsible for self-identification to the Disability Services for Students in the Office of Student Life, providing appropriate documentation of disability, requesting accommodation in a timely manner, and follow-through regarding accommodations requested.” It is the student’s responsibility to make arrangements for any special needs and the instructor’s responsibility to accommodate them with the assistance of the Office of Disability Services for Students.

## **PLAGIARISM/CHEATING, ACADEMIC HONESTY & INTEGRITY**

You are expected to be honest in all academic work. There should be no unauthorized communication during examinations. Please ensure that you complete the Quizzes and Exam on your own without help from anyone else. You will receive a zero on any assignment or exam in which you cheat. In some cases, this may result in a failure of the course as well. In addition, the charge of academic dishonesty will go on your record in the Office of Student Life. If you have any doubt about what constitutes plagiarism, visit the following websites: the URI Student Handbook, and Sections 8.27.10 – 8.27.21 of the University Manual ([web.uri.edu/manual/](http://web.uri.edu/manual/)).

## **ACADEMIC ENHANCEMENT CENTER**

The work in this course is complex and intensive. To do the best you can, it’s a good idea to visit the Academic Enhancement Center (AEC) in Roosevelt Hall. The AEC offers a comfortable environment in which to study alone or together, with or without a tutor. AEC tutors can answer questions, clarify concepts, check understanding, and help you to study. You can make an appointment or walk in during office hours — Monday through Thursday from 9 am. to 9 pm, Friday from 9 am to 1 pm, and Sunday from 4 pm. to 8 pm. For a complete schedule call (401) 874-2367, or stop by the fourth floor in Roosevelt Hall.

## **THE WRITING CENTER**

The Writing Center is for “all writers, all disciplines, at all levels, and all stages of writing.” If an instructor suggests that you go to the Writing Center, it is not a punishment, and does mean that you are a terrible writer. It means the instructor wants you to receive more individualized attention to your writing than s/he is able to provide, given the constraints of the class. It will only improve your grade. If possible, call ahead for an appointment (401-874-2367). Drop-in tutorials are often available. You may make repeat appointments, requesting the same tutor each time if you wish.

## **STANDARDS OF BEHAVIOR**

Students are expected to treat faculty and fellow classmates with dignity and respect. Students are responsible for being familiar with and adhering to the published “Student Code of Conduct”. If you must come in late, please do not disrupt the class. Please turn off all cell phones, pagers, or any electronic devices.

## **CLASS ATTENDANCE**

Regular online attendance/participation and engagement is expected for student success in both fully online courses. Online participation is evident through posting to a discussion board, virtual office or classroom meeting, completing quizzes, or other course-related activities (synchronous or asynchronous).

## NETIQUETTE FOR ONLINE COURSE

- Be polite and respectful of one another.
- Avoid personal attacks. Keep dialogue friendly and supportive, even when you disagree or wish to present a controversial idea or response.
- Be careful with the use of humor and sarcasm. Emotion is difficult to sense through text.
- Be helpful and share your expertise. Foster community communication and collaboration.
- Contribute constructively and completely to each discussion. Avoid short repetitive “I agree” responses and don’t make everyone else do the work.
- Consider carefully what you write. Re-read all e-mail and discussion before sending or posting.
- Remember that e-mail is considered a permanent record that may be forwarded to others.
- Be brief and succinct. Don’t use up other people’s time or bandwidth.
- Use descriptive subject headings for each e-mail message.
- Respect privacy. Don’t forward a personal message without permission.
- Cite references. Include web addresses, authors, names of articles, date of publication, etc.
- Keep responses professional and educational. Do not advertise or send chain letters.
- Do not send large attachments unless you have been requested to do so or have permission from all parties.
- 2 word postings (e.g.: I agree, Oh yeah, No way, Me too) do not “count” as postings.

**Anti-Bias Statement:** We respect the rights and dignity of each individual and group. We reject prejudice and intolerance, and we work to understand differences. We believe that equity and inclusion are critical components for campus community members to thrive. If you are a target or a witness of a bias incident, you are encouraged to submit a report to the URI Bias Response Team at [www.uri.edu/brt](http://www.uri.edu/brt). There you will also find people and resources to help.

**Disability Services for Students Statement:** Your access in this course is important. Please send me your Disability Services for Students (DSS) accommodation letter early in the semester so that we have adequate time to discuss and arrange your approved academic accommodations. If you have not yet established services through DSS, please contact them to engage in a confidential conversation about the process for requesting reasonable accommodations in the classroom. DSS can be reached by calling: 401-874-2098, visiting: [web.uri.edu/disability](http://web.uri.edu/disability), or emailing: [dss@etal.uri.edu](mailto:dss@etal.uri.edu). We are available to meet with students enrolled in Kingston as well as Providence courses.

**Academic Enhancement Center (for undergraduate courses):** Located in Roosevelt Hall, the AEC offers free face-to-face and web-based services to undergraduate students seeking academic support. Peer tutoring is available for STEM-related courses by appointment online and in-person. The Writing Center offers peer tutoring focused on supporting undergraduate writers at any stage of a writing assignment. The UCS160 course and academic skills consultations offer students strategies and activities aimed at improving their studying and test-taking skills. Complete details about each of these programs, up-to-date schedules, contact information and self-service study resources are all available on the AEC website, [uri.edu/aec](http://uri.edu/aec).

