

9-2013

## PHAR 191.01C: Special topics - Pharmacology for Techs

Mary McHugh

*University of Montana - Missoula, [mary.mchugh@umontana.edu](mailto:mary.mchugh@umontana.edu)*

**Let us know how access to this document benefits you.**

Follow this and additional works at: <https://scholarworks.umt.edu/syllabi>

---

### Recommended Citation

McHugh, Mary, "PHAR 191.01C: Special topics - Pharmacology for Techs" (2013). *Syllabi*. 299.  
<https://scholarworks.umt.edu/syllabi/299>

This Syllabus is brought to you for free and open access by the Course Syllabi at ScholarWorks at University of Montana. It has been accepted for inclusion in Syllabi by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).

<b>SpTop: Pharmacology for Techs (PHAR 191-01)</b> <b>Fall 2013</b>	
<b>Instructor:</b> Dr. Mary McHugh PharmD, RPh	<b>Class Dates and Location:</b> Mondays, Tuesdays and Wednesdays GH9C (11:10-12:00) Fall Semester
<b>Contact Info:</b> Phone: 243-7813 Cell: 531-2420 Email: <a href="mailto:mary.mchugh@umontana.edu">mary.mchugh@umontana.edu</a>	<b>Office Hours:</b> <i>Posted on office door and feel free to schedule ahead via phone, email. I will respond to all calls and emails within a 24 hr. period <b>M-F</b>.</i>

### Course Description:

*Pharmacology:* This course will introduce you to the drugs used in pharmacy, including brand and generic names, dosages and forms, uses and side effects, therapeutic effects, adverse effects and basic anatomy and physiology of the systems affected by these medications. Memorization of medication names will be necessary.

### Relationship to program(s):

Pharmacy technicians must be familiar with the generic and brand names of drugs so that they are able to locate and dispense drugs efficiently and correctly in the pharmacy. They must know the classifications and general properties of the various classes of drugs to aid in the correct dispensing of prescriptions, and also to avoid mistakes such as duplications of therapy or interactions. Proper dispensing and labeling of drug products requires a knowledge base that will enable the technician to be of optimal assistance to the pharmacist. This base will enable the technician to communicate with the pharmacist, other health professionals, and with clientele in a knowledgeable manner. This course will build upon skills obtained in concurrent courses, giving the student a basic introduction to the complex world of medicinal agents.

**Text:** Manual for Pharmacy Technicians by Bachenheimer 4th ed  
**ISBN:** 978-1-58528-207-4  
**Supplies:** Flash cards (you make from recipe cards)

### Course Completion and Grading Criteria:

Class participation/completion Criteria:

- Complete all course assignments
- Thoughtful participation in discussions
- Grading for discussion is explained in grading for discussion rubric

The grading scale is as follows:

90-100	A
80-89%	B
70-79%	C
60-69%	D
below 60%	F

You must have a "B" or better final grade in all pharmacy classes in order to progress within the program.

**Semester schedule:**

DATE	Week #	Pharmacology (chapters/ pages)	Topics	Points
26-Aug-13	Week 1	11	Basic Biopharmaceutics, pharmacokinetics, pharmacodynamics	10
2-Sep-13	Week 2	12	Medication Dosage Forms and Routes	10
9-Sep-13	Week 3	12	Medication Dosage Forms and Routes	10
16-Sep-13	Week 4	10	Antiepileptic, Parkinsons, Alzheimers, MS	10
23-Sep-13	Week 5	10	Migraines, neuropathic pain, mood disorders	10
30-Sep-13	Week 6	10 pg 214	Cardiovascular Drugs	10
7-Oct-13	Week 7	220-224	Respiratory Drugs	10
14-Oct-13	Week 8	224-228	Musculoskeletal Drugs	10
21-Oct-13	Week 9	228-232	Endocrine, Immune Sx Drugs	10
28-Oct-13	Week 10	232-327	Gastrointestinal, Urinary	10
4-Nov-13	Week 11	237-241	Other Body systems	10
11-Nov-13	Week 12	241-244	Women and Men	10
18-Nov-13	Week 13	245-251	Anti-infectives	10
25-Nov-13	Week 14	251-263	Hematologic and Oncologic	10
2-Dec-13	Week 15	review		
9-Dec-13	Finals			60
	Total Points			200

