Basic Course Information

Semester	**Spring 2016**	Instructor's Name	**Rick Fitzsimmons FNP, BC, MSN**
Course Title & #	**Nursing 109 Pharmacology I**	Instructor's Email	**Rick.fitzsimmons@imperial.edu**
CRN #	**20753**	Webpage (optional)	
Room	**2150**	Office (PT Faculty:809)	RF 2129 / PC 2134
Class Dates	**February 16, to June 7, 2016**	Office Hours (n/a for PT Faculty)	
Class Days	**Monday**	Office Phone # (PT may use dept. number)	RF 355-6421 CP 355-6422
Class Times Units	**0130-1500** **1.5 units**	Who students should contact if emergency or other absence	Email instructor

Course Description

This course provides an introduction to the principles of pharmacology, including: pharmacokinetics, pharmacodynamics, medication interactions and potential adverse medication reactions. Emphasis will be placed on life span issues, gene therapy, medication errors, substance abuse, Immunizations and OTC, herbal and dietary medications. Focus will be on nursing actions and rationale for the concepts and medications covered.

Student Learning Outcomes

1. Differentiate the principles of pharmacology, pharmacodynamics, pharmacokinetics Pharmacogenetics, therapeutics, toxicology, legal, ethical, psychosocial, gender and cultural influences to mediation utilization by passing the final with 75% or better. (ILO 1,2,4)

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Apply principles of pharmacology, pharmacokinetics, pharmacodynamics and drug administration including adverse drug effects and medication errors to medication therapy.
2. Understand the legal and ethical implications, with historical and current drug regulation, substance abuse and psychosocial, gender and cultural influences to medication utilization and administration.
3. Apply principles of pharmacotherapy in the dimensions of the pediatric, geriatric and pregnancy and lactating patient.
4. Recognize the major classifications of medications, common medications within each classification, their side effects, and Contraindications
5. Discuss nursing implications and concepts of safety when performing medication administration.

Textbooks & Other Resources or Links

Required Information—discretionary language

Author	ISBN	Title	Edition	Year	Publisher
Burchum & Rosenthal	978-0-323-32190-7	Lehne's Pharmacology for Nursing Care	9th	2016	Elsevier

Course Requirements and Instructional Methods

Hours

NS109 is a 1.5 unit theory course. Lectures are held 1.5 hours per week.

Assignments:

Reading, CD/video, Internet, and writing assignments are required. Students will be expected to read, understand, and critique information from college level textbooks, nursing journals, or equivalent. The reading list will include texts used in prior nursing courses and those required of this course (see text book list). Additional reading assignments will be required to supplement textbook material. Writing assignments will reflect the objectives listed and may include, but not be limited to, short essays, posters, and/or professional papers. Outside assignments including but not limited to nursing lectures, independent exercises, and learning center activities may be assigned and are required.

Methods of Instruction

The methods of instruction will be determined by each instructor and may include, but not be limited to the following: small group discussions, student presentations, demonstration, simulations, classroom lecture, CD or online assisted instruction, audiovisuals, textbooks, handouts, and required reading and writing assignments.

Course Grading Based on Course Objectives

Methods of Evaluation:

Students must maintain a "C" average grade as determined by the scale below:
RN Nursing Grading Scale
A = 92 –100%
B = 83 – 91 %
C = 75 – 82 %
D = 68 – 74 %
F = Below 68%

Grades will not be "rounded". To advance to the next semester, a "C" or better is required in this course and the co-requisite courses. **The course grade will be computed as follows 65% will come from an average of all assignments prior to the final exam and 35% of the course grade will come from the final exam. Drug cards and assignments will compose 25% and test 75% of 65% of grade.**

All of the following must be attained to successfully pass this course:
A. Final Theory Exam score must be passed at a 70%.
B. Theory (exams) grade must total equivalent of 75% or greater.
C. Attendance requirements as noted below must be met.
Testing will include no more than 3 examinations in addition to written, demonstration, and oral assignments, and a final examination. Pop quizzes may be included. EXCEPT FOR UNDER EXTREME CIRCUMSTANCES, THERE WILL BE NO MAKE-UPS FOR TESTS OR QUIZZES MISSED DUE TO ABSENCE.

