**Reese Campus** 

**Course Syllabus** 

COURSE: DAAC-1304 (200) (3:3:0)

**Pharmacology of Addiction** 

SEMESTER: Fall 2014

CLASS TIMES: Tuesday/Thursday

9:30-10:45

South Plains College, Reese Center

Building 5, Classroom 516

INSTRUCTOR: Mollie McCook-Melton

Program Coordinator and Professor Applied Rehabilitation Psychology

Allied Health Department Chair

OFFICE: South Plains College, Reese Center

Building 5, Office 514

OFFICE HOURS: <u>Monday Tuesday Wednesday Thursday Friday</u>

8:30-9:30 1:00-3:30 8:30-9:30 1:00-3:30 11:00-12:00

PROGRAM FACEBOOK: The Applied Rehabilitation Psychology Program has a Facebook page at

www.facebook.com/southplainscollegeappliedrehabilitationpsychology . In addition to the South Plains College website, this Facebook page will be used to keep students up-to-date on program activities, weather delays, South Plains College announcements and will help with program recruitment. "Liking" the Applied Rehabilitation Psychology Facebook page is not mandatory, nor is

personal Facebook accounts, in order to access this page.

BLACKBOARD: Blackboard is an e-Education platform designed to enable educational

innovations everywhere by connecting people and technology. This educational

tool will be used in this course throughout the semester.

Please contact me for an appointment, if the noted days and times are not convenient.

OFFICE PHONE: (806) 716-4552

E-MAIL: <u>mmelton@southplainscollege.edu</u>

Classroom Messages: Number (806) 472-4424

Class Code: @daac1

"South Plains College improves each student's life."

### **GENERAL COURSE INFORMATION**

### **COURSE DESCRIPTION**

Psychological, physiological, and sociological effects of mood altering substances and behaviors and their implications for the addiction process are discussed. Emphasis is placed on pharmacological effects of tolerance, dependency/withdrawal, cross addiction, and drug interaction.

## **STUDENT LEARNING OUTCOMES**

Students will: Measure/Assessment Tool

<ul> <li>Acquire theoretical knowledge and a conceptual understanding of rehabilitation and psychological theories, in order to translate premises into practical field placement experience. Experience must be demonstrated in the areas of physical disabilities, substance abuse, mental health disorders and mental retardation, for a total of 360 clinical hours.</li> </ul>	Successful completion of PSYT-1164, and PSYT- 1165, (Clinical Practicum's)
Achieve knowledge about the basic pharmacology of the specifics of CNS drug action on the brain and behavior. (i.e. sedative-hypnotic, psychostimulants, analgesic, and psychedelic drugs.)  Proposition of the basic pharmacology of the specific specific service and proposition of the service servic	<ul> <li>Semester Exams</li> <li>Comprehensive Final Exam</li> <li>Reaction Paper</li> <li>Class Projects</li> </ul>
Refer to the evaluation methods to determine the student's level of achievement regarding the designated learning outcomes.	

#### **COURSE OBJECTIVES**

Specific goals/objectives of this course are to:

- **A.** Understand and recognize actions, uses, and side effects of the following psychoactive drugs (C-5, C-6, C-7):
  - (1) CNS depressants
  - (2) Alcohol
  - (3) Benzodiazepines
  - (4) Psychostimulants (cocaine and amphetamines)
  - (5) Caffeine and nicotine
  - 6) Antidepressants and lithium
  - (7) Antipsychotic drugs
  - (8) Psychedelic drugs
  - (9) Marijuana
  - (10) Analgesics
- B. Distinguish and identify the classification of psychoactive drugs. (C-16)
- C. Understand the basic principles of drug action. (C-5, C-6, C-7)
- D. Understand the basic anatomy of the nervous system. (F-10)
- E. Understand the physiology of the neuron, synaptic transmission, and transmitters. (F-12)
- F. Recognize various treatment methods of additive behaviors and available community resources (F-9)
- G. Classify psychoactive drugs as behavioral reinforcers. (C-7)
- H. Distinguish trends in policies for the 1990's and the 21st century in drug use and abuse and suggest modifications with current treatment programs (C-16, C-17; F-7)
- I. Appreciate the need to adapt a rehabilitation philosophy in the treatment of individuals with substance abuse problems. (F-8, F-17)

## **EVALUATION METHODS**

A. Regular class attendance by the student. (Minimum of 4 absences)

(Minimum score of 75)

B. Comprehensive examination policy.

C. Successful completion of PSYT 2331 and PSYT 1332.

(75 or better)

- D. The student achieves a minimum score of 75 on all assignments.
- E. Assignments include objective and essay measures.

