Manual for Psychology W1 (Online)

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Beginning in 2010, the Department began offering Psychology 1 online as Psychology W1, through UCB Extension and Summer Sessions (SS), taught by me. With the establishment of UC Online Education (UCOE), arrangements were made to offer the online course during the regular academic year (AY). However, due to my other teaching commitments, I was not available to serve as the Instructor of Record (IoR) for the course when it is offered in the Fall and Spring semesters of the regular AY. Currently, Dr. Christopher Gade has filled this position. The purpose of this manual is to provide a guide to whomever serves as IoR, “vice Kihlstrom”.

This is Not a MOOC

I have been teaching the introductory psychology course, with and without discussion sections, since 1980 (beginning at the University of Wisconsin, and everywhere else I’ve been since then). It is my favorite course, not least because it keeps me connected to the whole of psychology. I teach it as a liberal-arts course, aimed at least as much at non-majors as to majors, assuming that (1) this may be the only psychology course that nonmajors take; and (2) prospective majors should be adequately prepared for mid-level survey courses in the various subfields of psychology. The emphasis of the course is on basic concepts and principles. It is organized more or less historically, with an emphasis on cognitive and personality-social psychology.

This online version of Psych 1 was initiated by the UCB Extension Division, which wanted to offer a version of the course online during the Summer Session (SS). That course was launched in 2010. Subsequently, the UC Office of the President (UCOP) took an interest in offering a series of popular lower-division courses systemwide, as well as to non-matriculated students (NMSs) who, for whatever reason, wished to take courses for official UC credit through what became UC Online Education (UCOE). However, this online course is not intended as a Massive Open Online Course (MOOC) – not least because, at least for now (May 2013), I’m a MOOC skeptic.

• I don’t understand the business model. Based on what I have read, universities provide MOOCs free to all who wish to enroll, and must devote resources to teaching the course, mounting it online, and grading assignments and exams without remuneration in the form of tuition. It would be one thing if MOOCs were intended as a revenue source for the institution involved, but that doesn’t seem to be part of the business plan.
Given that the students in MOOCs don’t pay tuition and fees commensurate with the instruction they are getting, it seems to me that MOOCs must necessarily divert resources that would otherwise go to the education of matriculated students (whether they take courses on-ground or online).

There is reason to be concerned that the development of MOOCs, which by definition reach beyond the boundaries of the home campus, will be incorporated into the curricular plans at other institutions – that, for example, Psych W1 might be adopted at some other college or university, in lieu of its own offering. At best, this would relegate the faculty on that campus to the role of glorified teaching assistant, and might even reduce its incentive to hire the faculty needed to teach the course. This would be uncollegial at the very least. And by reducing the demand for new faculty, would increase the difficulties that exiting graduate students will have on the job market.

Put bluntly, Psych W1 is not intended to be either massive or open. It is primarily intended to increase access to the introductory course for matriculated students. Virtually every freshman comes to college intending to take an introductory psychology course. On the other hand, given present resources (i.e., interested tenure-track faculty, GSI availability, and classroom size), we are only able to offer the course to about 1,200 students per year. If Psych W1 can play a role in UCB’s program of outreach beyond the campus (as it currently does through such vehicles as webcasting and iTunes University), that will be an extra benefit.

Learning Management Systems

Both versions of the course are currently run on a Learning Management System (LMS) called Canvas, a unit of Instructure, Inc. This manual is oriented toward Canvas, but all LMSs have pretty much the same features.

For the present, the SS course actually has two websites. The course itself is delivered via Canvas. However, I provide certain supplementary materials on my scholarly website, http://socrates.berkeley.edu/~kihlstrm/IntroductionWeb/index.htm.

