COURSE TITLE & NUMBER: Chemical Awareness: HLTH 1050  
CREDITS: 3 (3 Lec /0 Lab)  
PREREQUISITES: None

CATALOG DESCRIPTION:  
Chemical Awareness examines the history, pharmacology, and physical and psychological aspects of drug abuse. The class provides an opportunity for candid and open discussions on social, legal, political and philosophical questions associated with the use of various drugs.

OUTLINE OF MAJOR CONTENT AREAS:  
1. Drug use overview  
   A. Basic definitions  
   B. Drug classifications  
   C. Health consequences  
   D. Social consequences  
   E. Drug policy  
   F. Current use and trends  
2. Correlates of drug use  
   A. Risk and protective factors  
   B. Race  
   C. Gender  
   D. Level of education  
   E. Personality variables  
   F. Genetics  
3. Pharmacology  
   A. Administration of drugs  
   B. Drug distribution and elimination  
   C. Drug actions  
   D. Factors influencing drug actions  
   E. Nervous system  
      1. Nerve cell  
      2. Neurotransmitters  
      3. Drugs and synaptic transmission  
   F. Brain  
      1. Medulla oblongata  
      2. Cerebellum  
      3. Thalamus  
      4. Hypothalamus  
      5. Limbic system  
      6. Cerebrum
G. Drugs and other body systems
   1. Cardiovascular-renal system
   2. Endocrine system
   3. Digestive system
   4. Respiratory system
H. Placebo effect

4. Alcohol
   A. Historical and cultural aspects
   B. Personal and social uses
   C. Alcoholic beverages
   D. Alcohol pharmacology
      1. Absorption
      2. Distribution
      3. Metabolism
      4. Mechanisms of action
   E. Behavioral effects
   F. Alcohol toxicity
   G. Fetal alcohol syndrome
   H. Alcohol dependence
      1. Causes
      2. Signs and symptoms
      3. Treatment

5. Narcotics
   A. General characteristics and effects
   B. Natural narcotics
   C. Semisynthetic narcotics
   D. Synthetic narcotics
   E. Endogenous narcotics
   F. Historical and legal perspectives
   G. Treatment

6. Sedative-hypnotics
   A. General characteristics and effects
   B. Historical perspectives
   C. Barbiturates
   D. Nonbarbiturate sedative-hypnotics
   E. Self care for inducing sleep
   F. Minor tranquilizers
   G. Inhalants

7. Tobacco
   A. General characteristics and effects
   B. Patterns and trends of tobacco use
   C. Psychological aspects of smoking
   D. Health consequences
   E. Passive smoking
   F. Smoking and diseases
      1. Cardiovascular diseases
      2. Lung cancer
3. Emphysema
4. Chronic bronchitis

G. Smokeless tobacco

8. Stimulants
   A. General characteristics and effects
   B. Cocaine and crack
      1. Historical and legal aspects
      2. Medical uses
      3. Patterns of use
      4. Effects
   C. Amphetamines
      1. Historical and legal aspects
      2. Medical uses
      3. Patterns of use
      4. Effects
   D. Caffeine
      1. Historical aspects
      2. Sources
      3. Effects
      4. Dependence
      5. Intake recommendations
   E. Ephedrine

9. Psychedelics and phencyclidine
   A. General characteristics and effects
   B. Historical aspects
   C. Types of psychedelic experiences
   D. Types of psychedelics
      1. Lysergic Acid Diethylamide (LSD)
      2. Peyote
      3. Psilocybin
      4. Methylenedioxymethylamphetamine/ 3,4-Methylenedioxymethylamphetamine (MDMA/MDA)
   E. Phencyclidine (PCP)
      1. Effects
      2. Historical aspects
      3. The dilemma
      4. Legal prohibition

10. Marijuana
    A. General characteristics
    B. Historical and legal aspects
    C. Behavioral and psychosocial effects
    D. Chronic effects
    E. Medical uses

11. Over-the-counter (OTC) drugs
    A. Classifications
    B. Analgesics
       1. Salicylates
2. Nonsalicylates
C. Weight-control products
D. Cold and allergy products
E. Sedatives and sleep aids
F. Dietary supplements
G. Guidelines for self-medication

12. Prescription drugs
A. Benefits versus risks
B. Drug labels
C. Proper use
D. Frequently prescribed drugs
F. Side effects and adverse reactions
G. Generic drugs

13. Drug-abuse prevention
A. General strategies of prevention
B. Public health model of abuse prevention
C. Intervention levels of abuse prevention
D. Substance abuse in the work place
E. Drug law enforcement
F. Alternative behaviors
G. Responsible use
H. Role of the family

14. Drug prevention education
A. Planning and strategies
B. Resources
C. School policies

COURSE GOALS/OBJECTIVES/OUTCOMES:
1. Students will examine drug use in society.
2. Students will interpret drug use as a social problem.
3. Students will discuss drug products and their regulation.
4. Students will recognize the influence drug use has on the brain and body.
5. Students will describe the actions of drugs.
6. Students will identity the major categories of drugs and their potential for abuse and dependence.
7. Students will evaluate dynamic drug-related information for credibility.
8. Students will analyze methods of preventing substance abuse.

MNTC GOALS AND COMPETENCIES MET:
N/A

HCC COMPETENCIES MET:
Working productively and cooperatively
Communicating clearly and effectively
Thinking creatively and critically
STUDENT CONTRIBUTIONS:
Students are expected to attend all lectures and working sessions, participate in all activities and discussions, listen to and follow directions, complete assignments on time, and request assistance when needed. Students are expected to assist with equipment when necessary. Attendance and class participation are critical in this class.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

ADDITIONAL INFORMATION: None

<table>
<thead>
<tr>
<th>AASC APPROVAL DATE:</th>
<th>September 20, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>REVIEW DATE:</td>
<td>September 2022</td>
</tr>
</tbody>
</table>