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Course Outline for PSYC 17

THE PSYCHOLOGY OF SLEEP AND DREAMS

Effective: Fall 2018

I. CATALOG DESCRIPTION:
PSYC 17 — THE PSYCHOLOGY OF SLEEP AND DREAMS — 3.00 units

An introduction to the scientific study of sleep and dreams. Major historic, modern, multicultural views and theories of sleep and dreams; research methods in the study of sleep and dreams; the biological basis of sleep and dreams; biological rhythms; individual differences in biological rhythms ; the stage sand cycles of sleep; sleep requirements and changes across the lifespan; sleep deprivation and its effects on cognitive, emotional, behavioral functioning and health; the role of sleep and dreams in mental health; the relationship between sleep and daytime alertness and performance; theories of dream content, function, and meaning; dreaming and creativity; and lucid dreaming; sleep disorders, their characteristics and treatments. Examination of information and theories for practical application.

3.00 Units Lecture

Grading Methods:
Letter or P/NP

Discipline:
- Psychology

	MIN
Lecture Hours:	54.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

A. Discuss the major theories and concepts of sleep and dreams
B. Analyze the methods used in the scientific study of sleep and dreams
C. Examine the biological foundations of sleep and dreams
D. Explain the regulation of biological rhythms include the sleep-wake cycle.
E. Evaluate the effects of healthy and unhealthy sleep practices
F. Contrast the causes and treatments for the major sleep disorders

V. CONTENT:

A. Introduction to the Psychology of Sleep and Dreams
   1. Overview of historical views of sleep and dreams.
   2. Overview of the development of the modern study of sleep and dream.
   3. Basic characteristics of sleep, dreams and wakefulness.
   4. Myths and misconceptions.

B. Theories of Sleep and Dreams.
   1. Adaptive theory
   2. Energy conservation theory
   3. Restorative theory
   4. Neuroplasticity theory
   5. Emotional and cognitive regulation theory.

C. The Scientific Study of Sleep and Dreams
   1. Overview of the basic methodology used in the study of sleep and dreams.
   2. Basic terminology
   3. Polysomnography (EEG, EMG, EOG, EKG, Oximetry, etc.).

D. The Biology of Sleep

1. Overview of the role of the nervous system in regulating wakefulness, sleep and dreams.
2. The role of the brain in regulating wakefulness, sleep, and dreams.
3. Major brain areas, biochemistry of sleep, and EEG brainwaves.

E. Biological Rhythms
1. The biological clock.
2. Types of biological rhythms: circadian, ultradian, infradian.
3. Timing of sleep and wakefulness.
4. Regulation of biological rhythms
5. Chronotypes
    a. individual variations in biological rhythms.
    b. chronotype and age.
6. Misalignments of the internal and external time.
7. Disruptions in circadian rhythms

F. Regulation of Wakefulness and Sleep
1. Homeostatic sleep drive
2. Clock-dependent alerting
3. Opponent process model
4. Biological model

G. Sleep
1. Defining characteristics.
2. Stages: characteristics and functions.
3. Sleep cycles
4. Sleep across the life-span.

H. Dreaming
1. Defining characteristics
2. Historial and cultural view of dreamns
3. Non-REM and REM dreams
4. Theoretical models (Psychoanalytic, Jungian, Activation-Synthesis, Emotional regulation, Biological)
5. Dream Content
6. Dreams and creativity
7. Lucid dreaming

I. Sleep Deprivation
1. Sleep requirements
2. Sleep debt
3. Quality of sleep
4. Chronic sleep deprivation
5. Sleep fragmentation
6. Effects of sleep deprivation

J. Healthy Sleep Practices
1. Exercise
2. Nutrition
3. Sleep hygiene

K. Drugs and Sleep
1. Caffeine
2. Alcohol
3. Cannabis
4. Opioids
5. Sleep medications
6. Herbal supplements

L. Mental Health
1. The role of sleep in mental health
2. Disturbances in sleep associated with mental health disorders

M. Sleep Disorders and their Treatments
1. Dyssomnias
2. Parasomnias
3. Sleep-related movement disorders

N. Sleep Education and Social Policy

VI. METHODS OF INSTRUCTION:

A. **Audio-visual Activity** - Short videos and examples of sleep and dreams content
B. **Discussion** - Application of course content to personal lives
C. **Lecture** - Multimedia presentations of course content
D. **Written exercises and case studies** -

VII. TYPICAL ASSIGNMENTS:

A. Lecture
1. Biology of Sleep
    a. Overview of the nervous system regulation of sleep-wake cycles
        1. Major brain areas
        2. Biochemistry of sleep
        3. EEG brainwaves and their relation to sleep-wake cycles

B. Reading
1. Read chapter on "Biology of Sleep" in text for vocabulary and concept development.

C. Writing
1. Explain how the brain regulates sleep-wake cycles. Include references to the various brain structures and biocehmical changes that regulate sleep.
2. Create a sleep diary that records the following: time you go to bed, time you fall asleep, time you wake up, rating of how

rested you feel upoon waking. This should be done for all naps and regular periods of sleep.

VIII. EVALUATION:

A. **Methods**

1. Exams/Tests
2. Research Projects
3. Class Participation
4. Other:
    a. Sleep analysis and behavior modification project

B. **Frequency**

1. 2 midterms and 1 final exam
2. 1 research project
3. weekly participation
4. 1 sleep analysis project

IX. TYPICAL TEXTS:

1. Dement, William, Rafael Pelayo, and Krystle Singh. *Dement's Sleep and Dreams.* 1st ed., CreateSpace Independent Publishing Platform, 2014.
2. Moorcroft, William. *Understanding Sleep and Dreaming.* 2nd ed., Springer, 2013.
3. Hsu, Eric. *Understanding Sleep: An Introduction to the Sociology of Sleep.* 1st ed., Routledge, 2018.
4. Buckleley, Kelly. *An Introduction to the Psychology of Dreaming.* 1st ed., Praeger (ABC-CLIO), 2017.

X. OTHER MATERIALS REQUIRED OF STUDENTS: