COMMON COURSE OUTLINE: Course discipline/number/title: HLTH 1132: Drug Use and Abuse

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

This course allows students to explore many of the historical and current patterns associated with the use of drugs in our society and other cultures and societies of the world. Discussions will include the social, legal, medical, psychological, and rehabilitative aspects of drug use. Health risks and implications surrounding drug use and HIV and AIDS will also be covered. Students will examine their attitudes, values, and assumptions concerning drug use. RECOMMENDED ENTRY SKILLS/KNOWLEDGE: College level reading.

a) DATE LAST REVISED (Month, year): February, 1997

b) OUTLINE OF MAJOR CONTENT AREAS:
1. Drug Use in Modern Society
   a) Drug Use Overview
      1. The drug problem
      2. How did we get here?
      3. Drugs and drug use today
   b) Drug Use as a Social Problem
      1. Laissez-Faire
      2. Toxicity Drug addiction
      3. Crime and Violence
      4. Why we try to regulate drugs?
   c) Drug Regulations
      1. The beginnings
      2. Regulating Pharmaceuticals
      3. Narcotics, dangerous drugs, and controlled substances
      4. Stat and local regulations
      5. Federal support for urine screening
2. How Drugs Work
   a) The Nervous System
      1. Chemical messengers
      2. The nervous system
      3. The brain
      4. Drugs and the brain
      5. Chemical theories of behavior
      6. Modern brain imaging techniques
   b) The Actions of Drugs
      1. Drugs
      2. Drug Effects
      3. Getting the drug to the brain
      4. Drug deactivation
      5. Mechanisms of tolerance and physical dependence
3. Uppers and Downers
   a) Stimulants
      1. Cocaine
      2. Amphetamines
   b) Depressants
      1. History and Pharmacology
      2. Mechanism of Action
      3. Beneficial Uses
      4. Causes for Concern
C. OUTLINE OF MAJOR CONTENT AREAS: Continued.

c) Drugs for Mental Illness
   1. Mental Illness
   2. Treatment of Mental Disorders
   3. Antipsychotics
   4. Consequences of Drug Treatments

4. Alcohol
   a) Alcohol in the Body
      1. Alcoholic beverages
      2. Alcohol as a consumer item
      3. Alcohol pharmacology
      4. Alcohol toxicity
   b) Alcohol and Society
      1. Alcohol Use and the Alcohol Problem
      2. Who drinks and why?
      3. Social problems
      4. Who is an alcoholic?

5. Familiar Drugs
   a) Nicotine
      1. Tobacco
      2. Current tobacco products
      3. A social and economic dilemma
      4. Causes for Concern
      5. Pharmacology of nicotine
      6. Behavior effects
      7. Smoking – how not to
   b) Caffeine
      1. Plants containing caffeine
      2. Other sources of caffeine
      3. Caffeine pharmacology
      4. Causes for concern
   c) Over-the-Counter Drugs
      1. FDA regulation of OTC products
      2. OTC versus prescription drugs
      3. Some psychoactive OTC products
      4. Analgesics
      5. Cold and allergy products
      6. Choosing an OTC product

6. Restricted Drugs
   a) Narcotics
      1. History
      2. Pharmacology of the narcotics
      3. Beneficial uses
      4. Cause for concern
   b) Hallucinogens
      1. Animism and religion
      2. Terminology and types
      3. Indole hallucinogens
      4. Catechol hallucinogens
      5. Anticholinergic hallucinogens
   c) Marijuana and Hashish
      1. Cannabis
      2. History
      3. Pharmacology
      4. Medical uses of cannabis
      5. Causes for Concern
      6. Marijuana and American society
C. OUTLINE OF MAJOR CONTENT AREAS: Continued. . .
   d) Steroids and Other Drugs in Sports
      1. Historical use of drugs in athletics
      2. Stimulants as performance enhancers
      3. Steroids
      4. Other hormonal manipulations

7. Reducing the Demand
   a) Drug Education and Prevention
      1. Defining goals and evaluating outcomes
      2. Stages of prevention
      3. Prevention programs in the schools
      4. Peers, Parents, and the Community
      5. What should we be doing?

   b) Substance Abuse and Treatment
      1. Defining Goals and evaluating outcomes
      2. Treating alcoholism
      3. Treatment of narcotic addicts
      4. Treatment approaches applicable to various substances
      5. Cocaine treatment