Schedule may change at the discretion of the instructor, taking into account the progress of students with the materials. Any change will be announced in class or via email through Blackboard. **Students are held responsible for all materials covered in the syllabus and for any changes that are announced in class or by email**.

It is recommended that if a grade falls below 78% that the student will arrange to meet with the faculty member. Faculty can be reached in person, by email, or during office hours to discuss grades or other classroom matters.
The student is responsible for withdrawing (W) from the class before the deadline as outlined on your registration forms. Failure to pass this class will affect your ability to progress to the next semester. Students failing or withdrawing must complete a Petition to Re-Enter.

Attendance

- A student who fails to attend the first meeting of a class or does not complete the first mandatory activity of an online class will be dropped by the instructor as of the first official meeting of the class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See general catalog for details.

- It is the responsibility of each student to attend all classes and to contact the faculty person before the start of class if there is a need to be excused from class. Students are expected to attend all classes. **Absences are limited to 1.5 hours of theory throughout the semester (equivalent to number of hours class meets in one week).** A student who reaches the maximum allowable hours of absenteeism or tardiness may be dropped by the instructor.

- Acceptance of absenteeism excuses is at the discretion of the faculty member and may result in failure of the class. Absences attributed to the representation of the college at officially approved events (conferences, contests, and fieldtrips) will be counted as "excused" absences. A student who reaches the maximum allowable number of hours absent and is not allowed to continue in class and may file a petition to reenter the nursing program. The teaching team will meet with the student to discuss remediation and the possibility of reentry.

- Students who are late for class three times will be considered absent for one day.

Classroom Etiquette

During all classroom and clinical instruction time, every person will be respected within the group and it is expected that all interactions between students, faculty, and other staff will take place professionally and courteously. It is expected that students will come prepared for class by completing reading assignments and skills practice on their own time.

- **Electronic Devices**: Cell phones and electronic devices must be turned off and put away during class unless otherwise directed by the instructor.
- **Food and Drink** are prohibited in all classrooms. Water bottles with lid/caps are the only exception additional restrictions will apply in labs. Please comply as directed.
- **Disruptive Students**: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- **Children in the classroom**: Due to college rules and state laws, no one who is not enrolled in the class may attend, including children.

Academic Honesty

- **Plagiarism** is to take and present as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to correctly "cite a source"' you must ask for help.
- **Cheating** is defined as fraud, deceit, or dishonesty in an academic assignment or using or attempting to use materials, or assisting others in using material, or assisting others in using material, which are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary action. Please refer to the General School Catalog for more information on

academic dishonesty or other misconduct. Acts of cheating include, but are not limited to the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment, (e) use of a commercial term paper service.

Additional Help – Discretionary Section and Language

- Material and testing will be done on Blackboard and you should learn the Blackboard System. Go into Blackboard and use the help for any assistance.
- Learning Center: There is the Nursing Learning center on campus to assist you through the use of computer, tutors or a combination. You will need to take the unitive to set up time with the tutors.
- Library Services: There is more to our library than just books. You have access to tutors in the learning center, study rooms for small groups and online access to a wealth of resources.

Disabled Student Programs and Services (DSPS)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. If you feel you need to be evaluated for educational accommodations, the DSP&S office is located in Building 2100, telephone 760-355-6313.

Student Counseling and Health Services

Students have counseling and health services available, provided by the pre-paid Student health Fee. We now also have a fulltime mental health counselor. For information see http://www.imperial.edu/students/student-health-center/. The IVC Student Health Center is located in the Health Science building in Room 2109, telephone 760-355-6310.

