



## PHAR 273 - Pharmacotherapy 1

### Description

This course explores basic anatomy, physiology, medical conditions and medical terminology. Students will explain basic pharmacology concepts related to body systems. These concepts include the generic names, trade names, therapeutic uses, and side effects of commonly prescribed medications. In addition, students will interpret abbreviations and symbols used to write prescriptions.

3 Credits

### Time Guidelines

The standard instructional time for this course is 90 hours.

### Course Assessment

Assignments	15%
Quizzes	40%
Mid-Term Exam	15%
Final Exam	30%
Total:	100%

### Other Course Information

The School of Health and Public Safety (HPS) expects that students familiarize themselves with policies, procedures, and guidelines that are applicable to SAIT, HPS, and their program of study. All students should explore institutional, school, and program-specific information on [sait.ca](#) in order to ensure they are informed with regards to relevant policies, procedures, and guidelines.

### School of Health and Public Safety Attendance Guideline:

The School of Health and Public Safety (HPS) has expectations, consequences, and processes for excused and unexcused absences. The entire Attendance Guideline may be found on the HPS program orientation requirements resources website. This document is located under the General Resources section found on your Program page. **Students are expected to review the entire Attendance Guideline.** Students should also take note of the attendance expectations shown below.

### Attendance Expectations:

Students in the School of Health and Public Safety are expected to achieve 100% attendance for scheduled classes, and to participate in all learning activities. There is a positive correlation between attendance, participation, and grades. Attendance is required to achieve the necessary knowledge, skills, and abilities while attending both SAIT and workplace-integrated learning experiences, in order to become a successful, well-rounded, and job-ready Allied Health graduate. Failure to keep up with course work and/or repetitive and cumulative absences will result in a formal review of a student's progress.

## **Course Learning Outcomes**

1. Explain basic pharmacology concepts.

Objectives:

- 1.1 Compare drug sources.
- 1.2 Describe the Canadian drug approval process.
- 1.3 Differentiate between brand, trade, generic drug names and therapeutic classifications.
- 1.4 Identify key information found on a manufacturer's product label.
- 1.5 Recognize common dosage forms and routes of administration.
- 1.6 Explain drug stability and storage requirements.
- 1.7 Examine human anatomy and physiology.

2. Explain basic pharmacology concepts related to the gastrointestinal system.

Objectives:

- 2.1 Describe the basic anatomy and physiology of the gastrointestinal system.
- 2.2 Identify medical terminology related to the gastrointestinal system.
- 2.3 Describe common medical conditions associated with the gastrointestinal system.
- 2.4 Identify the basic side-effects of gastrointestinal drugs.
- 2.5 List common gastrointestinal drugs by their trade name, generic name and therapeutic use.

3. Explain basic pharmacology concepts related to the respiratory system.

Objectives:

- 3.1 Describe the basic anatomy and physiology of the respiratory system.
- 3.2 Identify medical terminology related to the respiratory system.
- 3.3 Describe common medical conditions associated with the respiratory system.
- 3.4 Identify basic side-effects of common respiratory drugs.
- 3.5 List common respiratory drugs by their trade name, generic name and therapeutic use.

4. Explain basic pharmacology concepts related to the endocrine system.

Objectives:

- 4.1 Describe the basic anatomy and physiology of the endocrine system.
- 4.2 Identify medical terminology related to the endocrine system.
- 4.3 Describe common medical conditions associated with the endocrine system.
- 4.4 Identify the basic side-effects of endocrine drugs.
- 4.5 List common endocrine drugs by their trade name, generic name and therapeutic use.

5. Explain basic pharmacology concepts related to anti-infectives.

Objectives:

- 5.1 Describe basic anatomy and physiology related to infection.
- 5.2 Identify medical terminology related to anti-infectives.

- 5.3 Describe the basic differences between bacteria, fungi and viruses.
- 5.4 Describe medical conditions treated with anti-infectives.
- 5.5 Identify the basic side-effects of anti-infective drugs.
- 5.6 List common anti-infective medications by their trade name, generic name and therapeutic use.

6. Explain basic pharmacology concepts related to immunizations and vaccines.

Objectives:

- 6.1 Describe basic anatomy and physiology related to immunizations and vaccines.
- 6.2 Identify medical terminology related to immunizations and vaccines.
- 6.3 Describe the purpose of immunizations and vaccines.
- 6.4 Describe common medical conditions requiring immunization or vaccination.
- 6.5 List common vaccines by their trade name, generic name and therapeutic use.

