# **Basic Course Information**

Semester:	Spring 2018	Instructor Name:	R. Fitzsimmons FNP,BC,MSN P. Colio MSN, ENP-C, FNP-C, CCRN
Course Title & #:	· •	Email:	rick.fitzsimmons@imperial.edu
	Nursing 123 Pharmacology II		pedro.colio@imperial.edu
CRN #:	21150	Webpage (optional):	Canvas
Classroom:	2150	Office #:	RF 2129/PC 2134
Class Dates:	February 12, to June 5, 2018	Office Hours:	Posted on Office Door
Class Days:	Tuesday	Office Phone #:	RF 355-6421/ PC 355-6422
Class Times:	1400-1530	Emergency Contact:	Nursing Office
Units:	1.5		

#### **Course Description**

The course addresses the principles of medication therapy for acute and complex conditions including the effects, actions, algorithms and recommended use of drugs in the treatment of complex patient problems. Safe administration practices and reduction of medication errors will be covered. The student will learn to manage complex medication administration through various routes including intravenous routes. Nursing actions and rationale for nursing actions are explored. Clinical application is integrated into the clinical nursing courses.

## Course Prerequisite(s) and/or Corequisite(s)

Nursing 127 Medical Surgical Nursing I & Nursing 128 Nursing Care Childbearing Family

#### **Student Learning Outcomes**

- Identify the mechanism of action, use, side effects and nursing interventions of medications for the allergic rhinitis, cold & flu, asthma & pulmonary disorders, bone & joint diseases, seizures, anxiety/mood disorders & CNS stimulants, Psychoses, CNS Diseases, neuromuscular disorders, shock, CHF, Angina/MI, Dysrhythmias, hematopoietic disorders, immune system modulation antiviral/antibiotics, GI and endocrine by passing the final with a 75 percent or better.
- The student will be able to apply pharmacological principles in the care of patients by passing the ATI Pharmacology test in the 3<sup>rd</sup> semester and the pharmacology aspect of the ATI predictor with a raw score of 70% or better on both tests.

#### **Course Objectives**

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

- 1. Describe the anatomy and physiology of the CNS, cardiovascular, pulmonary, immune, GI and endocrine systems.
- 2. Discuss the rationale and benefits of the major classifications of medications by the system they affect and considering oral versus infusion therapy.
- 3. Discuss the mechanism of action, use, side effects, and nursing intervention of medications for the CNS, cardiovascular, pulmonary, immune, GI and endocrine systems.
- 4. Explain legal implication related to medication administration by the major classifications of medications covered; i.e., CNS, cardiovascular, pulmonary, immune, GI and endocrine systems.

- 5. Describe the major classifications of medications as they relate to specific body systems for patients of all ages with acute and complex conditions.
- 6. Demonstrate understanding of cultural-psycho social aspects of client care related to patient teaching compliance in administration of the major classifications of medication.

Textbooks	Textbooks & Other Resources or Links				
Author	ISBN	Title	Edition	Year	Publisher
Burchum &	978-0-32332190-7	Lehne's Pharmacology for	9th	2016	Elsevier
Rosenthal		Nursing Care			

# **Course Requirements and Instructional Methods**

A. Hours

NS123 is a 1.5 unit theory course. Lectures are held 1.5 hours per week.

#### **B. 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.

Plagiarism and cheating policies noted in the student handbook and IVC policies will be strictly enforced. Students are expected to develop original work for this course. It is recommended that students visit the college library to become acquainted with research tools available.

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.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

# **Course Grading Based on Course Objectives**

Students must maintain a "C" average grade as determined by the scale below:

A = 92-100% B = 83-91% C = 78-82% D = 68-78% 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 corequisite courses. The course grade will be computed as follows 60% will come from an average of all assignments prior to the final exam, 10% from homework (take home quizzes), and 30% of the course grade will come from the final exam.

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 78% or greater.
- C. Take home quizzes

D. 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.

#### 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 that 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 1.0 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 lids/caps are the only exception. Additional restrictions will apply in labs. Please comply as directed by the instructor.
- 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.

# **Online Netiquette**

- What is netiquette? Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.
- Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons

(emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

# Academic Honesty

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting 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 "cite a source" correctly, 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 materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing 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 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) using a commercial term paper service.

#### **Additional Student Services**

Imperial Valley College offers various services in support of student success. The following are some of the services available for students. Please speak to your instructor about additional services which may be available.