Student Rights and Responsibilities

Students have the right to experience a positive learning environment and due process. For further information regarding student rights and responsibilities please refer to the IVC General Catalog available online at http://www.edu/index/php?option=com-docman&task=doc-download&gid=4516&Itemid=762

Information Literacy

Imperial Valley College is dedicated to help students skillfully discover, evaluate, and use information from all sources. Students can access tutorials at http://www.imperial.edu/courses-and-programs/divisin/arts-and-letters/library-department/info-lit-tutorials/

Anticipated Class Schedule / Calendar

Pharmacology I Nursing 109

Date	Description	Reading is to be done prior to class so that you may be an active participant in Lecture and class activities.
2-16-2016 Week 1	**Introduction:** History of pharmacology Characteristics of the ideal drug Classification of drugs Naming drugs Connecting pharmacology to clinical nursing Drug regulations Patent medicines Drug legislation Drug standards US food and drug administration Drug approval Prescription and OTC drugs Drug schedules	**Read syllabus.** **Lehne's, (2016) Chapter 1,2,3** **ATI Pharmacology Made Easy, Introduction**
2-23-2016 Week 2	Pharmacokinetics Introduction to pharmacokinetics Primary processes of pharmacokinetics Time-response relationships	**Lehne's , (2016)** Chapter 4 **ATI Pharmacology Made Easy, Introduction**
3-1-2016 Week 3	Pharmacodynamics Inter-patient variability Therapeutic index Dose-response relationship Potency and efficacy Receptor theory Agonists and antagonists Pharmacogenetics	**Lehne's , (2016)** Chapter 5,6 **ATI Pharmacology Made Easy, Introduction**
3-8-2016 Week 4	Adverse drug effects and drug interactions Adverse drug affects Drug interactions Medication errors and risk reduction Medication errors and their impact on health care Factors contributing to medication errors Drug names and medication errors Reporting medication errors Strategies for reducing medication errors	**Lehne's, (2016)** Chapter 7 **ATI Pharmacology Made Easy, Introduction**
3-15-2016 Week 5	Pharmacology of substance abuse Fundamental concept of substance abuse Central nervous system depressant Cannabinoids marijuana, hallucinogens Central nervous system stimulants Nicotine inhalants	**Lehne's, (2016)** Chapter 37-40 **ATI Pharmacology Made Easy, Introduction**

3-22-2016 Week 6	**Test**	
4-5-2016 Week 7	Pharmacotherapy During pregnancy and lactation Rationale for drug use during pregnancy and lactation Pharmacotherapy during pregnancy Pharmacotherapy during lactation Pharmacotherapy of the pediatric patient Pharmacokinetic variables in pediatric patients Pharmacologic implications associated with growth and development Medication safety for pediatric patients Determining pediatric drug dosages Adverse drug reactions in children and promoting adherence	**Lehne's, (2016)** Chapter 9,10 ATI Pharmacology Made Easy, Introduction
4-12-2016 Week 8	Pharmacotherapy of the Geriatric Patient Polypharmacy Physiological changes related to aging Pharmacokinetic and pharmacodynamics changes in the older adult Adverse drug reactions in older adults	**Lehne's, (2016)** Chapter 11 ATI Pharmacology Made Easy
4-19-2016 Week 9	Psychosocial, gender and cultural influences on pharmacotherapy Holistic pharmacotherapy Psychosocial influences Cultural and ethnic variables Genetic influences Gender influences	**Lehne's, (2016)** Chapter 8,108 ATI Pharmacology Made Easy
4-26-2016 Week 10	Complementary and alternative therapies Type of complementary and alternative therapy History of herbal therapies Standardization of herbal products Dietary supplement regulation Herb-drug interactions Specialty supplements	**Lehne's, (2016)** Chapter 108 ATI Pharmacology Made Easy
5-3-2016 Week 11	Immunizing Agents Discovery of vaccines Vaccines and the immune system Types of vaccines General principles of vaccine administration Active immunity Passive immunity	**Lehne's, (2016)** Chapter 67,68, **ATI Pharmacology Made Easy** Develop Immunization chart for children and adults outlining important information for nurses

