CENTRAL TEXAS COLLEGE
MENTAL HEALTH SERVICES DEPARTMENT
SYLLABUS FOR DAAC 1304
PHARMACOLOGY OF ADDICTION

Semester Hours Credit: 3
96 Contact Hours

INSTRUCTOR: ________________

OFFICE HOURS: ________________

I. INTRODUCTION

A. This course covers the psychological, physiological, and sociological effects of mood altering substances and behaviors and their implication for the addiction process. Emphasis is placed on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug interaction. This course provides for basic mathematic/arithmetic competency as it applies to the study of drugs. It is recommended that DAAC 1319 be taken concurrently.

B. This course is required to meet the curriculum requirements for the Central Texas College Advanced Certificate and the Associate in Applied Science Degree in Mental Health Services with a Chemical Dependency, At-Risk Youth, Criminal Justice or Social Work specialization.

C. This course is occupationally related and serves as preparation for jobs in the Mental Health Services field. This course provides SPECIFIC education as defined by the Texas Department of State Health Services.

D. Alphanumeric coding used through the syllabus, learning outcomes and learning activities denotes the integration of SCANS occupational competencies (C) and foundation skills (F).

E. This course is taught in a 16 or 12 week format only.

II. LEARNING OUTCOMES

Upon successful completion of this course, Pharmacology of Addiction, the student will:

A. Identify the components of the autonomic and central nervous system and explain their general functions in relation to drug use and misuse. (F1-17; C 1-20)

B. Explain the physiological, psychological, and social effects of drugs and addictive behavior on the major systems of the body. (F1-17; C 1-20)

C. Identify classes of psychoactive drugs and discuss them in relation to: signs of use, abuse, overdose, withdrawal, tolerance and cross addiction. (F1-17; C 1-20)
D. List and discuss the schedules and explain concepts of current and 20th century drug legislation.  (F1-17; C1-20)

E. Define and accurately use terms common to drug use, misuse, abuse, and dependence. (F1-17; C 1-20)

**Program Threads and SCANS Competencies**

The curriculum content in all Mental Health Services courses are organized around five general content areas known as program threads.

**Program Threads:**  
- Communication
- Legal and Ethical Practices
- Effective Helping
- Diversity
- Critical Thinking

These threads are used to formulate content, connect one course of study to another, and provide a structure for evaluation of basic professional skills.

The Secretary’s Commission of Achieving Necessary Skills (SCANS), U.S. Department of Labor, was formed “to encourage a high-performance economy characterized by high-skills, high-wage employment.” Representatives from education, business, labor, and government identified the five competencies that are necessary in the work place.

Programs in the Mental Health Services Department are organized around these competencies and the three part foundational skills that the competencies are based on. Learning Activities and outcomes which relate to the SCANS Competencies are identified either in the Learning Guide, or in the syllabus with C1-20 and/or F1-17.

The competencies C1-20 include:

- **Resources:** identifies, organizes, plans, and allocates resources (C1-C4).
- **Information:** acquires and uses information (C5-C8).
- **Interpersonal:** works with others (C9-C14).
- **Systems:** understands complex interrelationships (C15-C17).
- **Technology:** works with a variety of technologies (C18-C20).

The foundation competencies F1-F17 include:

- **Basic Skills:** reads, writes, performs arithmetic and mathematical operations, listens and speaks (F1-F6).
- **Thinking Skills:** thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons (F7-F12).
- **Personal Qualities:** displays responsibility, self-esteem, sociability, self-management, integrity, and honesty (F13-F17).

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III. INSTRUCTIONAL MATERIALS

A. The instructional materials identified for this course are viewable through www.ctcd.edu/books

B. The student will have a variety of handouts and copies of PowerPoint available in the Blackboard class platform, they must read them, printing is an option.

IV. COURSE REQUIREMENTS

A. Reading Assignment: It is suggested that the student first read the learning outcomes in the syllabus and then the assigned required readings which are detailed in the Daily Plan and course Learning Guide.

B. Projects, Oral Reports, Case Studies, Book Reports, Research Papers: Assigned written work is detailed in the Course Outline, on the Daily Plan and in the course Learning Guide. All assigned work must be submitted on time. No late papers will be accepted. The due dates are noted on the daily plan, or as stated by the instructor.

C. Class Performance: Students are required to: participate class regularly. In the blended classroom course they must be on time and to stay the whole class period; or an absence will be recorded, they are expected to complete assignments on time and participate in classroom activities. In the online environment students must participate weekly, completing all assignments on time. Students may be administratively withdrawn from class when their absences exceed a total of four (4) class meetings for a 16 week semester, three (3) class meetings for an 11, 8 or a 6 week semester, or if absences prevent the meeting of course objectives. Online students who are inactive for three weeks in a 12 week course or four weeks in a 16 week course will be withdrawn from the class by the instructor. For additional details see the current Central Texas College Catalog.

D. Class Participation: Students are required to be prepared for classroom discussions, unannounced Quiz/Self Tests, and exams. The student should be prepared to participate in all classroom group activities and assigned community, library and Internet activities as they relate to meeting the course objectives.

V. EXAMINATIONS

A. There will be two open book non-proctored exams covering each unit. The final examination will be comprehensive and proctored no instructional aides will be allowed on the final. Examinations can be essay, multiple choice, true/false, short answer or a combination.

B. Examinations must be completed as stated in the course schedule. No make-up examinations will be scheduled; alternative arrangements must be made with the
instructor individually PRIOR to the exam date. Unexpected absences due to illness or extenuating circumstances will require the students to see the instructor individually as soon as possible.

