Sleep and Dreams Spring 2019
PSYC 135/235, MW 1:30-2:50 pm, Cemex Auditorium, 3 units

Teaching Team:

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
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<tbody>
<tr>
<td>Professor Emeritus</td>
<td>William C. Dement</td>
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<tr>
<td>Course Instructor</td>
<td>Rafael Pelayo</td>
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<td>Sharon Keenan</td>
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</tr>
<tr>
<td>Head TA</td>
<td>Riley Spain</td>
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<tr>
<td>Exams TA</td>
<td>Charlie Goldberg</td>
<td><a href="mailto:cmgold@stanford.edu">cmgold@stanford.edu</a></td>
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<tr>
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<td>Jonathan Mak</td>
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<tr>
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<td>Michaela Keefe</td>
<td><a href="mailto:mkeefe@stanford.edu">mkeefe@stanford.edu</a></td>
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<tr>
<td>Projects TA</td>
<td>Sophia Lynn</td>
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<tr>
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<td>Jay Tyler</td>
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<tr>
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<tr>
<td>Logistics TA</td>
<td>Kate Formico</td>
<td><a href="mailto:kformico@stanford.edu">kformico@stanford.edu</a></td>
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Course Overview:
Sleep and Dreams is designed to impart essential knowledge of the neuroscience of sleep. The course will cover the science of sleep, dreams, sleep deprivation, biological rhythms, and sleep disorders. Such knowledge should empower the student to make educated decisions concerning sleep and alertness for the rest of his or her life. An equally important goal is to shape students' attitudes about the importance of sleep. Learning about the science of sleep will provide tangible reason to respect sleep as a member of what we term the triumvirate of health: good nutrition, physical fitness, and healthy sleep. We will include a live demonstration of how sleep is measured with a discussion of modern polysomnography. Students will be required to collect data on their own sleep hours and schedules in the form of a sleep journal and submit their sleep journals with this data each week. Students will also analyze their journal and track changes throughout the course. Finally, students will be required to complete an outreach project that allows them to share their newly acquired sleep knowledge with their community. PSYC 235 is intended for graduate students only - all undergraduates must be enrolled in PSYC 135.

Course Materials:
*Dement’s Sleep and Dreams*: The textbook is available in the Stanford Bookstore for purchase. You may also be able to find the book on Amazon or from another online textbook seller.

*Optional/Supplemental Reading*: Additional articles will be made available on our Canvas site. This reading is not required, but will hopefully enrich your experience in the course. Announcements may also be sent out alerting students to fun articles and videos of interest on the S&D website.

Canvas Site:
Assignments, announcements, readings, handouts, discussions and grades will be available through Canvas (http://canvas.stanford.edu). You should be automatically given access to the Sleep and Dreams Canvas page upon registering for the course. If you have any problems, please
email the Head TA immediately. Please note that most handouts and supplemental readings will be made available online only to conserve paper, so **REGULAR USE OF THIS SITE IS ESSENTIAL!**

**Shoppers (students who join the class late):**
Students who join the class after the first week of class should speak to the Head TA to pick up any information they need to meet the first deadlines. Be sure to check Canvas for any materials and announcements you may have missed. Assignments that have been missed cannot be made up.

**Teaching Assistants:**
Your primary means of getting personal assistance for the course, such as questions about grades, should be your assigned TA, as indicated on Canvas.

Since there are **no required sections** for this course, your TA is available to answer any questions you might have any day of the week via email or before or after class. He or she will also be the person who grades (most) assignments and who will you will submit bonus points to. Please put the words “Sleep and Dreams” or “S&D” in the subject of all emails to TAs to expedite their responses, and allow at least 24 hours for response. If a TA appears to be unresponsive, please follow up with the Head TA.

**Riley Spain | Head TA | rspain@stanford.edu**
Riley Spain is an Economics major with a History minor. From LA, Riley loves road trips and spending time outside, especially hiking, skiing, or hitting the beach. On campus, Riley is a Hume Center Writing Tutor, the Vice President of Corporate Outreach for Stanford Women in Finance, and a member of Pi Beta Phi. She looks forward to passing along the Sleep and Dreams experience to a new year of students!