**University Academic Calendar:**

(<http://www.umt.edu/provost/about/academiccalendar.aspx>)

Monday, August 26		Autumn Semester Classes Begin
Monday, September 2		Labor Day – No Classes, Offices Closed
Monday, November 11		Veterans Day – No Classes, Offices Closed
Wednesday, November 27		Student Travel Day – No Classes
Thursday-Friday, November 28-29		Thanksgiving – No Classes, Offices Closed
Friday, December 6		Last Day of Regular Classes
Monday-Friday, December 9-13		Final Exams

**Learning Objectives** are found at the beginning of each chapter and include:

**Chapter 11-Week 1**

- Define the study of biopharmaceutics.
- List and describe the four major processes that make up the study of pharmacokinetics.
- Describe factors that can alter the absorption of a medication.
- Describe how medications are distributed within the body, including factors that affect medication distribution in the body.
- List and describe the two most common types of drug interactions.
- Define pharmacodynamics.
- Describe how medications are eliminated from the body, including factors (e.g., disease states) that can increase or decrease elimination of a medication.
- Describe the steps that must occur before a medication can exert its effect on the body.
- Describe potential problems that can occur when a product formulation is disrupted or when absorption, distribution, metabolism, or elimination is altered, and how these alterations can affect the pharmacodynamics of a medication.

**Chapter 12-Week 2-3**

- Explain why medications are often available in more than one dosage form.
- List three advantages of liquid medication dosage forms over other dosage forms.
- List three disadvantages of solid medication dosage forms.
- Outline characteristics of solutions, emulsions, and suspensions.
- Describe two situations in which an ointment may be preferred over a cream.
- Explain the differences in use among various solid medication dosage forms, such as tablets, capsules, lozenges, powders, and granules.
- List six routes of administration by which drugs may enter or be applied to the body.
- Identify special considerations for five routes of administration.
- List five parenteral routes of administration.
- Distinguish between sublingual and buccal routes.

**Chapter 10-Weeks 4-15**

- Identify the common drug names for each classification.
- Describe the important actions and/or therapeutic uses for the major classes of drugs.
- Describe the most common or most serious adverse effects for the major classes of drugs.
- List special precautions for the major classes of drugs.

**Course Policies and Other Information:**

**1. Assignment Due Dates/Times**

All assignments are due as specified in Moodle. Late work will receive a 20% reduction in points for each day it is late.

## **2. Naming & Submitting Assignments**

Assignments may be saved in either of these file formats: RTF, .doc, or PDF. Please name your files with your last name and an abbreviated name of the assignment, like this:

mchugh\_antibiotics1. You can use an underscore ( \_ ) or a period ( . ) to separate your name from the name of the assign. Do not use other symbols (such as: # \$ @ \* & - ?, etc.) in your file names as I won't be able to open the file.

## **3. ACADEMIC INTEGRITY:**

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by The University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at [http://life.umt.edu/vpsa/student\\_conduct.php](http://life.umt.edu/vpsa/student_conduct.php).

## **4. DISABILITY ACCOMODATION:**

Students with disabilities may request reasonable modifications by contacting me. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students (DSS). "Reasonable" means the University permits no fundamental alterations of academic standards or retroactive modifications. Therefore, Eligible students with disabilities must request appropriate accommodations in this course in a timely way. Please speak with me after class or in my office. Please be prepared to provide a letter from your DSS Coordinator. For more information, visit the Disabilities Services website at <http://www.umt.edu/dss/> or call 406-243-2243 (voice/text)

**Note: Instructor reserves the right to modify syllabi and assignments as needed based on faculty, student, and/or environmental circumstances.**

## **5. Technical Requirements**

To participate in some courses at The University of Montana, students are expected to be familiar with computers and the Internet. Students are responsible for their own software and computer equipment maintenance and setup.