VI. SEMESTER GRADE COMPUTATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Possible Points</th>
<th>% of Final Grade</th>
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</thead>
<tbody>
<tr>
<td>Written Assignments</td>
<td>250</td>
<td>25</td>
</tr>
<tr>
<td>Lab Assignments</td>
<td>160</td>
<td>16</td>
</tr>
<tr>
<td>Discussion Assignments</td>
<td>120</td>
<td>12</td>
</tr>
<tr>
<td>Quizzes</td>
<td>183.5</td>
<td>18.35</td>
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<tr>
<td>Participation Classroom/Lab</td>
<td>86.5</td>
<td>8.65</td>
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<tr>
<td>Exam 1</td>
<td>50</td>
<td>5</td>
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<tr>
<td>Exam 2</td>
<td>50</td>
<td>5</td>
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<tr>
<td>Final Exam</td>
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<td>10</td>
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<tr>
<td>TOTAL</td>
<td>1000</td>
<td>100</td>
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</table>

A student must take the final examination to receive a grade for the course.

<table>
<thead>
<tr>
<th>Numerical Grade</th>
<th>Letter Grade</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
</tr>
<tr>
<td>80-89.9</td>
<td>B</td>
</tr>
<tr>
<td>70-79.9</td>
<td>C</td>
</tr>
<tr>
<td>60-69.9</td>
<td>D</td>
</tr>
<tr>
<td>Below 60</td>
<td>F</td>
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NOTE: The faculty reserves the right to adjust a student's grade for instances of disruptive/uncivil classroom behavior.

VII. NOTES AND ADDITIONAL INSTRUCTIONS FROM COURSE INSTRUCTOR

A. Course Withdrawal: It is the student’s responsibility to officially withdraw from a course if circumstances prevent attendance. Any student who desires to, or must, officially withdraw from a course after the first scheduled class meeting must file a Central Texas College Application for Withdrawal (CTC Form 59). The withdrawal form must be signed by the student.

CTC Form 59 will be accepted at any time prior to Friday of the 12th week of classes during the 16-week fall and spring semesters. The deadline for sessions of other lengths is:

- Friday of 6th week for 8-week courses
- Friday of 7th week for 10-week courses
- Friday of 9th week for 12-week courses
- Friday of 12th week for 16-week courses

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The equivalent date (75% of the semester) will be used for sessions of other lengths. The specific last day to withdraw is published each semester in the Schedule Bulletin.

A student who officially withdraws will be awarded the grade of “W” provided the student’s attendance and academic performance are satisfactory at the time of official withdrawal. Students must file a withdrawal application with the College before they may be considered for withdrawal.

A student may not withdraw from a class for which the instructor has previously issued the student a grade of “F” or “FN” for nonattendance.

B. Administrative Withdrawal: An administrative withdrawal may be initiated when the student fails to meet College attendance requirements. The instructor will assign the appropriate grade on CTC Form 59 for submission to the registrar.

C. Incomplete Grade: The College catalog states, “An incomplete grade may be given in those cases where the student has completed the majority of the course work but, because of personal illness, death in the immediate family, or military orders, the student is unable to complete the requirements for a course . . .” Prior approval from the instructor is required before the grade of “IP” for Incomplete is recorded. A student who merely fails to show for the final examination will receive a zero for the final and an “F” for the course. The Mental Health Services Department requires the student to have completed 2/3 of the course work, on time and completely before requesting consideration of granting an incomplete in-progress grade. Students cannot request an “IP” after the course has ended.

D. Cellular Phones and Beepers: Cellular phones and beepers will be turned off while the student is in the classroom or laboratory. The use of any technology (I-phone, tablet, I-Pad, lap-tops) in the classroom is at the discretion of the faculty member.

E. Americans With Disabilities Act (ADA): Disability Support Services provide services to students who have appropriate documentation of a disability. Students requiring accommodations for class are responsible for contacting the Office of Disability Support Services (DSS) located on the central campus. This service is available to all students, regardless of location. Explore the website at www.ctcd.edu/disability-support for further information. Reasonable accommodations will be given in accordance with the federal and state laws through the DSS office.

F. Faculty Discretion: The faculty member reserves the right of final decision in course requirements.

G. Civility: Individuals are expected to be cognizant of what a constructive
educational experience is and respectful of those participating in a learning environment. Failure to do so can result in disciplinary action up to and including expulsion.

H. Discrimination Policy: Central Texas College District does not discriminate in admissions or access to, or treatment or employment in, its programs and activities on the basis of race, color, religion, national origin, gender, disability, age or veterans’ status.

VIII. COURSE OUTLINE

A. **Module One: Introduction to Drugs and Society: Use, Abuse, and the Law** (Chapters 1, 2, & 3)

1. **Learning Outcomes:** Upon successful completion of this module, the student will:
   - Explain how drug use is affected by pharmacological, cultural, social, and contextual factors. (F1,2,5-17) (C1,5-18)
   - State the distinguishing factor between drug use and misuse. (F1,2,5-17) (C1,5-18)
   - Describe the link between drug abuse and mental illness. (F1,2,5-17) (C1,5-18)
   - Discuss the role the medical plays in drug use/misuse. (F1,2,5-17) (C1,5-18)
   - Identify the phases of drug addiction. (F1,2,5-17) (C1,5-18)
   - Discuss the role of the EAP, NIDA, DEA, FDA, NIH, NIAAA, SAMHSA. (F1,2,5-17) (C1,5-18)
   - Explain the significance of the Pure Food and Drug Act; the Harrison Act; the Federal Food, Drug and Cosmetic Act; the Durham-Humphrey Amendment; the Kefauver-Harris Amendments; the Food and Drug Administration (FDA); and The Comprehensive Drug Abuse Prevention and Control Act.
   - List the stages of testing for an investigational new drug. (F1,2,5-17) (C1,5-18)
   - Outline the procedures used by the FDA to regulate nonprescription drugs. (F1,2,5-17) (C1,5-18)
   - List the factors that influence the formation of laws regulating drug abuse. (F1,2,5-17) (C1,5-18)
   - Identify the Control and Schedule Classifications of common drugs of abuse. (F1,2,5-17) (C1,5-18)
   - Define key terms and key concepts in the module. (F1-17) (C1-20)