**Kate Formico | Exams TA | kformico@stanford.edu**
Hi! My name is Kate Formico and I am an undeclared sophomore from Saratoga, California. I play on the Stanford Women’s Volleyball team and in my spare time I enjoy hiking, going to the beach, and playing with my dog. Sleep and Dreams was one of my favorite classes last year, so I am very excited to be a TA this year!

**Jonathan Mak | Exams TA | jmak@stanford.edu**
Jonathan is a senior studying Electrical Engineering with a concentration in bioelectronics. His passions include playing basketball, singing, and of course, sleeping. He loves traveling, and has been to different parts of the globe including Africa and Asia.
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<thead>
<tr>
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**Michaela Keefe | Projects TA | mkeefe@stanford.edu**

Michaela is a junior majoring in Political Science and minoring in Psychology. She is on the Stanford Women's Volleyball team, has a Golden Retriever named Hoover, and loves the beach. She is looking forward to TAing for one of her favorite classes at Stanford this quarter!

**Sophia Lynn | Projects TA | sophiall@stanford.edu**

Sophia is a sophomore and prospective Product Design major. From Los Angeles California, she is also a member of the Women's Rowing team and is excited to be TAing this year!

**Jay Tyler | Grades TA | jtyler15@stanford.edu**

Hi! My full name is Jabiari Jawan Tyler but I go by Jay. I've always been fascinated by the human mind whether that be its amazing power or its pitfalls. Using practices and information I learned in sleep and dreams, I was able to acquire the skills to not only get more sleep, but also better sleep in pursuit of improving my performance as a student and as an athlete.

**Landon Ellingson | Grades TA | landon3@stanford.edu**

Landon is a junior studying human biology, concentrating in healthcare policy. He was born and raised in Jefferson, WI, and he will love the Wisconsin Badgers until the day he dies. Some activities he enjoys are: grabbing a thing, spinning, then throwing the thing. He listens to southern hip hop & rap, death metal, and classical music. His favorite TV shows are Family Guy, Ozark, and How I Met Your Mother. Favorite movies are Interstellar, Gran Torino, and the Godfather Trilogy.

**Charlie Goldberg | Logistics TA | cmgold@stanford.edu**

Charlie is a sophomore studying Management Science and Engineering. He grew up in New York City and is a big Giants fan. In his free time, he enjoys playing poker and backgammon with friends.
Course Requirements and Grading:
Grading of assignments and exams will follow the breakdown below. We will happily give A+’s to deserving students!

<table>
<thead>
<tr>
<th>Projects</th>
<th>Exams</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach Project: 300 points</td>
<td>Midterm: 200 points</td>
<td>1000 Points</td>
</tr>
<tr>
<td>Sleep Project: 200 points</td>
<td>Final Exam: 300 points</td>
<td>+ Bonus Points!</td>
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</table>

Outreach Project:
The outreach project offers you an opportunity to take what you’re learning in the course and share that knowledge with your classmates, the surrounding communities, students in neighboring high schools, and people all over the world via the class website and any other platform you may devise. As you will find on the project handout, there are several different types of projects you can choose to do, in addition to an option to create your own type. Depending on which of the options you choose, you may want to and/or be required to work individually or collaboratively. Please consult the handout for specific guidelines for each type of project. **Please direct all Outreach Project questions to the Projects TA.**

**Deadlines:** You must submit a proposal for your Outreach project on **Wednesday, April 17th.** Late approval submissions will lose points. The Outreach Project is due by the end of day on **Wednesday, May 22nd.** All assignments turned in after **11:59PM** will be considered late. There will be a **10% deduction for each late day,** including days on the weekend. No additional late projects will be accepted after **Monday, May 27th.**

Sleep Project:
The Sleep Project is an essential way for you to understand how sleep affects your own day-to-day life. It is designed for you to observe patterns in your own sleep or wakefulness by tracking personal data (e.g. sleep/wake times and alertness levels). Throughout the quarter, you will be submitting a Sleep Journal with this data each week. Because the Sleep and Dreams course fulfills a science requirement, the Sleep Journal Project teaches experimental measurements and data analysis. Please consult project handouts for further details. Should you have specific questions about the project, **please direct all Sleep Project questions to the Projects TA.**