- CANVAS LMS. Canvas is Imperial Valley College's main Learning Management System. To log onto Canvas, use this link: Canvas Student Login. The Canvas Student Guides Site provides a variety of support available to students 24 hours per day. Additionally, a 24/7 Canvas Support Hotline is available for students to use: 877-893-9853.
- Learning Services. There are several learning labs on campus to assist students through the use of computers and tutors. Please consult your Campus Map for the Math Lab; Reading, Writing & Language Labs; and the Study Skills Center.
- Library Services. There is more to our library than just books. You have access to tutors in the Study Skills 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. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodations.

## **Student Counseling and Health Services**

Students have counseling and health services available, provided by the pre-paid Student Health Fee.

- Student Health Center. A Student Health Nurse is available on campus. In addition, Pioneers Memorial Healthcare District provide basic health services for students, such as first aid and care for minor illnesses. Contact the IVC Student Health Center at 760-355-6128 in Room 1536 for more information.
- Mental Health Counseling Services. Short-term individual, couples, family and group counseling services are available for currently enrolled students. Services are provided in a confidential, supportive, and culturally sensitive environment. Please contact the IVC Mental Health Counseling Services at 760-355-6310 or in the building 1536 for appointments or more information.

# Veteran's Center

The mission of the IVC Military and Veteran Success Center is to provide a holistic approach to serving military/veteran students on three key areas: 1) Academics, 2) Health and Wellness, and 3) Camaraderie; to serve as a central hub that connects military/veteran students, as well as their families, to campus and community resources. Their goal is to ensure a seamless transition from military to civilian life. The Center is located in Building 600 (Office 624), telephone 760-355-6141.

## **Extended Opportunity Program and Services (EOPS)**

The Extended Opportunity Program and Services (EOPS) offers services such as priority registration, personal/academic counseling, tutoring, book vouchers, and community referrals to qualifying low-income students. EOPS is composed of a group of professionals ready to assist you with the resolution of both academic and personal issues. Our staff is set up to understand the problems of our culturally diverse population and strives to meet student needs that are as diverse as our student population.

Also under the umbrella of EOPS our CARE (Cooperative Agency Resources for Education) Program for single parents is specifically designed to provide support services and assist with the resolution of issues that are particular to this population. Students that are single parents receiving TANF/Cash Aid assistance may qualify for our CARE program, for additional information on CARE please contact Lourdes Mercado, 760-355- 6448, <u>lourdes.mercado@imperial.edu</u>. EOPS provides additional support and services that may identify with one of the following experiences:

- Current and former foster youth students that were in the foster care system at any point in their lives
- Students experiencing homelessness
- Formerly incarcerated students

To apply for EOPS and for additional information on EOPS services, please contact Alexis Ayala, 760-355-5713, <u>alexis.ayala@imperial.edu</u>.

## **Student Equity Program**

The Student Equity Program strives to improve Imperial Valley College's success outcomes, particularly for students who have been historically underrepresented and underserved. The college identifies strategies to monitor and address equity issues, making efforts to mitigate any disproportionate impact on student success and achievement. Our institutional data provides insight surrounding student populations who historically, are not fully represented. Student Equity addresses disparities and/or disproportionate impact in student success across disaggregated student equity groups including gender, ethnicity, disability status, financial need, Veterans, foster youth, homelessness, and formerly incarcerated students. The Student Equity Program provides direct supportive services to empower students experiencing insecurities related to food, housing, transportation, textbooks, and shower access. We recognize that students who struggle meeting their basic needs are also at an academic and economic disadvantage, creating barriers to academic success and wellness. We strive to remove barriers that affect IVC students' access to education, degree and certificate completion, successful completion of developmental math and English courses, and the ability to transfer to a university. Contact: 760.355.5736 or 760.355.5733 Building 100.

 The Student Equity Program also houses IVC's Homeless Liaison, who provides direct services, campus, and community referrals to students experiencing homelessness as defined by the McKinney-Vento Act. Contact: 760.355.5736 Building 100.

## **Student Rights and Responsibilities**

Students have the right to experience a positive learning environment and to due process of law. For more information regarding student rights and responsibilities, please refer to the IVC General Catalog.

#### Information Literacy

Imperial Valley College is dedicated to helping students skillfully discover, evaluate, and use information from all sources. The IVC Library Department provides numerous Information Literacy Tutorials to assist students in this endeavor.