2. **Learning Activities:**
   a. **Read:** (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 1, 2, and 3 of the textbook. As you read each chapter,
      - Note the chapter objectives and key terms at the beginning of the chapter.
• Keep these in mind as you examine all information, to include tables, figures, and definitions.
• Review the summary.
• Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming classroom discussions, tests and assignments.

b. **Key Terms and Key Concepts:** insiders, outsiders, drug(s), psychoactive drugs, addiction, withdrawal symptoms, licit drug, illicit drugs, over-the-counter (OTC), opioids, gateway drugs, MDMA, ethanol, designer drugs/synthetic drugs, structural analogs, equal-opportunity affliction, experimenters, compulsive users, floaters or chippers, Drug Enforcement Administration (DEA), relief phase, increased use phase, preoccupation phase, dependency phase, withdrawal phase, National Institute on Drug Abuse (NIDA), needle-exchange programs, drug cartels, drug cells, drug testing, employee assistance programs (EAPs), holistic self-awareness approach, moral model, disease model, characterological or personality predisposition model, personality disorders, psychoanalysis, double wall of encapsulation, genetic or biophysiological theories, psychoactive effects, neurotransmitters, dopamine, comorbidity, social learning theory, habituation, addiction to pleasure theory, sensation-seeking individuals, differential reinforcement, social influence theories, structural influence theories, labeling theory, primary deviance, secondary deviance, master status, retrospective interpretation, subculture theory, conventional behavior, control theory, socialization, low-risk drug choices, high-risk drug choices, thalidomide, phocomelia, switching policy, Harrison Act of 1914, supply reduction, demand reduction, inoculation, drug courts, interdiction.

c. **Test Your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss; you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)

1. Describe the four principle factors that determine how a drug user experiences their drug use. Give examples of each factor and how it might influence the users’ experience.
2. Read the Here and Now in chapter 1 on pages 17-20. The article discusses current global status of illicit drugs use in selected countries. Choose two of the countries highlighted and explore their drug role/problem further. Be sure to site your references.
3. According to sociology Erich Goode drugs are used for four reasons. Describe each of the reasons and give examples of each.
4. Discuss the five phases of addiction. Be sure to provide examples of how the addict might experience the phase.
5. Four genetic factors can contribute to drug abuse. Discuss each and give examples of how they might affect the user.

6. The United States has over a hundred years of legislative actions that have been taken regarding drugs. Outline the acts and amendments starting with the 1906 Pure Food and Drug Act. Hint for extra credit scan through the book and find some that are not described in chapter 3, but covered in later chapters.

7. Describe the FDA approval process for assessing the safety and efficacy of a newly developed drug. What are the advantages and disadvantages?

e. **Lab Assignment:** (F1,2,7-12,13,17) (C1,5-8,18,19) There are a number of federal agencies which have responsibilities for relevant drugs. For this assignment explore each agencies web site. Write a summary which explains the mission of the agency and describes resources which are available for both the general public and the professional counselor. In your summary discuss something you found about the agency or its resources that interest you.

   - Drug Enforcement Administration: www.justice.gov/dea/
   - Food and Drug Administration: www.fda.gov/
   - Bureau of Alcohol, Tobacco, Firearms & Explosives: www.atf.gov/
   - National Institute on Drug Abuse: www.drugabuse.gov/
   - Substance Abuse and Mental Health Administration: www.samhsa.gov/
   - National Institute on Alcohol Abuse and Alcoholism: www.niaaa.nih.gov/
   - National Institutes of Health: www.nih.gov/

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.

   - Why do Americans use so many legal drugs (for example, alcohol, tobacco, and OTC drugs)? What aspects of our society promote extensive drug use?
   - What principle factors are involved in the relationship between drugs and crime?
   - What is the relationship between mental illness and drug abuse? Why is this relationship important?
   - Discuss a recent prescription drug which has been pulled from the market. Be sure to discuss the reasons why the drug was pulled.

g. **Complete your Module Quizzes.** (F1,2,7-13,16,17) (C1,5-8,18,19)

B. **Module Two: Drugs of Abuse and How They Work (Chapters 4 & 5)**

1. **Learning Outcomes:** Upon successful completion of this module, the student will:

   - Explain the similarities and differences between the nervous and endocrine systems. (F1,2,5-17) (C1,5-18)
   - Describe common unintended drug effects and why similar drug doses affect individuals differently. (F1,2,5-17) (C1,5-18)
• State the pharmacokinetic factors that influence drug effects. (F1,2,5-17) (C1,5-18)
• Identify physiological and pathological factors that influence drug effects. (F1,2,5-17) (C1,5-18)
• Discuss how the blood-brain and placental barriers are significant to psychoactive drug effect. (F1,2,5-17) (C1,5-18)
• Discuss the role of the liver, kidney and lungs in drug metabolism and excretion. (F1,2,5-17) (C1,5-18)
• Describe the relationship between tolerance and withdrawal. (F1,2,5-17) (C1,5-18)
• State the influence of drug craving to drug use/abuse/addiction. (F1,2,5-17) (C1,5-18)
• Define and correctly use the key terms and abbreviations necessary to understanding homeostatic systems and drugs. (F1,2,5-17) (C1,5-18)
• Describe the process of neurotransmission and how psychoactive drugs impact it. (F1,2,5-17) (C1,5-18)
• State the role of receptors in mediating the effects of hormones, neurotransmitters, and drugs. (F1,2,5-17) (C1,5-18)
• Compare and contrast receptor agonists and antagonists; give an example of a drug that acts as an agonist and antagonist. (F1,2,5-17) (C1,5-18)
• Identify basic differences between the sympathetic and parasympathetic nervous systems. (F1,2,5-17) (C1,5-18)
• Define key terms and key concepts in the module. (F1-17) (C1-20)