**ASQ Survey:** The ASQ is a sleep survey worth a total of **25 points** of the total Sleep Project grade. You will have to complete the survey once at the beginning of the quarter for 12.5 points, and again at the end of the quarter for another 12.5 points. The first part of the ASQ survey is due by **Wednesday, April 10th.** The due date for the second part of the survey is **Monday, June 3rd.** You will be reminded via Canvas. **No late submissions will be accepted.**

**Final Sleep Project Deadline:** The sleep project is due by the end of lecture on **Wednesday, May 29th.** There will be a **10% deduction for each late day,** including the weekend. The last day to turn in a project is **Monday, June 3rd.** Any projects turned in after will not be accepted.
Midterm and Final:

There will be two written examinations in this course, a midterm during the normal class time on Wednesday, May 8th and a final on Monday, June 10th from 3:30-6:30PM. The locations of the final will be announced via Canvas as the date approaches. An alternate exam time may be scheduled only for those with valid need, limited to university sanctioned athletic/extracurricular events, OAE/DCR, and other extraordinary circumstances. (NOTE: This does not include accommodating earlier departure from campus or class conflicts due to double booking). **If you think you need an alternate exam, please email the logistics TA at least two weeks prior to the exam, or as soon as possible, to coordinate scheduling. Note that only one alternate exam time will be offered (this quarter it will be the Thursday of Week 10, time TBD).**

Please note that our exam review sessions will not be scheduled to accommodate for alternate exams. If you choose to take an alternate exam, then you are forfeiting the opportunity to have a review session beforehand.

**Bonus Points:**

The Sleep and Dreams bonus point system is designed to provide a way for those who desire to reach the next grade plateau to do so by delving deeper into the world of sleep. In addition, there are smaller sized bonus points given out for class-related efforts. **For details on how to earn bonus points, please see the Earning Bonus Points handout in Canvas.** The last day to earn bonus points is **Wednesday, June 5th.**

**Drowsiness is Red Alert:**

Be aware that any student who falls asleep during class may get woken up by a cool squirt of water to the face. You will have to stand up and yell the class mantra, “**Drowsiness is red alert!**” to demonstrate retrograde amnesia and spread the DIRA message.

**Students with Documented Disabilities:**

Students who may need an academic accommodation based on the impact of a disability must initiate the request with the **Office of Accessible Education (OAE).** Professional staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an Accommodation Letter for faculty dated in the current quarter in which the request is made.

Students should contact the OAE as soon as possible since timely notice is needed to coordinate accommodations.

**OAE Address:** 563 Salvatierra Walk.

**Phone:** 650-723-1066

**URL:** http://studentaffairs.stanford.edu/oae

**After the accommodation is finalized, please email the Logistics TA with the documentation. Teaching staff must receive appropriate documentation two weeks before the midterm exam in Week 6.**
Lecture/Reading Schedule:

The lecture schedule on the following pages will serve as a guide to the course. Dr. Pelayo intends to maintain a bit of flexibility depending upon the circumstances (such as guest lecturer availabilities) but this schedule is more or less the path the class will take. **Any changes will be announced via Canvas, so please be sure to pay attention to class announcements!**

Also included in the schedule is the required reading for each class session. We recommend that you have the reading completed **BEFORE** lecture, and can’t stress how advantageous this will be to your overall learning. Readings outside of the textbook can be found on Canvas.