Why is this material posted on a separate website? Mostly for convenience. I update this material constantly, and it is easier for me to post it on my own website, to which I have direct access, than to be constantly forwarding new material to the Instructional Designer, for him or her to post for me. Moreover, SS and UCOE actually host two slightly different versions of the Canvas website (go figure!), so uploading revisions to Canvas would double my work and inevitably lead to errors.
Lecture Supplements

So much material, so little time. Even though the SS course (organized on the standard model of three contact hours per week) offers approximately 50% more lecture material than the regular AY version (which has only two contact hours per week), there is still important material that is left out. Accordingly, I have developed an extensive set of Lecture Supplements which include written representations (not necessarily word-for-word) of my lectures, as well as additional material that broadens and deepens my treatment of the various topics, makes connections to other scholarly disciplines, refers to psychology-related events in the news, and the like. As such, they constitute an alternative (and admittedly somewhat idiosyncratic) textbook. But they are not intended to substitute for a real textbook. They’re just an expression of what the Carnegie Commission calls the “scholarship of teaching”.

Students are not held responsible for the material in the Lecture Supplements; except insofar as it also is presented in the lectures or the textbook. But it’s there for them if they’re interested; and it makes me feel better about the fact that Psych 1 is only a one-semester course!

I stopped teaching Psych W1 after Summer Session 2017, but I will maintain the Lecture Supplements on my scholarly website for the foreseeable future. URL: https://www.ocf.berkeley.edu/~jfkihlstrom/IntroductionWeb/index.htm.

Exam Information

Probably more important, from the students’ point of view, is the Exam Information section. This contains three items of interest:

1. The Exam Information page itself, which has material on optimal study habits, and sets out my philosophy of exams and grades. This includes information on the standards for retrospective editing of exams, assigning letter grades, and the like.
2. Narrative Reviews for the midterm and final exams. Instead of devoting class time to pre-exam reviews (there’s really no time available), I provide review material in writing. Students are able to post follow-up questions to the Queries and Comments module (see below).
3. I also post feedback on all Previous Exams offered in the course (at least since I’ve been at Berkeley). This includes the exam questions themselves, plus the results of the item analysis (pass percent and item-to-total correlation), and a paragraph detailing why the right answer is right and the wrong answers wrong. I don’t intentionally repeat exam questions, but I do focus my exams on basic concepts and principles, so this material constitutes an important study aid. The IoR each term should prepare and post feedback for each of his/her exams, following the models here, and send it to me for archiving on my website.
Even though I stopped teaching Psych W1 after Summer Session 2017, for the foreseeable future I will maintain copies of previous exams as part of the Lecture Supplements posted my scholarly website for the foreseeable future. URL: https://www.ocf.berkeley.edu/~jfkihlstrom/IntroductionWeb/exams.htm.

Scope of IoR Responsibilities

Aside from the responsibility of preparing lectures, which are already prepared, the intention is that the IoR should have full responsibility for the course. That means:

- setting the schedule for assignments (within certain constraints, as set out below);
- selecting the textbook;
- preparing, grading, and posting feedback for the exams;
- setting and responding to the students’ Discussion postings;
- responding to postings to the Queries and Comments (Q&C) discussion board.

Of course, these tasks may be shared with any Graduate Student Instructor (GSI) or Reader who is also assigned to the course. In fact, my practice is to assign these teaching assistants the primary task of responding to the student’s discussion postings, of which there are 12 (see below). They also hold office hours, but nobody ever attends them; and respond to email from students, but most of that concerns the grading of the discussion postings. Most substantive questions about course material are posted to the Q&C board, and I respond to those myself.

The only aspect of the course that cannot be changed is the number, content, and order of the lectures. These have been prepared in advance, and although they are subject to revision (just like any lectures), it would defeat the purpose of online instruction to alter them in any substantive way from instructor to instructor. If you spot an error, or anything that might be said differently, or have ideas about new material to be included, please forward your ideas to me.

Graduate Student Instructor(s)

Depending on enrollment, finances, and other considerations, one or more Graduate Student Instructors (GSIs) or Readers may be assigned to work with the IoR on the course. GSIs are enormously helpful, of course. But equally important, any introductory course, whether taught on campus or online, is an opportunity for graduate students to expand their knowledge of the field of psychology, to stretch themselves, and to view their own areas of specialization within the context of the field as a whole. Who knows? They might even develop an interest in teaching the course themselves.
When the course is taught on campus, GSIs have primary responsibility for discussion sections. But, as noted below, there are no discussion sections, as such, in the online version of the course. Nevertheless, GSIs can be assigned to respond to students’ discussion postings, prepare exam feedback, and help respond to postings to the Queries and Comments module.