2. **Learning Activities:**
a. **Read:** (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 4 and 5 of the text. As you read each chapter,
   • Note the chapter objectives and key terms at the beginning of the chapter.
   • Keep these in mind as you examine all information, to include tables, figures, and definitions.
   • Review the summary.
   • Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.

b. **Key Terms and Key Concepts:** homeostasis, hormones, nervous system, endocrine system, neurons, glia, axons, receptors, genetics, molecular biology, synapse, synaptic cleft, dendrites, opiate receptors, endorphins, cannabinoid system, anandamide, agonistic, antagonistic, muscarinic, nicotinic, catecholamine, sympathomimetic, central nervous system (CNS), peripheral nervous system (PNS), anticholinergic, nucleus accumbens, frontal cortex, autonomic nervous system (ANS), steroids, androgens, anabolic steroids, side effects, withdrawal, dose-response, tolerance, margin of safety, potency, toxicity, drug interaction, additive interactions, antagonistic interactions, synergism, pharmacokinetics, intravenous (IV), intramuscular (IM), subcutaneous (SC), blood-brain barrier, threshold dose, plateau effect, acute, chronic, cumulative effect,
half-life, biotransformation, metabolism, metabolites, teratogenic, dependence, reverse tolerance, cross-tolerance, rebound effect, cross-dependence, psychological dependence, mental set, placebo effects, dysphoric.

c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)

1. Spice or K2 (synthetic Marijuana) is one of the newest trends in street drug use. Its easy accessibility is causing lots of controversy. Research this drug; write a detailed paper (at least half a page which describes the drug, its use, and route of admission, effects, side-effects, and overdose and toxic levels. Be sure to site your references appropriately. The DEA may be a good place to start your hunt for information.

2. Describe the similarities and differences between neurotransmitters and hormones. This should take at least half a page to begin to cover it. You will need to do research outside the book. Be sure to cite references.

3. Explain neurotransmission. Use dopamine as one example, use heroin as another example. Be sure to explain how the drug cocaine affects the release of dopamine. Discuss how heroin works differently to alter normal neurotransmission of endorphins.

4. Describe the common methods of drug administration. Explain how each method affects the resulting effects of the drug. Give examples of each method of administration and compare at least one drug and how its effects are altered based solely on administration route.

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19) Define the following terms and give examples of each:

- homeostasis
- neuron (find a diagram of a nerve cell as well as the definition)
- axon
- receptor
- synapse
- dendrites
- neurotransmitters
- side-effects
- withdrawal
- tolerance
- threshold dose
- blood-brain barrier
- half-life
- reverse tolerance
- cross-tolerance
• rebound effect

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.

- Many professional athletes both male and female report that they have used anabolic steroids to build muscle mass. Most recently some professional baseball players have shared that they have used HGF (Human Growth Factor) to accomplish the same goal since it is not tested for by routine drug screens. What are some of the long term risks associated with anabolic steroid and HGF use (peek ahead to chapter 16) and what impact do you feel it has had on both youth and professional sports.
- Based on what you have learned so far about the biological aspects of addiction describe your position on addiction (i.e. is it a will power issue, a matter of environment, genetics, stress, social learning, changes in biochemistry, or a combination of factors).

h. **Take Exam 1** which is non-proctored. You must complete the exam once you open it. So be sure to set yourself up with enough time to do so. You may use your resources, but do not attempt to look up each question or your computer will time you out of the exam. If that happens you will lose the points attributed to the exam. (F1,2,7-13,16,17) (C1,5-8,18,19)

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• Explain why GHB is abused and how it relates to its analog compounds. (F1,2,5-17) (C1,5-18)
• Describe trends, patterns and cost of use of these drugs in the United States. (F1,2,5-17) (C1,5-18)
• Identify the major medical complications associated with these drugs when abused, in terms of: age, cause, spread, prevention, client education needs, treatment, legal-ethical-confidentiality issues as the complication/disease is treated, and the need for infection control precautions. (F1,2,5-17) (C1,5-18)
• Identify 3 types of poisonous alcohols and discuss why the fourth is a drug of abuse and state the pharmacokinetic properties of alcohol. (F1,2,5-17) (C1,5-18)
• State the physical effects of long term heavy alcohol consumption on the brain, nervous system, blood, cardiovascular system, sexual organs, liver, endocrine system and kidneys. (F1,2,5-17) (C1,5-18)
• Discuss the relationship of alcoholism to mental disorders. (F1,2,5-17) (C1,5-18)
• Describe the psychological and physical effects of varying blood alcohol level concentrations (BAC, BAL, BAT) and relate to number of drinks required to reach a certain BAC. (F1,2,5-17) (C1,5-18)
• State how alcohol is measured as to the blood level in the body (e.g., UDS, Breathalyzer, BAL). (F1,2,5-17) (C1,5-18)
• Discuss consumable alcohol as it relates to American history, to include the temperance movement and the prohibition era. (F1,2,5-17) (C1,5-18)
• Define key terms and key concepts in the module. (F1-17) (C1-20)