7. Explain basic pharmacology concepts related to the urinary system.

Objectives:

- 7.1 Describe the basic anatomy and physiology of the urinary system.
- 7.2 Identify medical terminology related to the urinary system.
- 7.3 Describe common medical conditions associated with the urinary system.
- 7.4 Identify side-effects of common urinary medications.
- 7.5 List common urinary medications by their trade name, generic name and therapeutic use.

8. Explain basic pharmacology concepts related to the cardiovascular system.

Objectives:

- 8.1 Describe the basic anatomy and physiology of the cardiovascular system.
- 8.2 Identify medical terminology related to the cardiovascular system.
- 8.3 Describe common medical conditions associated with the cardiovascular system.
- 8.4 Identify side-effects of common cardiovascular medications.
- 8.5 List common cardiovascular medications by their trade name, generic name and therapeutic use.

9. Explain basic pharmacology concepts related to the integumentary, otic and ophthalmic systems.

Objectives:

- 9.1 Describe the basic anatomy and physiology of the integumentary, otic and ophthalmic systems.
- 9.2 Identify medical terminology related to the integumentary, otic and ophthalmic systems.
- 9.3 Describe common medical conditions associated with the integumentary, otic and ophthalmic systems.
- 9.4 Identify side-effects of common integumentary, otic and ophthalmic medications.
- 9.5 List common integumentary, otic and ophthalmic medications by their trade name, generic name and therapeutic use.

10. Explain basic pharmacology concepts related to anesthetics, analgesics and narcotics.

Objectives:

- 10.1 Describe basic anatomy and physiology related to anesthetics, analgesics and narcotics.
- 10.2 Identify medical terminology related to anesthetics, analgesics and narcotics.
- 10.3 Describe common medical conditions associated with anesthetics, analgesics and narcotics.
- 10.4 Identify the basic side-effects of anesthetics, analgesics and narcotics.
- 10.5 List common anesthetic, analgesic and narcotics medications by their trade name, generic name and therapeutic use.

11. Explain basic pharmacology concepts related to psychotropics.

Objectives:

- 11.1 Describe basic anatomy and physiology related to common psychotropic conditions.
- 11.2 Identify medical terminology related to psychotropic conditions.
- 11.3 Describe common psychotropic conditions.
- 11.4 Identify the basic side-effects of psychotropic medications
- 11.5 List common psychotropic medications by their trade name, generic name and therapeutic use.

12. Explain basic pharmacology concepts related to the musculoskeletal system.

Objectives:

- 12.1 Describe the basic anatomy and physiology of the musculoskeletal system.
- 12.2 Identify medical terminology related to the musculoskeletal system.
- 12.3 Describe medical conditions associated with the musculoskeletal system.
- 12.4 Identify the basic side-effects requiring auxiliary information for musculoskeletal medications.
- 12.5 List common musculoskeletal medications by their trade name, generic name and therapeutic use.

13. Apply basic pharmacology concepts related to other central nervous system conditions.

Objectives:

- 13.1 Describe basic anatomy and physiology related to other central nervous system conditions.
- 13.2 Identify medical terminology related to other central nervous system conditions.
- 13.3 Describe other central nervous system conditions.
- 13.4 Identify the basic side-effects of medications for other central nervous system conditions.
- 13.5 List other central nervous system medications by their trade name, generic name and therapeutic use.

14. Interpret prescriptions accurately.

Objectives:

- 14.1 Define abbreviations used in prescriptions.
- 14.2 Translate common prescription symbols and notations.
- 14.3 Identify the appropriate patient instructions for common routes of administration.
- 14.4 Recognize legal symbols used in prescription filling.
- 14.5 State proper directions for patient use.

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**SAIT Policies and Procedures:**

For information on the SAIT Grading Scale, please visit policy AC 3.1.1 Grading Progression Procedure, found on the SAIT Academic Policies and Procedures page: <https://www.sait.ca/about-sait/administration/policies-and-procedures>

For information on SAIT Academic Policies, please visit: [www.sait.ca/about-sait/administration/policies-and-procedures/academic-student](https://www.sait.ca/about-sait/administration/policies-and-procedures/academic-student)

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