Because Psych W1 is relatively new, we do not have a clear metric for assigning GSIs. The union contract covering GSIs defines a 50% FTE as a commitment of 20 hours/week (some GSIs work much less than that in a typical week). For on-campus instruction, the Department follows an “N=70” staffing heuristic, such that a typical GSI covers three discussion sections totaling about 70 students. But there are no discussion sections attached to Psych W1. Given the organization of writing assignments set out below, it seems reasonable to ask a single GSI to cover as many as 120 students, perhaps more. Experience must be our guide in this, however, and so GSIs should be asked to keep careful (and honest!) track of the amount of time they actually spend on the course.

- For Summer 2013 (final official enrollment = 88), I had a GSI assigned to the course, and I asked him to keep careful track of his hours during one representative week. The total came out to 17.5 hours, which is well within the 20-hour limit for a 50% GSI.
- For Summer 2014 (enrollment = 178), I had a GSI and a Reader, who each took responsibility for half the students. Neither reported having any difficulties.
- For Summer 2015 (enrollment = 132), I again had a GSI and a reader. This time, because of the Reader hours assigned to the course we divided it somewhat differently: The GSi took responsibility for roughly 80 the students, and the about 50 students. Once the course began (after receiving training on Canvas), the Reader reported spending about 15 hours/week on the course.
- For Summer 2016 (enrollment = 155), I was initially assigned a GSI. When enrollment exceeded 120, I requested a Reader, and received one.

My own judgment is that a GSI working 20 hours/week can easily be expected to cover about 120 students, divided into three sections of 40 students each. One or more readers can then handle any remaining students, on a pro-rated basis, commensurate with the GSI workload.

If Reader(s) are also assigned to the course, their workload should be proportional to the hours assigned. So, a Reader scheduled to work 10 ours/week should have sections roughly half the size of a half-time GSI.

So far, I have been on campus to administer and grade, the Final Exams (which, according to UCB policy, must be proctored). This has worked out so far, because both I and the AY IoR have been available on campus for this purpose. But it could happen that, due to sabbaticals or retirement, the IoR will actually be located far enough away from campus to make this infeasible – in which case the GSIs/Readers will have to
shoulder the full responsibility for administering and scoring the exam (but not, of course, writing it).

**Generic Memo to GSI(s) and Reader(s)**

**GSI, Reader,**

John Schindel tells me that you will be the GSI and Reader, respectively, for Psych W1, the online version of Psych 1, this summer.

GSI, you already got a version of this memo earlier, but I've highlighted some changes that are important.

Welcome! It'll be a pleasure to work with you. Right now, enrollment is at about 160 students, and if we're lucky we'll get closer to 200. With the addition of Reader as Reader, I think you'll both find the workload to be pretty light.

The way things are arranged, GSI as GSI is scheduled for 160 hours (8 weeks x 20 hours/week). Reader as Reader is scheduled for 80 hours total across the entire 8-week term. Both of you, please keep close track of your hours, so that we can continue to get a sense of what the workload is in this course.

I've attached the syllabus for the course, and given you both access, as a “Teacher”, to the course website on Canvas (it hasn't been published yet).

There are two copies of the required textbook, Kalat's 11th edition, in my Department mailbox in 3210. Next time you're in Tolman hall, drop in and take a copy for your use (you don't have to return it at the end of the course).

Psych W1 is a little different from the “on-ground” offering of Psych 1, and from most of our other undergraduate courses, because there aren't discussion sections as such. But there are writing assignments, just as in my regular on-ground version, and dealing with those will be your chief responsibility.

I hope that it will be possible for us to get together before the course begins, or shortly thereafter. But in the meantime, here are some pointers about the GSI responsibilities for the online Psych W1.

The entire course is provided online, so there are no discussion sections as such -- there are, instead, 50% more lectures.