2. Learning Activities:
   a. Read: (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 6, 7, and 8 of the text. As you read each chapter,
      • Note the chapter objectives and key terms at the beginning of the chapter.
      • Keep these in mind as you examine all information, to include tables, figures, and definitions.
      • Review the summary.
      • Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.
   b. Key Terms and Key Concepts: barbiturates, benzodiazepines, antihistamines, sedatives, anxiolytic, hypnotics, amnesiac, anesthesia, REM sleep, paradoxical effects, club drug, detoxification, fermentation, mead, distillation, social lubricant, methyl alcohol, ethylene glycol, isopropyl alcohol, anesthetic, blood alcohol concentration (BAC), alcohol dehydrogenase, behavioral tolerance, polydrug use, disinhibition, diuretic, hepatotoxic effect, alcohol hepatitis, cirrhosis, alcoholic cardiomyopathy, Wernicke-Korsakoff’s syndrome, fetal alcohol syndrome (FAS), current alcohol use, binge use, heavy use, teetolalers, speakeasies, bootlegging, patent medicines, alcoholism, alcohol abuse, drunken comportment, disinhibitor, set and setting, pseudointoxicated, acquaintance and date
rape, codependency, enablers, relapsing syndrome, acute alcohol withdrawal syndrome, delirium tremens (DTs), psychodrama, role playing, genogram, posttraumatic stress disorder.

c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)

1. In your text there are “Case In Point’s” on Heath Ledger; Michael Jackson; and Patrick Kennedy. Each of these individuals struggled with depressant drugs, two of them died from overdose. Depressant drugs, including alcohol present a tremendous danger when combined. Discuss why depressant drugs are most commonly abused, why the potentiated effects of these drugs can be so deadly and what can be done to help the public understand the danger. Be sure to support your findings with research. List the resources you used in your essay. Your essay should be at least one page long (single spaced).

2. Compare and contrast barbiturates and benzodiazepines. Why are they prescribed? How long should they be taken, what are the side effects, what is contra-indicated (are there things that should not be done when on them)? What is the difference between drugs that sedate and drugs that are hypnotics. What is the difference between long acting and short acting barbiturates and benzodiazepines? Why is withdrawal from these drugs so dangerous?

3. Antihistamines have anti-cholinergic effects. What are they and how long do they last? What are the side-effects of taking these drugs for a long period of time? Can these drugs interfere with driving safely? Write up a short essay on what you discovered. Be sure to list resources used.

4. Prolonged heavy drinking causes various types of health issue. Write a 1 page essay on the long term possible effects of heavy alcohol consumption. Be sure to describe mental and physical damage that can occur.

5. Alcohol has been a part of history since the first grapes fell from the bush. Write up a 1 page paper discussing the role alcohol has played in American history.

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)

1. Visit the following web site and write a ½ page summary of the services provided by the National Council on Alcoholism and Drug Dependency, Inc. be sure to look at the FAQ/Facts for both Alcohol and Drugs. You may find some things you didn’t know: [www.ncadda.org](http://www.ncadda.org)

2. Rohypnol and GHB are two drugs often referred to as “Date Rate” drugs. Compare and contrast the two. Discuss why they may work well as a “date rate” drug, how available they are, street cost, and current trends.

3. There are several plants that contain naturally occurring CNS depressants.
Find one and research it. Are there dangers in using these herbals? What side-effects exists, can they be habit forming? Write up ½ page about what you discover. Be sure to include resources.

4. Children of Alcoholics (COA) and Adult Children of Alcoholics (ACOA) suffer from numerous issues. Research one of these groups. Write up a 1 page essay on what you learned.

f. Discussion Assignment: (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.

- Currently, sleep aid products are available OTC. Should the FDA also allow sedatives to be sold without a prescription? Support your answer.
- What dangers are associated with treating individuals who are severely dependent on CNS depressants? Why is it important for human services workers to be aware of these concerns?
- In light of the information you have read discuss your position on why the legal drinking age should remain at 21 or if you think it should be lowered to 18. Be sure to support your answer with facts.
- Most people would not have to travel far back in their family tree to find a relative who had an alcohol problem. Why do you think alcohol abuse and dependence is so prevalent? What can you do to make sure that you create a family environment which supports responsible use verses abuse/addiction.

g. Complete Module Quizzes. (F1,2,7-13,16,17) (C1,5-8,18,19)

D. Module Four: Narcotic (Opioid) Drugs (Chapter 9)

1. Learning Outcomes: Upon successful completion of this module, the student will:

- Describe the pharmacological effects of narcotics to include therapeutic effects and side effects. (F1,2,5-17) (C1,5-18)
- Discuss the abuse patterns for heroin for different age, cultural, and socioeconomic groups. (F1,2,5-17) (C1,5-18)
- Identify the stages of heroin dependence.
- Discuss why infectious diseases and medical complications are prevalent among heroin addicts. (F1,2,5-17) (C1,5-18)
- Describe the following about heroin abuse/dependence: symptoms of use, abuse, withdrawal, tolerance, cross tolerance, cross dependence. (F1,2,5-17) (C1,5-18)
- Discuss agonist and antagonist forms of pharmacotherapy in the treatment of heroin addicts. (F1,2,5-17) (C1,5-18)
- Describe how levels of narcotics are measured in the body. (F1,2,5-17) (C1,5-18)
- Discuss the significant points of the history of narcotic appearance and use in the world and in the United States. (F1,2,5-17) (C1,5-18)
- Define key terms and key concepts in the module. (F1-17) (C1-20)
2. **Learning Activities:**

a. **Read:** (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapter 9 of the text. As you read the chapter,
   - Note the chapter objectives and key terms at the beginning of the chapter.
   - Keep these in mind as you examine all information, to include tables, figures, and definitions.
   - Review the summary.
   - Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.

b. **Key Terms and Key Concepts:** analgesics, antitussive, opioid, speedballing, mainline.

c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19) Answer the three questions below. Write a minimum of 500 words for each answer. Be sure to list your references.
   1. Describe the history of opiates starting with recordings on Sumerian tablets to the designer opiates of today. Be sure to include “cheese” in your description.
   2. Discuss how narcotics work. Be sure to describe their effects, side-effects, and withdrawal.
   3. Methadone maintenance is a controversial heroin treatment strategy. What is it? Why is it controversial? What is LAAM?

