CLPS 0120, Reading Schedule 2018

Required Readings

- *The Twenty-Four Hour Mind, The Role of Sleep and Dreaming in our Emotional Lives*, by Rosalind D. Cartwright (on Amazon.com price range = $9.93-$19.95). This text takes a perspective steeped in psychological theory to explain the role of sleep and dreaming, exploring the history of sleep research and sleep medicine, dreams and their role, and a taste of events during sleep (parasomnia) that have led to dramatic and tragic behaviors with legal ramifications. Readings from this book are designated 24-HR below.


- **Selected Teaching Materials.** This set of readings is available electronically through the course e-reserves that can be accessed on our canvas web page. Access to the course reserve readings requires a Brown Username. Readings from this list are designated as STM on the reading list below. New readings may be added during the semester; please watch for announcements. Some of the readings are chapters taken from the Sleep Research Society’s *Basics of Sleep Guide*. If you are interested in a deeper dive into other sleep topics, the full book is available on sleepresearchsociety.org for $50. Other readings are chapters from the *Principles and Practice of Sleep Medicine*, a text book of sleep medicine. Again, for those interested in going deeper, the newest version is available on Amazon for $173 for the Kindle edition; we provide selected chapters in the course library reserves, so you do not need to purchase either book.

Recommended Readings

*The Promise of Sleep*, by William C. Dement and Christopher Vaughan (designated Dement below). Although chapters from this book are designated for particular segments of the course (see reading list below), it may be easier to read it from front to back rather than skipping around. On the other hand, if you don’t have time to read it at the start of the semester, then follow the outline given below. [NB: if you are experiencing sleep problems, skip directly to Part 4.] This book is a fairly easy read that I think you’ll find enjoyable as you go through the semester. (On Amazon.com price range = $5.99-$15.00)

*Wide Awake and Dreaming*, by Julie Flygare (Brown ’05), a personal memoir of a young person with narcolepsy. I suggest you read this book if you are interested in a patient’s view of life with a sleep disorder. (On Amazon.com price range = $4.90-$16.26)

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<th>Date</th>
<th>Topic/Readings</th>
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<td>9/10</td>
<td>Introduction to course structure and pedagogy. <strong>Why sleep?</strong> A brief introduction to the topic. <strong>Discussion:</strong> What do you want to learn? What do you think about sleep? <strong>What is sleep?</strong> Introduction to the scientific study of behavior and sleep; introduction to the 2-process model of sleep regulation. Measurement and characteristics of normal human sleep.</td>
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**SAVI:** Chapter 2. Sleep generation and regulation—a framework.  
**24-HR:** Chapter 1. In the beginning: The early days of sleep research.  
**STM:**


**Dement:** Chapter 1. Long night’s journey into day.

9/17  **What does sleep look like?** Fundamentals of normal human sleep. States, stages, measurement, course of events through the night, NREM-REM cycle. Introduction to sleep phenomenology.

**Discussion:** Introduction to your class project: what, how, when, who, etc.


Swan TH. A note on Kohlschutter’s curve of the “depth of sleep.” Psychol. Bull. 26:607-610, 1929

**Who sleeps?** Phylogeny: Sleep in other species.

**SAVI:** Chapter 4. The reasons for sleep.

**STM:** Basics of Sleep Guide, Chapter 1. The Evolution of Sleep.


**Recommended:**

Rattenborg NC, Voirin B, Cruz SM, Tisdale R, Dell’Omo G, Lipp H-P, Wikelski M, Vyssotski AL. Evidence that birds sleep in mid-flight. *Nature Communications* DOI: 10.1038/ncomms12468 www.nature.com/naturecommunications


09/24  **Where is NREM sleep controlled?** The sleeping brain: What/where are the brain mechanisms of sleep? Neuroanatomy, neurocircuitry, neurochemistry.

**SAVI:** Chapter 1. Sleep through the ages. Chapter 3. The sleeping brain.


10/01 Where is REM sleep controlled? The sleeping brain: REM sleep anatomy and chemistry, NREM-REM cycle, motor inhibition
24-HR: Chapter 8. Warnings from the Land of Nod: Nightmares and REM sleep behavior disorder.

10/08 Indigenous Peoples’ Day: NO CLASS (Catch up on your reading!)


10/22 Midterm Exam in Class (no exceptions!)
10/22 **Who sleeps?** Ontogeny: Developmental aspects of sleep behavior and sleep-wake regulation; focus on adolescence.

**SAVI:** Chapter 5. The seven ages of sleep.


**Basics of Sleep Guide, Section 2:** Life Cycles in Sleep—Chapter 3. Infants to adolescents; Chapter 4. Sleep in the older adult.


**JOURNAL CLUB ARTICLE:** No JC—After the Midterm Exam return to CIT 227 for lecture.

10/29 **What happens to your body during sleep?** Sleep physiology: autonomic nervous system, hormones, temperature regulation, sexual activation, breathing.


11/05 **The sleeping mind: Introduction to Dreaming—How are dreams made?** Biology of dreaming.

**What are dreams made of?** Dream phenomenology; psychology of dreaming.

**What are dreams made for?** Problem solving, creativity, mood, psychopathology, forensics.

**24-HR:** Chapter 2. Collecting dreams: Watching the sleeping mind. Chapter 6. More NREM parasomnias: Those who injure themselves, seek food or sex, explore, and protect.


**Dement:** Chapter 13. The real life of dreams.


11/12 **The sleeping mind—dreaming:** problem solving and what’s on your sleeping mind?


11/19 **The sleeping mind: How does sleep affect learning and memory?** Characteristics of memory formation; sleep-enhancing effects on learning.


**Recommended:** Carskadon, M.A. Sleep’s effects on cognition and learning in adolescence. *Prog Brain Res, 190*:137-143, 2011.


11/26 **The sleeping mind—do we need sleep?** Sleep deprivation. Sleep function. **How alert are you?** Sleepiness/alertness: measurement and regulatory processes. Recovery from sleep deprivation


12/03 What happens when sleep goes wrong? Sleep disorders: what they are? who has them? Focus on narcolepsy and sleep apnea.

SAVI: Chapter 6. When sleep suffers.


24-HR: Chapter 6. Insomnia.


12/10 Final project presentations and peer review!

12/19 FINAL EXAMINATION AT 2:00 pm. NO EXCEPTIONS! Location to be announced. Please make sure that you have no conflict.