San José State University
Department of Psychology

PSYC 120 – Advanced Research Methods and Design, Section 10
Spring 2014 Course Syllabus

Instructor: Dr. Cary S. Feria
Office Location: DMH (Dudley Moorhead Hall), Room 312
Telephone: (408) 924-5620
Email: cary.feria@sjsu.edu
Office Hours: Monday 1:15-1:45pm, Tuesday 11:30am-12:00pm, Wednesday 1:15-2:15pm, and Thursday 11:30am-12:00pm
You are welcome to schedule an appointment with me for a different time, if these times don’t fit your schedule.

Class Days/Time/Classroom: Lecture Section 10: Tuesday, Thursday 1:30-2:45pm in Clark 117
Lab Section 11: Tuesday 3:00-5:00pm in DMH 339
Lab Section 12: Thursday 3:00-5:00pm in DMH 339
You must be registered both in the lecture (section 10) and in one of the labs (section 11 or 12).

Prerequisites: STAT 95, PSYC 1, PSYC 100W

Course Description

SJSU Course Catalog Description: Descriptive, correlational, quasi-experimental, and experimental approaches: design, methodology, and analysis. Experience designing, conducting, analyzing, and presenting (verbal and written) research findings. Topics will include: hypothesis testing, validity, reliability, scales of measurement, questionnaire development, power, statistical significance, and effect size. Prerequisite: PSYC 001, STAT 095, and PSYC 100W. Misc/Lab: Lecture 3 hours/activity 2 hours.

Specific Course Description:

We all hear about research findings on the news and the internet every day. And as practitioners of psychology, we often hear that one therapy or medication is better than another. How can we know whether to believe these claims?

In PSYC 120, you will gain the tools to become a smart and critical consumer of research. In lecture, you will learn the strengths and limitations of different types of studies, problems that can arise, and how these problems affect the interpretation of results. In lab, you will gain hands-on experience carrying out several of the major types of psychology studies, and analyzing their results. You will also work in a group to develop an idea for an original psychology study, which you will carry out from start to finish.

Course Goals and Learning Objectives

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:
CLO1 – Critically evaluate research studies you read or hear about
CLO2 – Design and conduct an independent, original psychological research study
CLO3 – Use statistics to interpret the results of research studies  
CLO4 – Write reports of research findings according to APA style  
CLO5 – Give a professional research talk  
CLO6 – Understand and distinguish the different types of research designs  
CLO7 – Understand the vocabulary of various research designs  
CLO8 – Understand and identify problems in research studies  
CLO9 – Understand how to use design procedures to control for potential problems in research studies  

**Program Learning Outcomes (PLO)**  
Upon successful completion of the psychology major requirements…  

**PLO1 – Knowledge Base of Psychology** – Students will be able to identify, describe, and communicate the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.  

**PLO2 – Research Methods in Psychology** – Students will be able to design, implement, and communicate basic research methods in psychology, including research design, data analysis, and interpretations.  

**PLO3 – Critical Thinking Skills in Psychology** – Students will be able to use critical and creative thinking, skeptical inquiry, and a scientific approach to address issues related to behavior and mental processes.  

**PLO4 – Application of Psychology** – Students will be able to apply psychological principles to individual, interpersonal, group, and societal issues.  

**PLO5 – Values in Psychology** – Students will value empirical evidence, tolerate ambiguity, act ethically, and recognize their role and responsibility as a member of society.  

**Required Texts/Readings**  
**Textbook**  
ISBN number: 978-1-111-34225-8  

**Course Requirements and Assignments**  
**Exams:**  
There will be 3 exams. Exams will cover material from class and readings. Exams will be mostly multiple-choice, but may also include short-answer questions. The Final Exam will be cumulative. Exam 2 will mostly cover new material, but may cover some material that was tested in Exam 1. Exams will be closed-book and closed-notes. A study guide will be given out before each exam. (aligned with CLO 1, 6, 7, 8, 9; PLO 2, 3, 5)  

**Homework Assignments:**  
• There will be 3 homework assignments over the course of the semester. Homework will be turned in by each student individually. You will lose 10% of the point value of the homework for each day it is late. If the assignment is returned to the class before you hand in your homework, you will receive no credit.  
• In lab section, you will perform 3 research studies giving you hands-on experience with psychology research. After performing each study, you will analyze the results of the study, and do a written assignment about it. Because each
homework assignment requires participation in the laboratory session, attendance is mandatory. For some studies, if
you are absent on the day that we perform the study or the day that we analyze the study, you cannot receive credit for
the assigned work from that day. If you realize that you are going to have to miss lab on one of these days (see
schedule on pages 7-8 of this syllabus), please contact me as soon as possible. In some cases, you may also be
responsible for completing some of the data collection outside of class time. (aligned with CLO 1, 3, 4, 6, 7, 8, 9; PLO
2, 3, 5)