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   2. Read these four articles which are from the National Institute on Drug Abuse and write a summary of what you learned. Your summary should be at least 700 words.
      - Topics in Brief: Substance Abuse among the Military, Veterans, and their Families
      - Research Report Series: Comorbidity
      - NIDA Info Facts Heroin
      - NIDA Info Facts Treatment Approaches for Drug Addiction
   3. Read the two articles below which are from the Nation Institute on Drug Abuse and write a summary of at least 500 words.
      - Research Report Series: Prescription Drugs: Abuse and Addiction
      - Topics in Brief: Prescription Drug Abuse

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use
facts to back you up. Once you have posted your position choose at least two other students work to respond to.

- Why does heroin addiction contribute to criminal activity? What are the advantages and disadvantages to treating heroin addict’s verses just locking them up?
- How does “methadone maintenance” work for the treatment of narcotic dependence? Explain the advantages and disadvantages of this approach.

g. Complete your Module Quizzes. (F1,2,7-13,16,17) (C1,5-8,18,19)

E. Module Five: Central Nervous System Stimulant Drugs (Chapters 10 & 11)

1. Learning Outcomes: Upon successful completion of this module, the student will:
   - State which amphetamines are FDA approved and the therapeutic effects of those stimulants. (F1,2,5-17) (C1,5-18)
   - Discuss the abuse patterns for stimulants to include nicotine for different age, cultural, and socioeconomic groups.
   - Compare and contrast the effects of cocaine and amphetamines. (F1,2,5-17) (C1,5-18)
   - Discuss the following about stimulant abuse/dependence: symptoms of use, abuse, withdrawal, tolerance, cross tolerance, cross dependence and half-life. (F1,2,5-17) (C1,5-18)
   - Compare and contrast crack and other forms of cocaine. (F1,2,5-17) (C1,5-18)
   - State how levels of stimulants are measured in the body. (F1,2,5-17) (C1,5-18)
   - Discuss the significant points of the history of stimulant use and appearance in the world and in the United States. (F1,2,5-17) (C1,5-18)
   - Identify possible consequences of using herbal stimulants. (F1,2,5-17) (C1,5-18)
   - Describe the addictiveness of nicotine. (F1,2,5-17) (C1,5-18)
   - Identify effects of nicotine and the illnesses caused by nicotine for the skin, nervous system, cardiovascular and respiratory systems. (F1,2,5-17) (C1,5-18)
   - List methods used to aid in smoking cessation. (F1,2,5-17) (C1,5-18)
   - Discuss cigarette smoking as a gateway drug. (F1,2,5-17) (C1,5-18)
   - Discuss how the media is used to promote or deter the public’s smoking behavior. (F1,2,5-17) (C1,5-18)
   - Define key terms and key concepts in the module. (F1-17) (C1-20)

2. Learning Activities:
a. Read: (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 10 and 11 of the text. As you read each chapter,
   - Note the chapter objectives and key terms at the beginning of the chapter.
• Keep these in mind as you examine all information, to include tables, figures, and definitions.
• Review the summary.
• Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.

b. **Key Terms and Key Concepts:** uppers, anorexiants, behavioral stereotypy, narcolepsy, speed, precursor chemicals, ice, rush, high, run, binge, tweaking, hyperpyrexia, speedballs, performance enhancers, adulterated, freebasing, crack, crack babies, cocaine babies, xanthines, caffeinism, nicotine, tobacco chewing, snuff dipping, chewing tobacco, snuff, secondhand smoke, environmental tobacco smoke (ETS).

c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Describe how the following CNS Stimulants work: amphetamines, cocaine, caffeine and nicotine; include physical effects, symptoms of use, overdose and withdrawal. Discuss how they impact neurotransmission and what neuro-chemicals are affected.
   2. Discuss why stimulant use is so popular in today’s society. Be sure to support your conclusions with research.
   3. Tobacco is considered the leading cause of preventable death among adults today. Have current strategies to reduce smoking worked? Research the impact of the following strategies: taxes on tobacco products, restricted smoking areas, and reduction of advertisement. Site your references.

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19) Visit the Cocaine Anonymous World Services web site at www.ca.org/
   1. Write up a summary of what you learned.
   2. How does today’s consumption of caffeine affect children?
   3. See what the research says, be sure to site your resources.

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.
   - Why does the method of cocaine administration make a difference in how a user is affected by this drug? Use examples to substantiate your conclusions.
   - Should children be taken from mothers who are addicted to methamphetamine? Support your position with facts.
   - If smoking is the most preventable cause of disease and premature death in the US, why do people continue to smoke?
• How effective are the health warning labels on cigarette packages? Interview two to three smokers about the effect these warning labels have had on them.

g. Complete your Module Quizzes. (F1,2,7-13,16,17) (C1,5-8,18,19)
h. Complete Exam 2. (F1,2,7-13,16,17) (C1,5-8,18,19)