**Lecture Schedule**

**Guest lectures are subject to change. However, assignment due dates will not change.**

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Lecture</th>
<th>Required Reading</th>
<th>Assignments &amp; Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M 1-Apr</td>
<td>Lecture 1 – Normal Sleep I</td>
<td>Textbook: Preface, Ch 1</td>
<td>Get Textbook at Bookstore / Online</td>
</tr>
<tr>
<td></td>
<td>W 3-Apr</td>
<td>Lecture 2 – Normal Sleep II</td>
<td>Textbook: Ch 2, 3, 4</td>
<td>Sleep Journal Intro Handout</td>
</tr>
<tr>
<td>2</td>
<td>M 8-Apr</td>
<td>Lecture 3 – Sleep Debt &amp; Insomnia</td>
<td>Textbook: Ch 5, 6, 7</td>
<td>Start Sleep Journals!</td>
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<td></td>
<td>W 10-Apr</td>
<td>Lecture 4 – Polysomnography &amp; Restless Leg Syndrome</td>
<td>Textbook: Ch 14, 16</td>
<td>Outreach Project Handout Available</td>
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<td></td>
<td></td>
<td>In Class Demo</td>
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<td>ASQ + Initial Survey Due</td>
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<td>GL: Dr. Randy Charlton</td>
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<tr>
<td>3</td>
<td>M 15-Apr</td>
<td>Lecture 5 – Dreams</td>
<td></td>
<td>Sleep Journal #1 Due</td>
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<tr>
<td></td>
<td>W 17-Apr</td>
<td>Lecture 6 – Dreams in Psychotherapy</td>
<td>Textbook: Ch 13</td>
<td>Outreach Approval Due</td>
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<td><em>GL: Dr. Randy Charlton</em></td>
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<tr>
<td>4</td>
<td>M 22-Apr</td>
<td>Lecture 7 – OSA</td>
<td>Textbook: Ch 17</td>
<td>Sleep Journal #2 Due</td>
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<tr>
<td></td>
<td>W 24-Apr</td>
<td>Lecture 8 – Parasomnias</td>
<td></td>
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<tr>
<td>5</td>
<td>M 29-Apr</td>
<td>Lecture 9 - Surgical and Non Surgical Treatments of OSA</td>
<td>Textbook: Ch 17</td>
<td>Sleep Journal #3 Due</td>
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<tr>
<td></td>
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<td><em>GL: Dr. Stanley Liu &amp; Dr. Michael Awad</em></td>
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<td></td>
<td>W 1-May</td>
<td>Lecture 10 - Lighting &amp; Sleep + Jet Lag</td>
<td>Textbook: Ch 9, 10</td>
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<td>*GL: Dr. Jamie Zeitzer</td>
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<tr>
<td>6</td>
<td>M 6-May</td>
<td>Lecture 11 - Stress Reduction and Sleep</td>
<td></td>
<td>Sleep Journal #4 Due</td>
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<td></td>
<td></td>
<td>Midterm material ends</td>
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<tr>
<td>Date</td>
<td>Day</td>
<td>Event/Assignment</td>
<td>Lecturer/Textbook</td>
<td>Notes</td>
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<tr>
<td>8-May</td>
<td>W</td>
<td>MIDTERM - In Class</td>
<td></td>
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<tr>
<td>13-May</td>
<td>M</td>
<td>Sleep Journal #5 Due</td>
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<tr>
<td>15-May</td>
<td>W</td>
<td>Lecture 13 – Narcolepsy</td>
<td><em>GL: Dr. Emmanuel Mignot</em></td>
<td>Textbook: Ch 11, 12</td>
</tr>
<tr>
<td>20-May</td>
<td>M</td>
<td>Lecture 14 – Hacking Sleep</td>
<td><em>GL: Jonathan Berent &amp; Dr. Joseph Owens</em></td>
<td>Textbook: Ch 15, 19, 22</td>
</tr>
<tr>
<td>22-May</td>
<td>W</td>
<td>Lecture 15 – Pediatric Sleep</td>
<td></td>
<td>Textbook: Ch 18, 20</td>
</tr>
<tr>
<td>27-May</td>
<td>M</td>
<td>Memorial Day - NO CLASS</td>
<td></td>
<td>Sleep Journal #7 Due</td>
</tr>
<tr>
<td>29-May</td>
<td>W</td>
<td>Lecture 16 – Sleep &amp; Transportation Safety</td>
<td><em>GL: Dr. Mark Rosekind</em></td>
<td>Textbook: Ch 21</td>
</tr>
<tr>
<td>3-Jun</td>
<td>M</td>
<td>Lecture 17 - Sleep &amp; Sports Psychology</td>
<td><em>Dr. Scott Kutscher</em></td>
<td>ASQ Survey (part 2) Due</td>
</tr>
<tr>
<td>5-Jun</td>
<td>W</td>
<td>Lecture 18 – Sleep in Space + Safety and Performance</td>
<td><em>GL: Dr. Erin Flynn-Evans</em></td>
<td>Last day to Submit Bonus Points</td>
</tr>
<tr>
<td>10-Jun</td>
<td>M</td>
<td>FINAL EXAM 3:30 - 6:30PM</td>
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