If you wish to include additional information about their services:

- **STEM Tutoring** helps students navigate 100 and 200 level math, chemistry, physics, biology, and other select STEM courses. The STEM Tutoring program offers free online and limited in-

person peer tutoring this spring. Undergraduates in introductory STEM courses have a variety of small group times to choose from and can select occasional or daily appointments. Appointments and locations will be visible in the TutorTrac system beginning on January 26th, 2021. The TutorTrac application is available through URI Microsoft 365 single sign-on and by visiting [aec.uri.edu](http://aec.uri.edu). More detailed information and instructions can be found at [uri.edu/aec/tutoring](http://uri.edu/aec/tutoring).

●**Academic Skills Development** resources help students plan work, manage time, and study more effectively. In Spring 2021, all Academic Skills and Strategies programming are offered both online and in-person. UCS160: Success in Higher Education is a one-credit course on developing a more effective approach to studying. Academic Consultations are 30-minute, 1 to 1 appointments that students can schedule on Starfish with Dr. David Hayes to address individual academic issues. Study Your Way to Success is a self-guided web portal connecting students to tips and strategies on studying and time management related topics. For more information on these programs, visit [uri.edu/aec/academic-skills](http://uri.edu/aec/academic-skills) or contact Dr. Hayes directly at [davidhayes@uri.edu](mailto:davidhayes@uri.edu).

●**The Undergraduate Writing Center** provides free writing support to students in any class, at any stage of the writing process: from understanding an assignment and brainstorming ideas, to developing, organizing, and revising a draft. Spring 2021 services are offered through two online options: 1) real-time synchronous appointments with a peer consultant (25- and 50-minute slots, available Sunday - Friday), and 2) written asynchronous consultations with a 24-hour turn-around response time (available Monday - Friday). Synchronous appointments hosted by WC Online are video-based, with audio, chat, document-sharing, and live captioning capabilities, to meet a range of accessibility needs. View the synchronous and asynchronous schedules and book online, visit [uri.mywconline.com](http://uri.mywconline.com).

**BPS201: How Drugs Work (Online Winter J-Term 2025) TENTATIVE SCHEDULE**

Day	Date	Day	TOPIC	Assignments and Deliverables
1	01/02	Th	Introduction, Basic Definitions and Concepts	
2	01/03	F	Introduction to Pharmacokinetics, Drug Absorption	<b>Quiz 1 Day 2 (Covers day 1 &amp; 2).</b> The Quiz opens at <b>8 am</b> and closes at <b>10 pm, Fri 1/03.</b>
3	01/06	M	Introduction to Pharmacodynamics, Drug Receptors	<b>Quiz 2 Day 3.</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm on Mon 1/06.</b>
4	01/07	T	Pharmacokinetics: Drug Distribution	<b>Quiz 3 Day 4.</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm, Tue 1/07</b>
5	01/08	W	Pharmacodynamics: Cell Communication Receptors as Drug Targets	<b>Quiz 4 Day 5.</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm, Wed 1/08.</b>
6	01/09	Th	Pharmacokinetics: Drug Metabolism	<ul style="list-style-type: none"><li>• <b>Assignment 1</b><ul style="list-style-type: none"><li>○ Posted <b>8:00 am on Wed 1/08</b></li><li>○ Due <b>10:00 pm on Thu 1/09</b></li></ul></li></ul>
7	01/10	F	Pharmacodynamics: Introduction to Neurophysiology and Neuropharmacology	<b>Quiz 5 Day 7.</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm, Fri 1/10.</b>
8	01/13	M	Pharmacokinetics: Drug Metabolism Continued	<b>Quiz 6 Day 8.</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm on Mon 1/13.</b>
9	01/14	T	Pharmacodynamics: Drugs Targeting Synaptic Transmission	<b>Quiz 7 Day 9 (Covers days 8 &amp; 9).</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm on Tue 1/14.</b>
10	01/15	W	Pharmacokinetics: Drug Metabolism Continued and Drug Excretion	<ul style="list-style-type: none"><li>• <b>Assignment 2</b><ul style="list-style-type: none"><li>○ Posted <b>8:00 am on T 1/14</b></li><li>○ Due <b>10:00 pm on Wed 1/15.</b></li></ul></li></ul>
11	01/16	Th	Pharmacokinetics: Drug-Drug and Drug Food Interactions	<b>Quiz 8 Day 11 (Covers days 10 &amp; 11).</b> The quiz opens at <b>8:00 am</b> and closes at <b>10:00 pm, Thu 1/16.</b>
12	01/17	F	Pharmacodynamics: Receptor Desensitization, Drug Tolerance, Dependence and Addiction	<ul style="list-style-type: none"><li>• <b>Assignment 3</b><ul style="list-style-type: none"><li>○ Posted <b>8:00 am on Thu 1/16</b></li><li>○ Due <b>10:00 pm on Fri 1/17.</b></li></ul></li></ul>