## **Course Activities:**

- A. Class lectures
- B. Guest speakers
- C. Audio-Visual presentations
- D. Reaction paper
- E. Outside readings (library assignments)
- F. Examinations
- G. Class participation and interaction

## **ACADEMIC INTEGRITY**

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

**Cheating** - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or

unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of any and all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

**Plagiarism** - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

#### **SCANS and FOUNDATION SKILLS**

Refer also to Course Objectives. SCANS and Foundation Skills attached.

#### **VERIFICATION OF WORKPLACE COMPETENCIES**

This course offers information regarding the theoretical perspectives related to pharmacology of drug action. This course provides a knowledge base that supports learning experiences in the field of rehabilitation services.

### SPECIFIC COURSE INFORMATION

#### **TEXT AND MATERIALS**



<u>A Primer of Drug Action, Julien Thirteen Edition</u>, The student will be responsible for all information and materials furnished by guest speakers and class handouts.

#### **ATTENDANCE POLICY**

The student is required to make up any class work missed due to an absence. There are **no** excused absences. **Please refer to the college catalog 2014-2015, page19** for specific information on attendance policies.

## **ASSIGNMENT POLICY**

The student is required to write a reaction paper. An article will be provided by the instructor and the specific requirements for the paper will be discussed in class. Please note that this assignment will account for 20% of the student's grade.

The general purpose of the paper is to allow the student the opportunity to analyze the physiology of psychoactive drugs as related to various treatment methods.

<u>Reading Assignment</u>: The content of this course is divided into four units. An exam will be given at the end of each unit. The student is strongly encouraged to maintain a reading schedule at home in order to stay current with the class room discussions.

Each student is expected to meet program and course objectives. Therefore, please contact this instructor if you are experiencing difficulties in achieving the outlined objectives. Together, we will attempt to arrive at a solution that meets your individual needs as well as the required program standards.

**GRADING POLICY** - Grades in this course will be determined using the following criteria:

During the course of the semester, there will be no make-up examinations. A student may elect to miss one (1) examination during the course of the semester. If this option is selected, the exam average will be valued at 30% of the

overall course grade and the final examination will be valued at 40% of the course grade. Examinations will be a combination of objective questions and essay discussions.

Please note that the final is comprehensive and based on the course competencies and objectives.

## **Grading Policy:**

The final grade of this course will be determined by the average of the

following:

Class Activities = 10% Four Exams = 40% Reaction Paper = 20% Comprehensive Final = 30%

Grades are assigned within the following range:

100 – 90 = A 89 - 80 = B 79 –75 = C 74 - 70 = D Below 70 = F

#### **COMMUNICATION POLICY**

• Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC" and email systems. Instructor will not initiate communication using private email accounts. Students are encouraged to check SPC email on a regular basis.

#### STUDENT CONDUCT

• Students in this class are expected to abide by the standards of student conduct as defined in the SPC Student Guide pages 11-14.

#### **SPECIAL REQUIREMENTS**

• **Cell Phones** – Cell phones are to be turned <u>OFF</u> during scheduled class periods, unless prior approval has been given from the instructor. This includes text messaging. Cell phones are to be used <u>outside</u> the classroom only.

#### **COURSE OUTLINE**

• Text Table of Contents

## Part 1 Biological Basis of Drug Action

- 1. The Neuron, Synaptic Transmission, and Neurotransmitters
- 2. Pharmacokinetics: How the Body Handles Drugs
- 3. Pharmacodynamics: How Drugs Act

## Part 2 Pharmacology of Drugs of Abuse

- 4. Neurobiology of Addiction
- 5. Ethyl Alcohol and the Inhalants of Abuse
- 6. Stimulants Part 1 Caffeine and Nicotine
- 7. Stimulants Part 2 Cocaine, Amphetamine, NonAmphetamine Stimulants
- 8. Hallucinogens
- 9. Cannabinoids

# 10. Opioids

# Part 3 Drugs Used to Treat Psychological Disorders

- 11. Antipsychotic Drugs: Major Tranquilizers to Thymic Stabilizers
- 12. Antidepressant Drugs
- 13. Sedative-Hypnotic and Anxiolytic Medications
- 14. Drugs Used to Treat Bipolar Disorder