However, there are 12 "Discussion Questions", to which students post their responses. I'd like you to monitor these, responding to them, and logging them into the gradebook. We'll divide the class into "teams" of about 30 students each, analogous to discussion sections. Each of you will have 3 teams. Following the 2:1 ratio of hours, we'll also divide the sections accordingly. GSI will have three sections of about 30 students each, while Reader will have three sections of about 20 students each.

I suggest that you respond to one team for Discussion #1, then another team for Discussion #2, and so forth, rotating through so that everybody gets some feedback but the task remains manageable. There are 12 discussions, so if you are covering 3 teams, every student will get some feedback on at least three postings. Just make some kind of substantive comment, maybe pointing them in the direction of a relevant study, classic or recent, or a finding that is on point, something constructive. Comment on grammar and style as appropriate, so that they get some help with their writing skills. Record the students' credits in the Canvas gradebook.

**Credits are all or none, just like a neuron. No partial credit. Five points or zero.**
Actually, I suggest that you go through all your teams first, recording credits using the Speed Grader function in Canvas, to get that job out of the way. Then go back and make comments. I'd do this the morning after each deadline. Occasionally, students will ask for some variance from the deadlines. Use your judgment on this, but don't be a patsy. Deadlines are deadlines, and if they want, students can complete all 12 assignments well in advance of their due dates.

Don't be a patsy, but don't be a Nazi about deadlines either. My view is that somebody's work has to be read last, and that the real deadline is when I've finished the last paper. So, if you are looking at students' postings at 9:00 AM after the deadline, or the 2:00 PM afternoon, or even 8:00 PM in the evening, don't deny full credit to a student who posted after 11:59 PM the night before, so long as the posting occurred before you finished entering credits. That's the same policy I apply with the ZAPS assignments described below.

Actually, two of these 12 discussion assignments are easy.

- In Discussion #1, students just introduce themselves to each other. You should do the same thing, introducing yourself to each of the sections (write it once and cut and paste). Who you are, home town, where you were an undergraduate, what you're interested in, whose lab you work in, a little about your research, favorite sport, favorite music, whatever you want to say about yourself without being inappropriately self-disclosing (don't give out your phone number!). Just something to chime in and let them know you as a person.
- Discussion #12 is a throw-away, due the night before the Final Exam. You won't have time to respond to the students' postings, and they won't be particularly interested in your response. So, just record credits and let it go.

You'll also be holding an online office hour once per week, at a time of your convenience, using the Chat utility in Canvas. Live office hours don't really make any sense in an online course, but University policy requires us to hold them. We hold ours online, instead of in an office somewhere. For example, I hold mine from 8:00-9:00 AM on Fridays. I'm available 24/7 via email and the Queries and Comments discussion board, which is where students can (and should) transact most of their business. You are under no obligation to hold face-to-face office hours on campus: I don't and I wish you wouldn't do it either.

Students will occasionally use the office hours, but more often they'll contact you (and more likely me) via Canvas email with some question or comment -- mostly asking for an extension of some sort. Keep track of these encounters, because at the end of the class you'll have up to 10 points to assign to each student as a "participation" grade. You should enter each student's participation grade into the online gradebook by the end of business on Thursday, August 10 -- the night before the final exam on Friday, August 11. Moe details on this later.

There are also 9 "ZAPS" Active Discovery Learning exercises (ZAPS-ADL). I record the credits for this (with any luck, they'll be recorded automatically). If you want to take a look at the ZAPS exercises, which are mostly pretty good, use my instructor's login, "mappy" (don't ask -- it was assigned by the publisher), and password, "zap2it".

Ditto for the 5 ZAPS Research Participation Experience (ZAPS-RPE) exercises. Because the course is online, and for all we know some of the students are sitting at computers in Bhutan, we don't hold them to the regular summer RPP requirement -- at least not for the present. But ZAPS-RPE will at least give them some sense of what it's like to serve as a subject in an experiment.