**Project:**
In small groups, you will conduct an original research study, of your choosing, from beginning to end. You will
decide on a topic of investigation, conduct a literature review of the issue, design your study, conduct the study, write a
paper, and give an oral presentation of your research to the class. The progression of your project will be divided into
5 Project Steps. The schedule on pages 7-8 of this syllabus gives the due dates for each step.
Most of the steps of the project will be completed in groups, but writing the paper will be done individually. For most
of the steps, you will lose 10% of the point value of the step for each day that it is late. However, the oral presentation
must be completed on time, and cannot be accepted late. Further information on the project will be provided later.
**Participation in Classmates’ Studies** – Some of the students in this class will conduct their studies during class time
(see schedule on pages 7-8 of this syllabus), using classmates as their main source of participants. For this reason, it is
important that every student participate in every study that is being conducted in class. Your grade will be reduced for
each study that you fail to participate in. For example, if there are 10 studies performed in class, and you participate in
9 of them, your participation grade would be 9 points. If it turns out that there is not sufficient time for everyone to
participate in all the studies, then this grading scheme may be modified. The participation grade is determined on an
individual (not group) basis. (aligned with CLO 1, 2, 3, 4, 5, 7, 8, 9; PLO 2, 3, 5)

SJSU classes are designed such that in order to be successful, it is expected that students will spend a minimum of
forty-five hours for each unit of credit (normally three hours per unit per week), including preparing for class,
participating in course activities, completing assignments, and so on. More details about student workload can be
found in [University Policy S12-3](http://www.sjsu.edu/senate/docs/S12-3.pdf).

**Grading Policy**

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
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<tr>
<td>Exams (total)</td>
<td>325</td>
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<tr>
<td>Exam 1</td>
<td>90</td>
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<tr>
<td>Exam 2</td>
<td>100</td>
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<tr>
<td>Final Exam</td>
<td>135</td>
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<tr>
<td>Project (total)</td>
<td>115</td>
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<tr>
<td>Project Step 2 (proposal)</td>
<td>15</td>
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<td>Project Step 4 (oral presentation)</td>
<td>25</td>
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<tr>
<td>Project Step 5 (paper)</td>
<td>65</td>
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<tr>
<td>Study Participation</td>
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<tr>
<td>Homework (total)</td>
<td>60</td>
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<tr>
<td>HW 1 (observational)</td>
<td>8</td>
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<td>HW 2 (survey)</td>
<td>17</td>
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<td>HW 3 (experimental)</td>
<td>35</td>
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<td>Total</td>
<td>500</td>
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Final course grades will be based on the scale below:

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<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A+</td>
<td>≥ 97%</td>
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<tr>
<td>A</td>
<td>93-96%</td>
</tr>
<tr>
<td>A-</td>
<td>90-92%</td>
</tr>
<tr>
<td>B+</td>
<td>87-89%</td>
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<tr>
<td>B</td>
<td>83-86%</td>
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<tr>
<td>B-</td>
<td>80-82%</td>
</tr>
<tr>
<td>C+</td>
<td>77-79%</td>
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<tr>
<td>C</td>
<td>73-76%</td>
</tr>
<tr>
<td>C-</td>
<td>70-72%</td>
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<tr>
<td>D+</td>
<td>67-69%</td>
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<tr>
<td>D</td>
<td>63-66%</td>
</tr>
<tr>
<td>D-</td>
<td>60-62%</td>
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<tr>
<td>F</td>
<td>&lt; 60%</td>
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</tbody>
</table>
Extra Credit Opportunities:

(a) Bonus Quizzes
There will be an optional bonus quiz at the end of many class periods. The bonus quizzes are designed to help you and me evaluate your progress on understanding the material. They may cover any material from class or readings. Each bonus quiz will contain 3 questions. If you get at least 2 of the questions correct, you will receive 1 bonus point!

(b) Research Review Paper
You may choose to write a research review paper (4-6 pages) on a topic of interest to you for extra credit. The paper should focus on a specific topic within any area of psychology. The paper should discuss at least 6 references, at least 5 of which must be articles from scientific research journals. The extra credit paper topic you choose may not be related to your project topic for this course. If you choose to write a paper, you need to have your topic approved by me no later than Tuesday April 22. Depending on the quality of the paper, you may receive up to 8 bonus points. The paper must be submitted to turnitin.com as well as turning in a printed copy to me. The paper must be turned in before the final exam.

Classroom Protocol

Readings
Textbook reading due dates are listed in the course schedule on pages 7-8 of this syllabus. Additionally, journal articles or other readings may be assigned from time to time. These readings will be announced in class.