# Anticipated Class Schedule/Calendar

## Pharmacology II Nursing 123

Date	Description	Reading is to be done prior to class so that you may be an active participant in Lecture and class activities.
2-13 Week 1	Introduction:	Read syllabus.
Fitzsimmons	Allergic Rhinitis and Cold& Flu preparations	<ul> <li>Lehne, Ch 70,77 ATI Pharm made easy: Respiratory</li> <li>Drug Cards:</li> <li>C/C: H1-receptor Antagonist (First-gen); Diphenhdramine (Benadu H1- Blocker (Second Gen); Fexofenadine (Allegra)</li> <li>Leukotriene Receptor Antagonist: Montelukast (Singular)</li> <li>C/C Decongestant/Sympathomimetic; Oxymetazoline (Afrin)</li> </ul>
	Asthma& Pulmonary Disorders	<ul> <li>Expectorant; Guaifensin (Robitussin, Mucinex)</li> <li>Lehne, Ch. 76.</li> <li>Drug Cards:</li> <li>C/C: AsthmaBronchodilator/Beta2 adrenergic Agonist;</li> <li>Albuterol(Proventil, Ventilin, ProAir)</li> <li>Bronchodilator/Anticholinergic; Ipratropium Bromide (Atrovent)</li> <li>Xanthine Derivatives: Theophylline (Theo-Dur)</li> <li>Inhaled/nasal Glucocorticoid; Fluticasone (Flovent)</li> </ul>
2-20 Week 2 Fitzsimmons	Bone and Joint Disorders	Lehne, Ch 71,72,73,74. ATI Pharm: Musculoskeletal         Drug cards:         C/C: NSAID's Salicylate; Aspirin (Acetysalicylic Acid),         Celecoxib(Celebrex), Ibuprofen (motrin) (Group all NSAIDs together         in one card)         C/C: Uric Acid inhibitor Colcrys(Colchicine) Allopurinol (Zyloprim)         (Group together as Gout drugs)         C/C:Miscellaneous immunomodulating: Etanercept(Enbrel)Diseas:         modifying antirheumatic Drug;         Hydroxychoroquine Sulfate (Plaquenil)
2-27 Week 3 Colio	Seizures/Epileptic Anxiety/ Mood Disorders& CNS stimulants	Lehne, Ch 24 ATI Pharm Made Easy: Neurological <i>C/C: Barbiturate;</i> Phenobarbital (Luminal) <i>Hydantion;</i> Phenytoin (Dilantin) <i>Iminostilbenes:</i> Carbamazepine (Tegratol) <i>Miscellaneous antiepileptic</i> : Levetiracetam(Keppra)

		Lehne, Ch 32, 33, 35,36
		C/C:Benzodiazepine; Lorazepam (Ativan)
		Miscellaneous: Buspirone(Buspar)
		C/C: Drug cards: Selective Serotonin Reuptake inhibitor (SSRI); Escitalopram(Lexapro)/ Tricyclic Antidepressant; Imipramine (Tofranil) Tetracyclics: Atypical Antidepressant: Bupropion (Wellbutrin) Serotonin-norepinephrine reuptake inhibitor (SNRI):Duloxetine (Cymbalta) C/C: Monoamine Oxidase Inhibitor; Phenelzine (Nardil)
		Drug for Bipolar Disorder (Mood Stabilzers);
		Lithium (Lithobid);
		<i>C/C: CNS stimulant</i> ; Compare Methylphenidate (Ritalin) with
		Amphetamine aspartate (Adderall)
3-6	Drugs for Psychoses	Lehne, Ch 31 ATI Pharm Made Easy: Neurological
Week 4 Colio		Drug Cards
Cono		C/C: Phenylbutylpiperidines: Haloperidol (Haldol)
	Drugs for CNS disease	Atypical Antipsychotic; Dibenzodiazepines: Quetiapine (Seroquel): Quinolinone: Aripiprazole(Abilify) (Group all 3 together in one card Lehne, Ch 21
		C/C: Dopaminergic Agent; Levodopa (Larodopa)
		Cholinergic Blocker; Benztropine (Cogentin)
		COMT inhibitors: Tolcapone (Tasmar)
		<i>MAO-B inhibitors</i> : Selegiline (eldepryl)
		Nondoamine dopamine receptor agonists: Pramipexole (Mirapex) (Group all Parkinson drugs together)
3-13	Neuromuscular Disorders	Lehne, Ch 25
Week 5 Colio	Insomnia	Drug cards: C/C: { <i>Centrally acting Muscle relaxant</i> ; Cyclobenzaprine (Flexeril); Direct- <i>acting Antispasmodic</i> ; Dantrolene Sodium (Dantrium);
	Take Home Quiz #1 Due (week 1-5) Submit on	Lehne, Ch 34
	<u>Canvas</u>	C/C: [Sedative- <i>Hypnotic</i> Benzodiazepines: <i>Long acting</i> ; Flurazepam
		(Dalmane) Short acting: Temazepam (Restoril); Nonbenzodiazepine
		CNS depressant; Zolpidem(Ambien)]
<mark>3-20</mark> Week 6	Test 1	All Units covered
3-27	Cardiovascular Drugs	Lehne, Ch 41, 43, 44, 45, 46, 47
Week 7 Colio		Renin blocker, C/C: Direct Renin Inhibitor: aliskiren,;ACE, enalapril ARB, losartan;, C/C: Adrenergic drugs, clonidine, Doxazosin, nebivo C/C: CCB; nifidepine, verapamil; Vasodilator: Sodium nitroprusside Nitroglyceerin, (Nitrostat) C/C: Diuretics: hydrpchlorothizaide, furosemide