There are two midterm exams, both administered online, and a final exam administered on campus. I provide feedback to the students about the correct answers (look in Exam Information in the Lecture Supplements -- link also on the course's Canvas website -- to see examples). I write the exams, but I'll ask you to prepare feedback for them. Just a paragraph about why the right answer is right, and maybe why some of the wrong answers are wrong. I can give you the actual exams, in Word, well in
advance, so you can get a head start. Actually, MTs 1 and 2 are available now, if you want to get a head start (the Final Exam isn’t quite ready).

Again following the 2:1 division of labor, each of you should take one Midterm (50 questions each). Reader should take the non-cumulative portion of the Final Exam (23 questions), and GSI should take the cumulative portion (77 questions).

When you prepare the feedback, just type in your feedback paragraph, right below the question, after the reference (e.g., “Chapter 1” or “Lecture 1”) and let me have it back when it’s finished. I give an example in Question 1 of each Midterm. I like to post these feedbacks the day after the exam, so I’ll need them a couple of days in advance. If you see a problematic question, let me know: there may be time to edit the exam before it’s administered.

I'll deal with posting the feedback to the website. Even without another GSI/Reader, this is a pretty easy job: you’ve taken a lot of psychology, and you can probably prepare most of the feedback while in the bathtub, without even listening to the lectures.

The midterm exams are automatically scored. I edit the exams retrospectively to eliminate bad items, but you don’t have to do anything about that. Details are in the Exam Information page of the Lecture Supplements. If I need help, I'll let you know.

The final exam is administered on campus, except for our students in Bhutan and elsewhere, who arrange for off-campus proctors. The final is scheduled for Friday, August 11, from 9 AM to 12 Noon, for most of the students, and then a second, smaller sitting from 1-4 PM that same day just for students who have conflicts with the morning sitting. With any luck we can run the bulk of the exams through in early afternoon, and then pick up the holdovers from the afternoon sitting, and then we’re done. We may not even have to do that. The off-campus students are returning their answer sheets via the course website, and that worked out well for the afternoon sitting and DSP students as well (they brought their laptops to the “makeup” sessions). But block out Friday afternoon, August 12.

Reader, I know that you will be out of town on that Friday. GSI, I'll take the morning sitting alone (maybe you can drop by for a minute in the morning, just so the students can connect your name to your face), and then get started on scoring at the Scantron, while you take the afternoon sitting (which should be about a dozen students – not a two-person job).

I enter the students’ Final Exam grades, and calculate, enter, and report the students’ final letter grades.

The other thing I’ll ask you to do is to listen to each lecture online. You’re teaching assistants, but this is also supposed to be a learning experience for you. You’ve already had most of this material as an undergraduate, but I’ve got a fairly unique point of view on some of this material (especially the way I use the person-situation interaction to integrate personality and social psychology), so you’ll get another pass through psychology “as a whole”. You have early access to these lectures on Canvas, even before the website is formally published, so you can just sign on and listen whenever the spirit moves you. While you’re listening, keep your eyes and ears open for errors -- both technical errors, like something that’s garbled or misspelled, and substantive errors and ambiguities. I can then clean these up for next time. If you can’t bear to listen to me, the lectures themselves, and much more material besides, are available on the online Lecture Supplements.

I think that’s about it.

This is all a great experiment, so I’m sure that there will be some surprises along the way, but I’m trying to minimize surprises, as well as your workload. We’ve been offering this course online since 2010, so we’ve got most of the bugs worked out, but there is always some kind of surprise. Fortunately, the technical staff at UCB Extension is excellent.
Setting the Schedule of Lectures

Psych W1 was originally planned to fit into the 8-week summer session. The on-campus version of the SS course was taught for two 2-1/2 hour sessions per week, or the equivalent of 6 50-minute classes. The online version was planned for two 50-minute lectures per day, three days per week, yielding the same number of contact hours. That time was allocated to 43 50-minute lectures, 2 midterm exams, and a final exam (the three missing hours are due to the undesirability of having a lecture and an exam on the same day). This is the equivalent of a class meeting three days per week for 15 weeks during the regular AY.