5-10-2016 **Week 12**	**Test**	
5-17-2016 **Week 13**	Autonomic Nervous System Cholinergic Agonist Cholinergic Antagonists Adrenergic agonists Adrenergic Antagonists	**Lehne's, (2016)** Chapter 12-19 **ATI Pharmacology Made Easy** Drug Cards: Compare/Contrast (**C/C**) **Adrenergic agent; Norepinephrin (Levophed)** ***Adrenergic blocking agent*;** ***Alpha blockers*:Prazosin(Minipress)** ***Beta blockers*: Metoprolol (Lopressor, Toprol XL)** *C/C Cholinergic Agent* (Direct acting parasympathomimetic); **Bethanechol**(Urecholine) *Cholinergic blocking agent*; **Atropine** (Atropair) ***C/C Acetylcholinesterase Inhibitor*; Donepezil (Aricept),** **Memantine(Namenda) (Group together for dementia)**
5-24-2016 **Week 14**	Pain General principles of pain management Pharmacology of acute and chronic pain Prototype drugs Morphine sulfate (Astramoph) Tramadol (Ultram) Pharmacotherapy of opioid antagonists Naloxone (Narcan)	**Lehne's, (2016)** Chapter 28-30 **ATI Pharmacology Made Easy** Drug Cards: *C/C: Opioid Agonist*; Morphine (Astromorph) *Opioid Antagonist*; Naloxene (Narcan) *C/C: NSAID*, & Acetaminophen (Tylenol){pain use}, Misc: Tramadol (Ultram)
5-31-2016 **Week 15**	Anesthetic and Anesthesia Adjuncts Types of anesthesia Principles of General Anesthesia Local anesthesia Adjuncts to anesthesia	**Lehne's, (2016)** Chapter 26,27 Drug Cards: **Amide; Local Anesthetic Lidocaine(Xylocaine)** Compare/Contrast (C/C)General Anesthetic Gas; Nitrous OxideVolatile Anesthetic; Halothane (Fluothane) IV Anesthetic; Thiopental (Pentothal) Neuromuscular Blocker; Succinylcholine (Anectine)
6-7-2016	**Final Exam**	

Pharmacologic

Drug Card Guidelines

The purpose of these drug cards is to have all students research drug classifications, outline them and then create a learning product. When these steps are taken your learning is enhanced. Compare and contrast means to look at similarities of drugs and classes of drugs compared to how they are individual (different). Any short cuts that you may take will be revealed in your clinical practice and didactic tests. **Tip : do not copy and paste to the point that you do not read or understand the material.**

All drug cards will follow the following format, or your grade will be severely impacted.

All papers will be **typed with roman or courier**, **no underlining, bold, or italics will be accepted. No pictures or designer graphics that add only looks with no informational content**. Large and small case lettering must be used as with all APA format. **Topic headers must be used** to assist in organizing the material.

All papers will have **headers on each page** with **title (drug class) and each group members name (last name) in alphabetical order**. Pages shall be **numbered** in proper sequence in **bottom right hand corner** (see page).

All papers will be in Paragraph form, no listing or outlining, unless used with appropriate APA indications.

All classifications need to be **described fully** in regards to 1**) how the class of drugs work (20%),** 2) **pharmacokinetics and half-life of the class of drugs (20%)**, 3) **pharmacodynamics (20%)** and 4) you need to evaluate the above to determine the **nurses monitoring or teaching priorities (40%).**

Remember, you only need to explore the drug classification. Individual drugs need not be explored in this format, unless specifically requested. Many of the classifications are explained by using a drug prototype. You may also use this drug in your explanation (Beta Blockers = Inderal).