# **Part 4 Special Populations and Integration**

- 15. Child and Adolescent Psychopharmacology
- 16. Geriatric Psychopharmacology
- 17. Integration

Chapter 17 Appendix: Quick Reference to Psychotropic Medications

## Unit I - Test 1 (Week 1 to 3)

## TOPIC: Introduction to Psychopharmacology: Biological Basis of Drug Action

**CHAPTERS 1, 2, & 3** 

Chapter 1 The Neuron, Synaptic Transmission and Neurotransmitters

Chapter 2 Pharmacokinetics: How Drugs Are Handled by the Body

CHAPTER 3 PHARMACODYNAMICS: HOW DRUGS ACT

## UNIT II - TEST 2 & 3 (WEEK 4 TO 11)

## TOPIC: PHARMACOLOGY OF DRUGS OF ABUSE

CHAPTER 4 EPIDEMIOLOGY AND NEUROBIOLOGY OF ADDICTION

CHAPTER 5 ETHYL ALCOHOL AND THE INHALANTS OF ABUSE

CHAPTER 7 COCAINE THE AMPHETAMINES, AND OTHER PSYCHOSTIMULANTS

CHAPTER 8 PSYCHEDELIC DRUGS

CHAPTER 9 CANNABIS

CHAPTER 10 OPIOID ANALGESICS

UNIT III - TEST 4 (WEEK 11 - 15)

## **TOPIC: PSYCHOTHERAPEUTIC DRUGS AND SPECIAL POPULATIONS AND INTEGRATION**

REVIEW CHAPTERS 11- 17 VIA GUEST SPEAKERS AND RESEARCH.

## **UNIT IV - (WEEK 15)**

TOPIC: SPECIAL POPULATIONS AND INTEGRATION

# COMPREHENSIVE FINAL EXAMINATION DECEMBER 11, 2014 (9:00-11:00A.M.)

## **ACCOMMODATIONS**

## **DIVERSITY STATEMENT**

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

#### **ADA STATEMENT**

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office through the Guidance and Counseling Centers at Reese Center (Building 8) 716-4606, or Levelland (Student Services Building) 716-2577

#### **FOUNDATION SKILLS**

# BASIC SKILLS—Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

- F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- F-3 Arithmetic—performs basic computations; uses basic numerical concepts such as whole numbers, etc.
- F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.
- F-6 Speaking—organizes ideas and communicates orally.

# THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

- F-7 Creative Thinking—generates new ideas.
- F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.
- F-9 Problem Solving—recognizes problems, devises and implements plan of action.
- F-10 Seeing Things in the Mind's Eye-organizes and processes symbols, pictures, graphs, objects, and other information.
- F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.
- F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

# PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

- F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.
- F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.
- F-15 Sociability–demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.

F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control

F-17 Integrity/Honesty–chooses ethical courses of action.

#### **SCANS COMPETENCIES**

- C-1 **TIME** Selects goal relevant activities, ranks them, allocates time, prepares and follows schedules.
- C-2 **MONEY** Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.
- C-3 MATERIALS AND FACILITIES Acquires, stores, allocates, and uses materials or space efficiently.
- C-4 **HUMAN RESOURCES** Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

# **INFORMATION - Acquires and Uses Information**

- C-5 Acquires and evaluates information.
- C-6 Organizes and maintains information.
- C-7 Interprets and communicates information.
- C-8 Uses computers to process information.

#### **INTERPERSONAL-Works With Others**

- C-9 Participates as a member of a team and contributes to group effort.
- C-10 Teaches others new skills.
- C-11 Serves Clients/Customers—works to satisfy customer's expectations.
- C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- C-13 Negotiates-works toward agreements involving exchanges of resources; resolves divergent interests.
- C-14 Works With Diversity—works well with men and women from diverse backgrounds.

## **SYSTEMS-Understands Complex Interrelationships**

- C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.
- C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.
- C-17 Improves or Designs Systems–suggests modifications to existing systems and develops new or alternative systems to improve performance.

## **TECHNOLOGY-Works with a Variety of Technologies**

- C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.
- C-19 Applies Technology to Task—understands overall intent and proper procedures for setup and operation of equipment.
- C-20 Maintains and Troubleshoots Equipment—prevents, identifies, or solves problems with equipment, including computers and other technologies.

September 2014



	have received a copy of the South Plains College Student Guide. I he Student Guide as a student in the Applied Rehabilitation Psychology
Signature	
Date	