However, owing mostly to the week-long Reading, Review, and Recitation (RRR) period prior to final exams, this schedule of 45 classes (including midterm exam days) does not fit completely comfortably within the UCB semester (which is 14 weeks plus the 15th RRR week).

- One solution was to prepare a smaller set of lectures for use when the course is offered during the regular AY. This was rejected, on the ground that the goal was to migrate the SS course to the regular AY, so that the lecture materials developed for the SS course could be “taken off the shelf” and used during the AY as well. I was unwilling to develop the two different sets of lectures that this solution would have required.
- Another possibility was to trim the number of lectures offered during SS course, so that they would fit in the AY. This was rejected as well, on the ground that it would leave gaps in coverage during the SS course as well as the AY course. In fact, the SS version offered more lecture material than the usual AY course, and this was considered an asset.

The solution adopted was to keep the SS schedule intact, as originally planned, but to “double up” on a few lectures, taking advantage of the space afforded by the RRR period to give students a break between a relatively intense last week of lectures (two extras) and the final exam. This seemed satisfactory, given that there were no assignments for the course during the RRR period itself.

In practical terms, I adhered to the following principles:
  - The course is broken up by two midterm exams, each covering 16 lectures.
• The noncumulative portion of the final exam covers the remaining 11 lectures.
• I assumed a standard schedule of 3 lectures per week, nominally Tuesday-Wednesday-Thursday (of course, the students can view the lectures at any time).
• I allowed roughly 5 sessions to intervene between assignments (i.e., Discussion postings or ZAPS-Active Discovery Learning exercises).
  o Most modules in the course consist of 5 lectures.
• I ignored all scheduled holidays except for Spring Recess. After all, students are not required to attend lectures on any particular day. The exception, of course, is that no exams or deadlines should fall on official or religious holidays.
• I honored the RRR period, even though students have no assignments to complete during that time (except, perhaps, for the ZAPS-Research Participation Experience exercises).
• In preparing the actual schedule, I placed the midterm and final exams where they would ordinarily have occurred, if I were teaching the course in the regular AY – roughly, the beginning of October and the middle of November (before Thanksgiving Recess) for the Fall Semester, and the end of February and the beginning of April (after Spring Recess) for Spring Semester.
• Sometimes this requires “doubling up”, to squeeze in an extra lecture or two over and above the general scheme of 3 lectures/week. The most serious “doubling up” occurs in the final week of the semester: the students have all of RRR week to recover!

As concrete examples, I attach the schedules prepared for Spring and Fall 2013 as Excel spreadsheets, to serve as templates for the IoR to modify as needed.

Perhaps this is the place to make the point that Psych 1 really should be a two-semester course, like the introductory courses in most other natural and social sciences.

In any event, the lectures themselves are intended to cover the entire canonical syllabus of the usual introductory psychology course, in roughly canonical order. That is to say, it begins with the brain and ends with psychotherapy. A plurality of lectures deal with cognition, but emotion and motivation are not ignored. The development lectures focus on personality development, though cognitive development is not ignored. The lectures on personality and social psychology are somewhat idiosyncratic, covering the material in a manner intended to integrate the two fields, but the basics of each field are covered. There is barely a mention of Freud.

**Choosing a Textbook**

As with any course, the IoR has complete freedom to choose his or her own textbook. I have been a loyal user of Gleitman since its first edition. In fact, John Jonides and I were the first to adopt the text, he at Michigan and I at Wisconsin. We were such early adoptees that the book actually hadn’t been published by the time the course started.
Don Fusting, then the psychology editor at Norton, personally distributed softbound copies of the first half-dozen chapters to the students, free of charge, while they waited for the bound volumes to arrive at the bookstore!

Over the years since I began teaching this course, in 1980, I admit to having strayed from Gleitman a couple of times, but I always came back to Gleitman, because I prefer a textbook that is a product of a single intelligence to one that is written by a committee. Intro is the one course where students get to see psychology “whole”, and it is nice for them to have a textbook (and instructor!) who does so, too. And besides, Gleitman was one of my teachers in graduate school, and sat on my dissertation committee.