Canvas
Lecture slides, exam grades, and other materials will be posted on the course Canvas website. Please do not email me through Canvas – email me at cary.feria@sjsu.edu instead.

Turnitin.com
Students will be required to turn in certain papers (as specified by the instructor) to turnitin.com, in addition to submitting a printed copy to the instructor. This website will check your paper for plagiarism.

Checking Your Email Account
I will from time to time send email messages to the class, using your email address listed in MySJSU.

Getting Help
If you are having difficulties with any aspect of this course, please come to my office hours, and I will do my best to help you. If you are unable to come to my office hours, you can contact me to make an appointment for a different time. If you have just a short question, you also can send it to me by e-mail.

Group Participation
Active participation in your lab group is required, and at many lab sections students will be working in their groups on their projects. If you do not participate on group work days it may result in a reduction of your (individual) grade on your proposal and/or talk.

Attendance
Missed Classes. If you are absent, you should consult a classmate to get the lecture notes and to find out about any announcements made in class.
Missed Exams. I strongly discourage make-up exams. No make-up exams will be given unless the student presents a valid excuse. I reserve the right to decide if the excuse is valid. I will be more likely to allow you to make up an exam if you make every effort possible to contact me before the scheduled date of the exam. The fastest way to contact me is often by e-mail.

Class Courtesy
- Cell phones are not permitted in class. Please turn off your cell phone and put it away in your backpack prior to entering the classroom.
- If you must arrive late or leave early, please do so quietly and with a minimum of distraction.
Cell Phone/Exam/Quiz Policy
- Students cannot have any cell phones or other electronics out in the classroom when an exam or quiz is being given. Students must keep their cell phone/electronics turned off or in silent mode, and inside their backpack.
- If a student has a cell phone or other electronics out when an exam/quiz is being given, they will receive a grade of zero on the exam/quiz.
- Even after the student has handed in their exam/quiz, they still cannot have a cell phone/electronics out in the classroom. Students must wait until after they leave the classroom to take out cell phones/electronics.
- There will be no discussion of what the student was doing with the cell phone/electronics, the student will simply receive a grade of zero.

Note
The procedures and schedule in this course syllabus are subject to change at the instructor’s discretion.

University Policies
Dropping and Adding
Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester’s Catalog Policies section at http://info.sjsu.edu/static/catalog/policies.html. Add/drop deadlines can be found on the current academic year calendars document on the Academic Calendars webpage at http://www.sjsu.edu/provost/services/academic_calendars/. The Late Drop Policy is available at http://www.sjsu.edu/aars/policies/latedrops/policy/. Students should be aware of the current deadlines and penalties for dropping classes.

Information about the latest changes and news is available at the Advising Hub at http://www.sjsu.edu/advising/.

Consent for Recording of Class and Public Sharing of Instructor Material
University Policy S12-7, http://www.sjsu.edu/senate/docs/S12-7.pdf, requires students to obtain instructor’s permission to record the course.
- “Common courtesy and professional behavior dictate that you notify someone when you are recording him/her. You must obtain the instructor’s permission to make audio or video recordings in this class. Such permission allows the recordings to be used for your private, study purposes only. The recordings are the intellectual property of the instructor; you have not been given any rights to reproduce or distribute the material.”
- “Course material developed by the instructor is the intellectual property of the instructor and cannot be shared publicly without his/her approval. You may not publicly share or upload instructor generated material for this course such as exam questions, lecture notes, or homework solutions without instructor consent.”

Academic integrity
Your commitment as a student to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Instances of academic dishonesty will not be tolerated. Cheating on exams or plagiarism (presenting the work of another as your own, or the use of another person’s ideas without giving proper credit) will result in a failing grade and sanctions by the University. For this class, all assignments are to be completed by the individual student unless otherwise specified. If you would like to include your assignment or any material you have submitted, or plan to submit for another class, please note that SJSU’s Academic Integrity Policy S07-2 requires approval of instructors.

Campus Policy in Compliance with the American Disabilities Act
If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires
that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of your disability.

In 2013, the Disability Resource Center changed its name to be known as the Accessible Education Center, to incorporate a philosophy of accessible education for students with disabilities. The new name change reflects the broad scope of attention and support to SJSU students with disabilities and the University's continued advocacy and commitment to increasing accessibility and inclusivity on campus.
Course Schedule
PSYC 120 – Advanced Research Methods and Design, Section 10, Spring 2014

Note: This schedule is subject to change. Reading due dates and topic dates are approximate. I will announce any changes of exam dates, homework due dates, or project step due dates in class and by email.

Lecture sections have a white background. Lab sections have a gray background.