F. Module Six: Hallucinogens & Marijuana (Chapters 12 & 13)

1. Learning Outcomes: Upon successful completion of this module, the student will:
   • Discuss types of hallucinogens and their psychedelic, stimulant and anticholinergic effects. (F1,2,5-17) (C1,5-18)
   • Discuss the following about hallucinogen and marijuana use/abuse: use patterns, symptoms of use, abuse, withdrawal, tolerance, cross tolerance, and half-life. (F1,2,5-17) (C1,5-18)
   • List and describe the sensory effects of hallucinogens. (F1,2,5-17) (C1,5-18)
   • Describe how/why hallucinogens were used in psychotherapy. (F1,2,5-17) (C1,5-18)
   • Discuss LSD and the occurrence of psychosis and flashbacks and how LSD is adulterated. (F1,2,5-17) (C1,5-18)
   • Compare and contrast PCP and other hallucinogens in terms of effects. (F1,2,5-17) (C1,5-18)
   • Discuss the significant points in the history of hallucinogen use and appearance in the world and in the United States. (F1,2,5-17) (C1,5-18)
   • Describe the forms and characteristics of cannabis and how they differ as to THC content. (F1,2,5-17) (C1,5-18)
   • Discuss marijuana as a gateway drug. (F1,2,5-17) (C1,5-18)
   • Describe the effects of THC on the respiratory system, cardiovascular system; on sexual performance and reproduction; on growth and development of a fetus; on motor functions; and how it is affected by expectations and surroundings. (F1,2,5-17) (C1,5-18)
   • Identify therapeutic uses of marijuana. (F1,2,5-17) (C1,5-18)
   • Define key terms and key concepts in the module. (F1-17) (C1-20)

2. Learning Activities:
   a. Read: (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 12 and 13 of the text. As you read each chapter,
      • Note the chapter objectives and key terms at the beginning of the chapter.
      • Keep these in mind as you read examine all information, to include tables, figures, and definitions.
      • Review the summary.
      • Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.
b. **Key Terms and Key Concepts:** hallucinogens, psychedelics, psychotomimetics, psychotogenics, synesthesia, flashbacks, ergotism, mydriasis, entactogen, jimsonweed, analogs, catatonia, cannabis sativa, sinsemilla, drug trafficking organizations (DTOs), hashish, subjective euphoric effects, differential association, amotivational syndrome, medical marijuana, glaucoma, altered perceptions, munchies, aphrodisiac, marinol.

c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Describe how hallucinogens work. Be sure to describe their mechanism of action, effects including side-effects, signs of use, abuse, and withdrawal. Compare synthetic and natural hallucinogens.
   2. Discuss the similarities between PCP and Ketamine.
   3. Cannabis sativa is a complex plan. Research the use of this plan throughout history. Don’t just focus on its medical and recreational uses. Your response should be a page and a half at least.

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Chose a naturally occurring hallucinogen and research it. Write a 1 page single spaced response discussing what you discovered. Be sure to list your resources.
   2. Marijuana is legal in some states. Research what states it is legal in and the conditions of use (i.e. medical with a prescription).
   3. Read the Case in Point on page 403 of your text. Answer the questions to consider. Support your answers with research. Be sure to site your references.

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.
   - Do you think the federal government is justified in lying to the public about the dangers of hallucinogens to convince people to stop using these drugs? Defend your answer.
   - Why has MDMA become so popular?
   - What is your reaction to legalizing marijuana as a controlled substance like alcohol and tobacco products? Give reasons either for or against legalization.
   - In light of the information in this module regarding medical marijuana use, do you believe in legalizing medical marijuana use? Why or why not?

g. **Complete your Module Quizzes.** (F1,2,7-13,16,17) (C1,5-8,18,19)

G. **Module Seven: Inhalants, Anabolic Steroids & Over-the-Counter Drugs (Chapters 14 & 15)**
1. **Learning Outcomes:** Upon successful completion of this module, the student will:
   - List the household and commercial products that are most often abused as inhalants. (F1,2,5-17) (C1,5-18)
   - Discuss the following about inhalant use/abuse: symptoms of use, abuse, withdrawal, and tolerance. (F1,2,5-17) (C1,5-18)
   - Examine the current patterns of abuse among various groups. (F1,2,5-17) (C1,5-18)
   - List the dangers of inhalant abuse. (F1,2,5-17) (C1,5-18)
   - Discuss the long term dangers of anabolic steroid use to include legal ramifications. (F1,2,5-17) (C1,5-18)
   - Outline the general differences between prescription and non-prescription drugs. (F1,2,5-17) (C1,5-18)
   - Discuss the change in the FDA policy regarding some previously prescribed drugs now being OTC.
   - Identify the information that is required to be included on the labels of nonprescription medicines. (F1,2,5-17) (C1,5-18)
   - Identify and classify the drug groups that are available OTC and are most frequently prescribed. (F1,2,5-17) (C1,5-18)
   - Compare and contrast benefits versus risks of generic and proprietary drugs. (F1,2,5-17) (C1,5-18)
   - Define key terms and key concepts in the module. (F1-17) (C1-20)

2. **Learning Activities**
   a. **Read:** (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 14 and 15 of the text. As you read each chapter,
      - Note the chapter objectives and key terms at the beginning of the chapter.
      - Keep these in mind as you read examine all information, to include tables, figures, and definitions.
      - Review the summary.
      - Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.
   b. **Key Terms and Key Concepts:** volatile, euphorogenic, arrhythmia, hypoxia, salicylates, anti-inflammatory, nonsteroidal anti-inflammatory drugs (NSAIDs), antipyretics, Reye’s syndrome, congestion rebound, antitusives, expectorants, gastritis, anorexiants, keratolytics, keratin layer, SPF (sun protection factor) number, generic, proprietary, tricyclic antidepressants, monoamine oxidase inhibitors (MAOIs), diabetes mellitus, hyperglycemia, type 1 diabetes, type 2 diabetes, oral hypoglycemics, peptic ulcers, bronchodilators, β-adrenergic stimulants, hypertension, ischemia, angina pectoris, congestive heart failure, edema, hypothyroidism.
   c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to whether you have mastered the primary objectives of this lesson. Do not
email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Describe the signs of inhalant abuse. Discuss risk factors for the age group most likely to abuse them.
   2. Prescription medication addiction is rising in this county. What prescription drugs are most often abused and why? What can be better done to inform the public of the risks associated with the most addictive drugs? Are their alternatives to these drugs that should be considered first?
   3. Research a prescription drug which has recently gone through the switching policy. What impact has the drug had? Have any new safety concerns been identified? (Hint: check the FDA web site for help with this one.)