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
   1. Discuss the definition of the term “drug” and distinguish among illicit drug use, deviant drug use, drug abuse, and addiction.
   2. State four general principles about psychoactive drug effects.
   3. Describe four pharmacological revolutions that have altered our thinking about drugs and discuss the impact of recent cultural changes on drug use.
   4. Explain what is meant by laissez-faire and victimless crimes and give three general motivations for societal regulations on drug use.
   5. Define four categories of toxicity and give an example of each.
   6. Define each of the following terms: tolerance, physical dependence, and psychological dependence.
   7. Discuss the historical factors that led to the passage of the 1906 and 1914 laws that are the basis for our current federal drug regulations.
   8. Describe the process by which a drug company works with the FDA to bring a new drug to market.
   9. Explain the need for chemical communication within the body and know the similarities and differences between hormonal and neural communication.
   10. Describe how neurotransmitter chemicals are released from neurons and from what parts, and understand their interaction with receptors.
   11. Name a few of the major structural parts of the brain and some of the chemical pathways along with the general functions served by each path or pathway.
   12. Discuss the plant origins of most drugs.
   13. Describe the five major categories of psychoactive drugs and give and example of each.
   14. Explain how the route of administration, drug distribution, and processes of drug removal are reflected in the time course of a drug’s action.
   15. Discuss the history of the origin and early uses of both cocaine and amphetamine.
   16. Describe the beginning of legal restrictions on cocaine and amphetamine and the interaction between the two in terms of illicit use over the years.
   17. Discuss how these drugs work in the brain and how their chemical structure relates to their mechanism of action
   18. Describe the sources of illicit supply for each drug and the current trends in illicit use.
   19. Explain the mechanism of action of the barbiturates and the benzodiazepines in relation to the neurotransmitter GABA.
   20. Discuss the ability of these drugs to produce both psychological and physical dependence and describe the withdrawal syndrome.
   21. Describe the major symptoms associated with anxiety disorders, psychosis, and the mood disorders.
   22. List the names of some of the antipsychotic and antidepressant drugs and know how they work and how effective they are.
   23. Explain how alcohol is absorbed and broken down in the body an how blood alcohol level relates to changes in behavior.
   24. Describe what is meant by FAS and FAE and discuss the issue of a “safe” level of drinking pregnancy.
   25. Describe the history of alcohol use and its regulation in the United States.
D. **LEARNING OUTCOMES (GENERAL):** Continued... The student will be able to:
26. Describe some of the important social problems related to alcohol use.
27. List fact about the consequences of smoking for cancer, heart disease, obstructive lung disease, and pregnancy.
28. Explain the concerns that have been expressed about caffeineism and the potential toxicity of caffeine.
29. Describe the process by which the FDA has reviewed OTC products for safety and effectiveness.
30. Discuss the effects of three types of OTC psychoactive drugs: stimulants, weight-control products, and sedatives.
31. Discuss the opium poppy as the original source of narcotic drugs and describe the history of this important plant substance.
32. Describe how narcotic addiction has changed over the years up to the present.
33. Explain why psychoactive drugs have played an important role in many of the world’s religions.
34. Identify the psychological similarities between the indole and catechol hallucinogens and describe the current scientific attitude about how they work in the brain.
35. Describe the absorption, distribution, and metabolism of THC.
36. Discuss the current status of medical uses for marijuana.
37. Describe the historical development of the use of performance-enhancing drugs by athletes and of attempts to regulate drug use by athletes.
38. Identify major concepts and terms such as ergogenic aids and anabolic and androgenic steroids.
39. Describe what experimental research and experience tells us about the effects of anabolic steroids on muscular development and strength as well as the side effects and dangers of anabolic steroids.
40. Describe the evolution of prevention models used in public schools from the 1960s to the 1990s.
41. Explain how approaches involving peers, families, and other community agencies can be used to strengthen school-based approaches.
42. Describe some of the history, current approaches, and controversies involved in treatment of alcoholism and narcotic addiction.
43. Discuss the current research on HIV and its relationship to AIDS.
44. Describe the use of drug combinations used in treating HIV and their relationship to the existence of AIDS in a patient.
45. Evaluate current research on the occurrence of AIDS and HIV in relation to ethnic groups, societies and countries.
46. Discuss the relationship of the occurrence of HIV and AIDS to the use and/or abuse of drugs in our society.

E. **LEARNING OUTCOMES (MNTC):** NA

F. **METHODS FOR EVALUATION OF STUDENT LEARNING:**
1. Objective tests
2. Essay tests
3. Group discussion
4. Panel discussion
5. Debate
6. Class participation
7. Term papers
8. Short answer tests
9. Position paper
10. Oral exams
11. Writing assignments

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