Unfortunately, the era of the single-authored intro text may be over. Gray, Kalat, Myers, and Nairne are just about the last ones, to my knowledge – though Wade & Tavris come close to being a single-authored text; and Myers is retiring and handing the book over to a new author.

In any event, the lectures are compatible with any good intro text, and there are many good ones out there. The IoR should feel free to choose any one that s/he wishes. The only proviso is that some textbook chapters may have to be assigned in an order that differs from their table of contents. For example, I teach Development toward the end, whereas some authors put it nearer the beginning. But this happens in most iterations of any survey course, and most textbooks are designed to have some flexibility, so that should not be a problem.

Because this course is offered on line, it’s desirable to choose a textbook that is available as an e-book, or at least as a downloadable PDF, in addition to a traditional cloth- or paper-bound edition. Again, fortunately, most high-end texts are available now in e-book format. It’s also nice to choose a textbook with lots of web-based resources. But the most important feature is that the text itself be available as an e-book.

For 2014, we adopted Kalat's, Introduction to Psychology, 10e. Chris Gade was serving (and continues to serve) as IoR for the AY, he was also teaching Psych 1 on ground, using Kalat, and having the same textbook for both versions of the course promised reduce his workload. And, at least for this first real-live offering of the online course in the regular AY as well as the SS, keeping the textbook constant would ease the burden on the instructional designers. We’ll revisit this issue when the new edition of Gleitman comes out, but there is virtue in keeping the textbook constant from one offering to the next – and I can live without Gleitman (not least because it’s not written by Gleitman anymore!).

Discussion Sections

The on-campus version of Psych 1 includes weekly discussion sections, led by Graduate Student Instructors (GSIs) serving as teaching assistants. Discussion sections are an attractive feature of any undergraduate course, though I have taught
Psych 1 successfully without them, and in any event they are difficult to implement in an online course. Even though the course is intended primarily for matriculated students, some non-matriculated students – and even some matriculated students, such as those studying abroad – may be located some distance from campus.

At the same time, it does seem desirable to have students actively engage with the course. To this end, they are required to complete 12 short writing assignments, one for each module in the course, and post these to a discussion board. The instructor (or any GSIs assigned to the course) then responds to a subset of these (about 1/3), so that each student gets some feedback on his or her ideas and written expression. Ideally, it would be nice to have students engage with each other’s discussion postings, as well. This does not seem feasible in the short temporal confines of an eight-week summer session (much less in a six-week session!). But within the more leisurely space of a 15-week semester, this seems more feasible. In any event, at present we merely encourage students to respond to each other’s posts, and take some account of this behavior in calculating “Participation” scores toward the final grade.

For management purposes, the students are currently divided into “teams”, analogous to discussion sections, of up to 40 students each. I like to have teams in multiples of three: this way, the instructor or GSIs can comment on Discussion 1 postings from Team 1, Discussion 2 postings from team 2, Discussion 3 postings from Team 3, and then begin the rotation again with Discussion postings from Team 4. This way, each student will receive substantive comments on about 1/3 of his or her Discussion postings. If you can do more, that is great.

In addition, we have toyed with the idea of dividing students further into smaller study groups of approximately 5 students each, modeled on those familiar in a business- or law-school environment. It’s not clear how feasible this is for an on-line course, or how easy it would be to manage it.

As a practical matter, two of the 12 discussion assignments are easy.

- In Discussion #1, students just introduce themselves to each other. The GSI(s) and Reader(s) should do the same thing, introducing themselves to each of the sections (write it once and cut and paste). Who you are, home town, where you were an undergraduate, what you’re interested in, whose lab you work in, a little about your research, favorite sport, favorite music, whatever you want to say about yourself without being inappropriately self-disclosing (don’t give out your phone number!). Just something to chime in and let them know you as a person. Don’t respond to individual students’ postings unless something really sticks out – like they’re the child of a famous psychologist, or they went to your high school, or something like that. Just write the one introduction and post the same thing to all your sections. Do this early, before classes begin, so that when the students post their introductions, they’ll see yours right at the top.
- Discussion #12 is a throw-away, due the night before the Final Exam, in which I ask students to talk about something they learned in the course that surprised
them. The GSI(s) and Reader(s) won’t have time to respond to the students’ postings, and they won’t be particularly interested in your response. So, just record credits and let it go. I’ve written a little essay of my own on this subject, which I’ll post to each of your sections. If you want to do something similar, feel free, but don’t feel any obligation.

