

**JEFFERSON COLLEGE**  
**INSTITUTIONAL COURSE GUIDE**

PTA215

Pharmacology for Physical Therapist Assistants

1 Credit Hour

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## PTA215 Pharmacology for Physical Therapist Assistants

### I. CATALOGUE DESCRIPTION

- A. Pre-requisite: PTA130, PTA140, PTA150 each with a grade of “C” or higher and reading proficiency
- B. Credit hour award: 1
- C. Description: This hybrid course will introduce students to the basic concepts of drug therapy of pharmacokinetics, pharmacodynamics, modes of delivery, side effects, and ways in which the medications can affect physical therapy treatment for the major drug classifications related to each organ system. (F)
- D. Curricular alignment: Fulfills Physical Therapist Assistant program requirement toward an Associate of Applied Science degree.

### II. EXPECTED LEARNING OUTCOMES/CORRESPONDING ASSESSMENT MEASURES

Expected Learning Outcome	Assessment Measure
Compare and contrast various modes of medication delivery.	Quizzes Written Assignments
Define common drug terms.	Quizzes Written Assignments
Identify common adverse drug reactions and causes of adverse drug reactions.	Quizzes Written Assignments
Identify the purpose for and side effects of common over the counter medications.	Quizzes Written Assignments
Identify commonly prescribed medications and their common side effects for infections as well as diseases of the cardiovascular, respiratory, endocrine, urinary, gastrointestinal, musculoskeletal, and nervous systems.	Quizzes Written Assignments
Differentiate between narcotic pain medications and non-narcotic pain medications.	Quizzes Written Assignments
Describe how medication side effects impact physical therapy interventions.	Quizzes Written Assignments

Identify signs and symptoms of adverse drug reactions or medication interactions requiring the supervising physical therapist and/or physician must be contacted.	Quizzes Written Assignments
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### III. OUTLINE OF TOPICS

#### A. Pharmacology Terms

1. Pharmacokinetics versus pharmacodynamics
2. Adverse Reaction versus side effect
3. Tolerance versus dependence
4. Half life
5. Toxicity
6. Bioavailability
7. Consumer Safety
8. Drug Names
9. Poison Control

#### B. Modes of Medication Preparation and Administration

#### C. Drug Classifications, Indications, and Side Effects

1. Narcotic Pain Medications
2. Non-Narcotic Pain Medications
3. Antibiotics
4. Medications for Type I and Type II Diabetes
5. Cardiovascular Medications
6. Respiratory Medications
7. Diuretics
8. Antidepressants, Anti-Anxiety Medications
9. Muscle Relaxants

#### D. Medication Safety and Adverse Reactions

#### E. Medication Timing and Impact on Physical Therapy Treatments

### IV. METHOD(S) OF INSTRUCTION

#### A. Lecture

#### B. Online Webinars

#### C. Case Studies

### V. REQUIRED TEXTBOOKS

A. Colbert, B. and Woodrow, R (current edition). Essentials of Pharmacology for Health Professions. Cengage.

B. Giles, S. (current edition). PTA EXAM The Complete Study Guide Scorebuilders.

#### VI. REQUIRED MATERIALS

A. Subscriptions to Cengage MindTap, PhysioU, Scorebuilders Basecamp, and EHRgo

B. Computer with reliable internet access

#### VII. SUPPLEMENTAL REFERENCES

A. American Physical Therapy Association student member resources

B. Davis's Drug Guide for Rehabilitation Professions

#### VIII. METHOD(S) OF EVALUATION

A. Written Assignments

B. Quizzes

#### IX. ADA AA STATEMENT

Any student requiring special accommodations should inform the instructor and the Coordinator of Disability Support Services (TC101; phone 636-481-3169).

#### X. ACADEMIC HONESTY STATEMENT

All students are responsible for complying with campus policies as stated in the Student Handbook (see College website, <http://www.jeffco.edu>).

#### XI. ATTENDANCE STATEMENT

Regular and punctual attendance is expected of all students. Any one of these four options may result in the student being removed from the class and an administrative withdrawal being processed: (1) Student fails to begin class; (2) Student ceases participation for at least two consecutive weeks; (3) Student misses 15 percent or more of the coursework; and/or (4) Student misses 15 percent or more of the course as defined by the instructor. Students earn their financial aid by regularly attending and actively participating in their coursework. If a student does not actively participate, he/she may have to return financial aid funds. Consult the College Catalog or a Student Financial Services representative for more details.

## XII. OUTSIDE OF CLASS ACADEMICALLY RELATED ACTIVITIES

The U.S. Department of Education mandates that students be made aware of expectations regarding coursework to be completed outside the classroom. Students are expected to spend substantial time outside of class meetings engaging in academically related activities such as reading, studying, and completing assignments. Specifically, time spent on academically related activities outside of class combined with time spent in class meetings is expected to be a minimum of 37.5 hours over the duration of the term for each credit hour.

## XIII. DIVERSITY STATEMENT

Jefferson College is a community leader dedicated to supporting and promoting diversity through opportunities and experiences that foster a culture of respect, inclusiveness, and understanding for everyone in the campus community to engage in a diverse world.