4-10	CHF	Lehne, Ch 48 ATI Pharm Made easy: Cardiovascular
Week 8		Drug Cards:
Colio		Cardiac Glycoside; Digoxin(Lanoxin)
	Angina/MI/Coagulation	<i>C/C: B-type natriuretic peptide:</i> Nesiritide (Natreor)
		Phosphodiesterase Inhibitor; Milrinone (Primacor)
		Lehne, Ch 50,51,52,53
		Drug Cards: C/C: atrorvastatin, gemfibrozil, cholestryramine, niacir
		Drug Cards: C/C: Warfarin; Dabigatran Etexilate; Heparin, enoxapaı alteplase, C/C: aspirin, clopidogrel
4-17	Dysrhythmias/Shock	
Week 9		Lehne, Ch. 49 ATI Pharm made easy: Cardiovascular
Colio		Drug Cards: C/C: [Sodium Channel Blocker/Class 1A; Procainamide;
		<i>Class 1b:</i> Lidocaine; <i>Class 1c:</i> Propafenone (Rythmol)(Group these 3
		together)]
		<i>C/C: Beta-adrenergic Antagonist/Class II</i> ; esmolol
		(Brevibloc) <i>Potassium Channel Blocker/Class III</i> ; Amiodarone (Cordarone) <i>Calcium Channel Blocker/Class IV</i> ; Verapamil (Calan)
4-24	Hematopoietic Disorders	
4-24 Week 10		Lehne, Ch. 55,56
Colio	Take Home Quiz #2 Due (week 7-10) Submit on	Drug cards:
	Canvas	C/C: Hematopoietic Growth Factor; Epoetin (Epogen)
		Colony-stimulating Factor; Filgrastim (Neupogen)
		Anemia: C/C: Vit B 12, Iron supplement; Ferrous Sulfate
5-1	Test 2	All units covered
Week 11		
5-8	Chemotherapy of Infectious Disease	Lehne, 83,84,85,86,87,88,89,91,
Week 12		Drug Cards: Antibiotics
Fitzsimmons		<i>Sulfonamides</i> ; Sulfamethozazole/trimethoprim (Bactrim/Septra)
		Compare/Contrast (C/C): Penicillin:Amoxicillin (Amoxil)
		Cephalosporins: 1 <sup>st</sup> gen:3 <sup>rd</sup> gen Ceftriaxone (Rocephin) Carbapenem:
		Imipenem/cilastatin (Primaxin)
		C/CMacrolides: Erythromycin (E-mycin)
		Tetracyclines: Doxycycline (Doryx)
		Amionoglycosidees: Gentamicin (Garamycin)
		Quinolones: Ciprofloxacin (Cipro)
		Miscellaneous: C/C: Clindamycin (Cleocin)
		Linezolid (Zyvox). Metronidazole (Flagyl)
		Vancomycin(Vancocin)
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5-15 Week 13 Fitzsimmons	Chemotherapy of Infectious Disease	Lehne, 90,92,93,94,95,96 <i>C/C: NRTI</i> ; Zidovudine(Retrovir, <i>NNRTI</i> ; Nevirapine (Viramune), <i>Protease Inhibitor</i> ; Saquinavir (Invirase), <i>Antiviral</i> ; Acyclovir(Zovira Drug Card: C/C: Antitubercular: isoniazid (INH); ethambutol(myambutol), rifampin(Rifadin)(Group TB together) C/C:Antifungal: Amphotericin B, Fluconazole (Diflucan), terbinafine (Lamisil),
5-22 Week 14 Fitzsimmons	GI	Lehne, Ch 78, 79, 80 Drug Cards: C/C: Antacids, cimetidine, lansoprazole, , sucralfate, C/C:diphenoxylate with atropine, lactobacillus, C/C:lactulose, polyethylene glycol, Drug Cards: C/C anitemetics: Metoclopramide, ondansetron, scopolamine:
5-29 Week 15 Fitzsimmons	Endocrine <u>Take Home Quiz #3 Due (week 12-15) Submit on</u> <u>Canvas</u>	Lehne Ch, 57 Drug Cards: C/C,Glipizide, metformin, pioglitazone (actos),C/C:Sitagliptin (Januvia ) Exenatide (Byeta); Dapaglifozin C/C: insulin (NPH & Reg, & Lispro), glargine
5-5 Week 16	Final Exam	