COMMON COURSE OUTLINE: Course discipline/number/title: HS 1740: Pharmacology of Addiction

A. CATALOG DESCRIPTION
1. Credits: 2
2. Hours/Week: 2
3. Prerequisites (Course discipline/number): ENGL 1117
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course provides an overview of the pharmacological aspects of alcohol and drug addiction, including prime effects and side effects of mood altering drugs. The mood altering drug categories, routes of administration, and the physical and psychological effects of drugs are addressed.

B. DATE LAST REVISED (Month, year): April, 2013

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Overview of drug problem and psychopharmacology
2. Drug monitoring
3. Ethical and legal standards
4. How drugs work and act in the body/brain
5. Brain structures and their function
6. Drug effects, drug safety and effectiveness, does response relationship and routes of administration
7. Pharmaceutics of illegal/legal drugs, supplements, herbal meds, pills and MH medication
8. Tranquilizers, Antidepressant drugs, hypnotic, anxiolytic (NSAIDs), Opioid analgesics
   a) Discuss history and psychopharmacology aspects of Caffeine and Nicotine
   b) Cocaine, amphetamines, and non-amphetamine
   c) Ethyl Alcohol, inhalants, Cannabinoid, Psychedelic Drugs, anabolic steroids
   d) Child/adolescent, adult, and geriatric psychopharmacology
9. Psychopharmacology and psychological treatment options in patient care

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Define and discuss biopsychosocial historical perspectives in drug use and abuse.
2. Explain the history of psychopharmacology.
3. Differentiate different drug monitoring techniques.
4. Summarize how drugs word in the body and brain.
5. Define and explain categories of toxicity, chemical messengers, pharmacokinetics, and body barriers.
6. Understand drug safety, effectiveness, dose responses, and routes of administration.
7. Discuss function of neurons, neurotransmission, receptors, and neurotransmitters.
8. Explain absorption, distribution, termination, and elimination process of drugs.
9. Define and explain the drug monitoring and half-life of drugs.
10. Describe tolerance, physical dependence, and psychological dependence.
11. Identify and explain how drugs work in the body.
12. Hypothesize the need for chemical communication within the body and know the similarities and differences between hormonal and neural communication.
13. Examine how neurotransmitter chemicals are released from neurons and from what parts, and understand the reactions with receptors.
14. Identify major structural parts of the brain and some of the chemical pathways along with the general functions served by each path or pathway and or their mechanisms of action.
15. Determine the functions of common neurotransmitters
16. Describe the five major categories of psychoactive drugs
17. Recapitulate how the route of administration, drug distribution, and processes of drug removal are reflected in the time course of a drug's action.
18. Discuss the biopsychosocial and psychopharmacological issues associated with all drugs of abuse
19. Differentiate intoxication/withdrawal, and side effects of common drug of abuse
20. Recap the history, origin and pharmaceutical treatments of all psychological disorders
21. Identify which medications are used for which psychological disorders and the potential side effects of using and mixing medications.
E. **LEARNING OUTCOMES (MNTC):** NA

F. **METHODS FOR EVALUATION OF STUDENT LEARNING:**
   1. Research or reflection papers
   2. Quizzes
   3. Group activities
   4. Objective examinations
   5. Interpersonal counseling interviews
   6. Presentations
   7. Case studies
   8. Resource projects
   9. Online interactions

G. **RCTC CORE OUTCOME(S) Addressed:**
   - Communication
   - Critical Thinking
   - Global Awareness/Diversity
   - Civic Responsibility
   - Personal/Professional Accountability
   - Aesthetic Response

H. **SPECIAL INFORMATION (if any):** None