<table>
<thead>
<tr>
<th>Wk</th>
<th>Date</th>
<th>Topic/Activity</th>
<th>Reading due</th>
<th>Assignments due</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>R Jan. 23</td>
<td>introduction</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td><strong>no lab sessions</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>T Jan. 28</td>
<td>psychology as a science; variables, reliability &amp; validity</td>
<td>Ch. 1</td>
<td></td>
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<tr>
<td></td>
<td>R Jan. 30</td>
<td>variables, reliability &amp; validity</td>
<td>Ch. 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>lab</td>
<td>SPSS basics, observational study</td>
<td></td>
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<tr>
<td>3</td>
<td>T Feb. 4</td>
<td>observational designs</td>
<td>Ch. 13</td>
<td></td>
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<tr>
<td></td>
<td>R Feb. 6</td>
<td>survey research</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td>review statistics, observational study analysis</td>
<td>Ch. 15 (review)</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>T Feb. 11</td>
<td>correlational designs</td>
<td>Ch. 12</td>
<td>HW 1</td>
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<tr>
<td></td>
<td>R Feb. 13</td>
<td>correlational designs</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td>survey study</td>
<td></td>
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<tr>
<td>5</td>
<td>T Feb. 18</td>
<td><strong>Exam 1</strong></td>
<td></td>
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<tr>
<td></td>
<td>R Feb. 20</td>
<td>intro. to exper. designs</td>
<td>Ch. 7</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td>survey study analysis</td>
<td></td>
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<tr>
<td>6</td>
<td>T Feb. 25</td>
<td>research strategies &amp; validity</td>
<td>Ch. 6</td>
<td></td>
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<td></td>
<td>R Feb. 27</td>
<td>research strategies &amp; validity; APA Results/Discussion</td>
<td>Ch. 16</td>
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<td></td>
<td>lab</td>
<td>experimental study</td>
<td></td>
<td>HW 2</td>
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<tr>
<td>7</td>
<td>T Mar. 4</td>
<td>research strategies &amp; validity</td>
<td></td>
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<tr>
<td></td>
<td>R Mar. 6</td>
<td>more experiment basics</td>
<td>Ch. 8</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td>experimental study analysis</td>
<td></td>
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<tr>
<td>8</td>
<td>T Mar. 11</td>
<td>between-subjects experiments</td>
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<tr>
<td></td>
<td>R Mar. 13</td>
<td>between-subjects experiments</td>
<td></td>
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<tr>
<td></td>
<td>lab</td>
<td>form groups, work on project</td>
<td>Ch. 2 (skim)</td>
<td>HW 3, PS 1</td>
</tr>
<tr>
<td>9</td>
<td>T Mar. 18</td>
<td><strong>Exam 2</strong></td>
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<tr>
<td></td>
<td>R Mar. 20</td>
<td>within-subjects experiments</td>
<td>Ch. 9</td>
<td>PS 2</td>
</tr>
<tr>
<td></td>
<td>lab</td>
<td>work on project</td>
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<td></td>
<td>Mar. 25-27</td>
<td>Spring Break</td>
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<td>10</td>
<td>T Apr. 1</td>
<td>within-subjects experiments</td>
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<td></td>
<td>R Apr. 3</td>
<td>within-subjects experiments</td>
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<td></td>
<td>lab</td>
<td>work on project</td>
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<td>11</td>
<td>T Apr. 8</td>
<td>run your studies!</td>
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<td>R Apr. 10</td>
<td>run your studies!</td>
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<td></td>
<td>lab</td>
<td>how to do conference talks, work on project</td>
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<tr>
<td>12</td>
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<td>factorial designs</td>
<td>Ch. 11</td>
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<tr>
<td>Date</td>
<td>Description</td>
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<td>R Apr. 17</td>
<td>factorial designs</td>
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<td>lab</td>
<td>work on project, analyze project data</td>
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<td>13 T Apr. 22</td>
<td>factorial designs</td>
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<td>R Apr. 24</td>
<td>factorial designs; ethics</td>
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<tr>
<td>lab</td>
<td>analyze project data</td>
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<tr>
<td>14 T April 29</td>
<td>ethics</td>
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<td>R May 1</td>
<td>ethics</td>
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<tr>
<td>lab</td>
<td>work on project</td>
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<tr>
<td>15 T May 6</td>
<td>sampling</td>
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<tr>
<td>R May 8</td>
<td>talk sessions - T lab students (PS 4)</td>
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<tr>
<td>lab</td>
<td>work on project</td>
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<tr>
<td>16 T May 13</td>
<td>talk sessions - R lab students (PS 4)</td>
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<tr>
<td>lab</td>
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<tr>
<td>17 Mon. May 19</td>
<td><strong>Final Exam (12:15-2:30pm)</strong></td>
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