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Design a flyer informing parents of the risks of inhalant abuse. Be sure to provide links to web sites to help parents learn more.
   2. We have become a very drug seeking society. Over the counter medications are an attractive alternative to feeling bad. Design a flyer to remind the public to use over the counter drugs correctly and give them clues to even safer alternatives.
   3. Should herbal remedies be required to be safe and effective by the FDA? Should the FDA have the same control over herbas and supplements as they do over OTC’s? Support your position with research.

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.
   - Why are inhalants widely abused? What items do you have in your house right now which could be abused as an inhalant?
   - What kinds of questions should a patient ask a health professional to ensure that they understand how to use a drug properly and safely?
   - What role should a pharmacist play in providing information about OTC and prescription drugs to patients?
   - Look at two of the OTC or prescription drugs that you routinely take, visit www.healthtouch.com and look up the drug. Describe the common side effects and possible drug interactions that you learn about. Did you know this already or are you surprised by what you discovered?

g. **Complete your Module Quizzes.** (F1,2,7-13,16,17) (C1,5-8,18,19)

H. **Module Eight: Drug Abuse Addiction Prevention & Treatment (Chapters 16, 17 & 18)**

1. **Learning Outcomes:** Upon successful completion of the module, the student will:
• Identify how drug abuse contributes to the spread of HIV/AIDS. (F1,2,5-17) (C1,5-18)
• Compare and contrast, with examples, of the following: primary prevention activities, secondary prevention activities, and tertiary prevention activities. (F1,2,5-17) (C1,5-18)
• Identify suggestions about how the outcomes of drug education programs could be improved. (F1,2,5-17) (C1,5-18)
• Discuss the role of basic mathematics in understanding drug use and abuse. (F1,2,5-17) (C1,5-18)
• Demonstrate basic mathematical skills in addition, subtraction, multiplication, division and calculations of percentages in the units of measure common to the study of drugs. (F1,2,5-17) (C1,5-18)
• Discuss the models of addiction. (F1,2,5-17) (C1,5-18)
• Identify the risk factors for special populations of drug users. (F1,2,5-17) (C1,5-18)
• Identify the major concepts used in the treatments of addiction. (F1,2,5-17) (C1,5-18)
• Define key terms and key concepts in the module. (F1-17) (C1-20)

2. **Learning Activities:**

   a. **Read:** (F1,2,7-12,13,16,17) (C1,3,5-8,15,18,19) Chapters 16, 17, and 18 of the text. As you read each chapter,
   - Note the chapter objectives and key terms at the beginning of the chapter.
   - Keep these in mind as you examine all information, to include tables, figures, and definitions.
   - Review the summary.
   - Be prepared to answer the questions at the end of each chapter. This will help you prepare for the upcoming tests.

   b. **Key Terms and Key Concepts:** subculture, outsider’s perspective, insider’s perspective, doping, proprietary medicine, ergogenic, World Anti-Doping Code, muscle dysmorphia, stacking, cycling, plateauing, pyramiding, array, human growth factor (HGF), human growth hormone (HGH), Adolescents Training and Learning to Avoid Steroids (ATLAS) program, sociobiological changes, intragang, intergang, primary prevention, secondary prevention, rohypnol, protease inhibitors, highly active antiretroviral therapy (HAART), drug prevention, protective factors, risk factors, primary drug prevention programs, secondary drug prevention programs, tertiary drug prevention programs, harm reduction model, scare tactic approach, information-only awareness model, attitude change or affective education model, social influences model, ecological or person-in-environmental model, BACCHUS network, Drug Abuse Resistance Education (D.A.R.E.), alternative approaches, meditation, open meetings, closed meetings, Minnesota model, therapeutic community (TC), partial agonist.

   c. **Test your Knowledge** by completing the self-grading activities, flash cards, and crossword puzzles at the textbook website as an indicator as to
whether you have mastered the primary objectives of this lesson. Do not email results to the instructor. Review any items that you miss, you can refer to the Index in the back of your textbook for the appropriate pages to review.

d. **Written Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19) Choose one special population (i.e. athletes, women, teens, college students) discussed in chapter 16 and research the drug prevalence rates for that population and write a 500 word essay on it. Be sure to list your references.

e. **Lab Assignment:** (F1,2,7,13,16,17) (C1,5-8,18-19)
   1. Research one strategy for prevention discussed in the text and write a 500 word essay on it. Be sure to list your references.
   2. Research one type of drug treatment discussed in the text and write a 500 word essay on it. Be sure to list your references.

f. **Discussion Assignment:** (F1,2,5-17) (C1,4,5-14,18,19) Choose one of the following discussion points and write your response to it. Be sure to use facts to back you up. Once you have posted your position choose at least two other students work to respond to.
   • Argue both for and against drug testing in sports.
   • Why are women who have been or are sexually abused more likely to become addicted to drugs?
   • In what way are drugs of abuse associated with juvenile gang activity?
   • What do you think is more likely to work today in drug prevention programs for youth: teaching moderation use or total abstinence? Why?
   • Discuss the pros and cons of incarcerated therapeutic community approaches to treating substance abuse.

g. **Complete your Module Quizzes.** (F1,2,7-13,16,17) (C1,5-8,18,19)

h. **Take the Non Proctored Final.** (F1,2,7-13,16,17) (C1,5-8,18,19)