

<b>Prof:</b>	William Ogilvie Room 403, D'Iorio Hall	
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<b>Web Site:</b>	Available through Virtual Campus.	
<b>Discussion:</b>	A discussion group is available through Virtual Campus for any aspect of the course (lectures, readings).	
<b>Office Hours:</b>	Wednesdays 14:30 – 15:30 Fridays 13:00-14:00 (If you can't make it during these hours, please make an appointment by e-mail)	
<b>Lectures:</b>	Mondays 17:30-19:00 MRN 150 Wednesdays 17:30-19:00 MRN 150	
<b>Assessment:</b>	<b>Mid Term 1:</b> Wednesday, January 29	<b>10% - 30%</b>
	<b>Mid Term 2:</b> Wednesday, March 4	<b>10% - 30%</b>
	<b>Final Exam:</b>	<b>40% - 80%</b>
	<b>Total:</b>	<b>100%</b>
<b>Bonus:</b>		<b>+ 1%</b>

**Absence from a mid-term without an approved exemption will result in a grade of 0. If you miss a test contact me immediately to arrange a make-up test.**

**The final exam is cumulative.**

### ***Course Outline***

- 1) Pharmaceutical industry and regulatory agencies
  - a. Folk remedies, traditional medicine, drugs in the 1800's, start of modern drug industry
  - b. Roles of regulatory agencies, historical background and modern structure
  - c. Relationship between companies, government, physicians and consumers
  - d. Generic and ethical pharmaceutical companies
- 2) Pain relievers
  - a. OTC pain relievers, dosages, side effects, labelling
  - b. Aspirin, Tylenol, Ibuprofen, Mechanism of action
  - c. Sources of drugs, artificial drugs
  - d. Origins of side-effects
  - e. Generic vs. name brand medications
  - f. Headaches, types of headaches and medications
  - g. Migraine drugs
- 3) Cold medications
  - a. Causes of colds
  - b. Cold medications, decongestants, cough remedies, control of fever
  - c. Appropriate medications, purchasing medication for colds
  - d. Influenza, medications, issues
- 4) Cancer
  - a. Development of cancer in the body, sources of cancer
  - b. Risk factors for cancer
  - c. Types of chemotherapy, risks and benefits, sources of side effects
- 5) Drugs in Sports
  - a. Performance enhancing drugs, steroids, stimulants
  - b. Health consequences of sports drug use
  - c. Drug detection methods, drug masking methods
  - d. Blood doping, Recombinant drugs
- 6) Antibiotics
  - a. History, impact on health

- b. Basis of action, types of antibiotics
  - c. Selectivity, side effects
  - d. Resistance, development of modern antibiotics
- 7) Tobacco
- a. Effects of nicotine
  - b. Cigarette as a drug delivery device
  - c. Health effects of smoking
  - d. Smoking cessation drugs
  - e. Vaping, comparison to cigarettes, known risks
  - f. Marijuana, side effects, risks of smoking and vaping, edibles
- 8) Vaccines
- a. How they work, applicable diseases
  - b. Historical and present issues
  - c. Types of vaccines
  - d. Politics of vaccine use, fear of vaccines
- 9) Heart and Circulation
- a. Cardiac illness, circulation problems
  - b. Risk factors and sources of damage,
  - c. Cholesterol, HDL and LDL
  - d. Cholesterol drugs, anti-inflammatory drugs, mechanisms, risks and benefits
  - e. Blood pressure treatments
- 10) Drugs for Mental Illness
- a. History of treatments, discovery of first drugs
  - b. Schizophrenia, depression, obsessive compulsive disorder, bipolar disorder, anxiety
  - c. Classes of prescription medications, major side effects, efficacy of drugs
  - d. Placebo effects
  - e. Drug development challenges
- 11) Allergy
- a. Basis and mechanism of allergy, substance sensitivity, sources of allergy
  - b. Identifying allergy
  - c. Allergy medications, side effects
  - d. Generic vs. name brand allergy medications
  - e. Prescription medications
- 12) Street Drugs
- a. Opioids, cocaine, methamphetamine, hallucinogens, ecstasy, designer drugs, fentanyl, bath salts, Demerol, smart drugs
  - b. Effects, side effects, sources, risks
  - c. Counterfeit drugs
- 13) Nutraceuticals and Homeopathy
- a. Nutraceuticals, “natural” medications, folk remedies
  - b. Risks
  - c. Industry practices, interactions with prescription drugs, government regulation
  - d. Adulterated products, counterfeit drugs, internet marketing
  - e. Homeopathy, effects of dilution, biological response and concentration
- 14) Sex and Drugs
- a. Changes in body chemistry during relationships
  - b. Aphrodisiacs
  - c. Erectile dysfunction