7.1 Sleep and Dreams
I. Introduction

A. Sleep is vital to mental health, it is not unconsciousness, but instead an altered state of consciousness.

B. **Consciousness** is a state of awareness of a given “something”.

C. Researchers use the EEG to record brain activity during sleep.
II. Why Do We Sleep?

A. Some people believe sleep is the body’s way of recovery from stress and exhaustion.

B. Some believe sleep helps to conserve energy, similar to hibernation.

C. Other beliefs include sleep being a way of clearing minds of useless information.
II. Why Do We Sleep? (con’t)

D. Earlier people believed that sleep was God’s way of protecting people from harm’s way at night.
III. Stages of Sleep

A. In **Stage I** sleep, your pulse slows and muscles relax. Your breathing becomes uneven and your brain produces theta waves.

B. In **Stage II** sleep, your eyes roll slowly from side to side.
III. Stages of Sleep (con’t)

C. In **Stage III**, delta waves sweep your brain.

D. **Stage IV** is the deepest sleep. Talking out loud, sleepwalking, and bed-wetting may occur in this stage.
III. Stages of Sleep (con’t)

E. REM Sleep follows Stage IV and is more active characterized by rapid eye movements, uneven pulse, breathing, relaxation of muscles, and dreaming. Nearly all dreaming occurs in REM sleep.

F. Stages I-IV are collectively known as NREM or quiet sleep. This makes up about 75% of adult sleep.
IV. How Much Sleep?

A. The amount of needed sleep varies by age.
   1. Newborns can sleep 16 hours a day.
   2. Teenagers may need 10-12 hours a day.
   3. Adults: 8 hours
   4. Seniors over age 70 may need only 5 hours.
IV. How Much Sleep? (con’t)

B. People tend to have a rhythm of activity or non-activity throughout a 24 hour period, this is known as the circadian rhythm.

EXAMPLE:
Jet lag occurs as a result of confusion with your circadian rhythm.
V. Sleep Disorders

A. Sleepless nights are common and experienced by all. This does not necessarily indicate a sleep disorder.

B. People with insomnia never get enough sleep to feel rested. Insomnia may be caused by drug and alcohol use, and anxiety or depression.
C. **Sleep apnea** is a disorder in which people have difficulty breathing while asleep. Snoring is a common symptom of this disorder.

D. **Narcolepsy** is a condition in which people suddenly fall asleep or feel very sleepy throughout the day. Symptoms of this condition may also include dreamlike hallucinations or temporary paralysis.
E. **Nightmares** take place during REM sleep. Usually the sleeper has clear recollection of the dream. **Night terrors** occur during Stage IV sleep and sleepers usually have no recall of the dream. Night terrors may involve screaming, panic, or confusion.
V. Sleep Disorders (con’t)

F. Sleepwalking is a disorder where people walk or do other things with no memory of doing so. Sleepwalking tends to occur more frequently in children than in adults.
VI. Dreams

A. Everyone dreams but most people remember few of their dreams. Dreams usually take place in ordinary settings and mix reality with fantasy.

B. Sigmund Freud believed that dreams contain clues to thoughts the dreamer is afraid to express when he/she is awake.
VI. Dreams (con’t)

C. Francis Crick theorized that dreams are the body’s way of removing or “unlearning” unneeded memories.

D. Nathaniel Kleitman theorized that dreams have no purpose at all. Dreams are simply a by-product of stimulating certain brain-cells during sleep.