So, in the final analysis, the GSI(s) and Reader(s) will only be making comments on Discussions 2-11. That means that some students will get comments on 4 postings, but must students will get comments on only 3, and we can live with that.

**Exams**

The course is broken up into three segments, separated by two midterm exams; in line with UCB policy (and good pedagogy), there is also a comprehensive final exam.

The exams are in multiple-choice format. Although controversial in some circles, I believe that the multiple-choice test, properly constructed, is the most reliable and efficient means of evaluating student performance in a course. It is less dependent on the expertise of GSIs, and less susceptible to grade-grubbing on the part of students.

I set out my philosophy of examinations on the Exam Information page of the Lecture Supplements. Exams should focus on basic concepts and principles, not names and dates. They shouldn’t focus on particular experiments – though students should be able to comment on the methods of experiments, and reason their way to a prediction of their results, based on their understanding of the basic concepts and principles.

I try to have half my exam questions drawn directly from the textbook, and half drawn directly from the lectures – though, of course, there is necessarily considerable overlap between the two sources. For this purpose, a good test-item file, provided by the textbook publisher, is essential: I would not adopt a text that did not provide a good test-item file. For items drawn from the text, I try to have at least one question drawn from each major section of each chapter covered by the exam. For items drawn from the lectures, I have at least one question from every lecture. Considering the inevitable overlap, that works out to about half-and-half.

I don’t intentionally repeat questions from one exam to another – though, I’m not obsessive about this either. Still, I keep a record of questions chosen for each exam on a hard copy of the textbook’s test-item file.

When GSIs are available, instructors often ask them to take primary responsibility for preparing exams. For an online course, however, this is not usually possible, because all the materials for the course have to be prepared far enough in advance for the staff to be able to prepare them for the LMS. Typically, the deadlines involved are before GSIs (if any) are even assigned. So this is a task that the IoR has to perform. However, I do ask the GSIs to prepare exam feedback, as the exercise helps bolster their own knowledge of psychology.
In Summer 2016 we introduced a new method for collecting final exams from the off-campus proctors. For the final exams administered on-campus, the students provide their answers on a machine-scored Scantron sheet. This works well, except that students taking the course far from the Berkeley campus, and taking their final exams with an off-campus proctor, often find it inconvenient to obtain the proper Scantron sheet. In the past, we have provided the proctors with a special answer sheet, attached to the exam, which the proctors scan into a PDF and then return to the Summer Sessions proctoring coordinator, who then forwards them to the instructor, who must then score them by hand -- thus delaying feedback of their results to the students.

A similar problem occurs with students taking the exam on campus with a proctor supplied by the Disabled Students Program. By virtue of the extended time offered to DSP students, it is not usually possible to score the exams the same day the students take them. In fact, if the Final Exam is given on a Friday, as is the case during Summer Session, the exams may not be available for scoring (again, by hand) until the next Monday.

In an effort to make scoring these exams more efficient, we created a new "Quiz" in Canvas consisting only of the numbers 1-100 and answers a-d. No text of the exam is provided, thus making the "quiz" a virtual answer sheet. Students provide their answers via this quiz, when is then scored automatically.

In Summer 2016, all but one student using an off-campus or DSP proctor was able to submit his/her answers via Canvas. One student who took the afternoon alternative sitting also used Canvas. Of the 32 students who submitted their Final Exams online, the mean score was 64.03 (out of 100), with a standard deviation of 12.83. By comparison, the mean for the 128 students who took the exam on campus (filling out the usual Scantron sheets) was 62.16, $SD = 13.38$. The difference is not statistically significant, $t(158) = 0.71$, so we will continue to use this method in the future.

### Hints for Writing Exams

**Accessing the Test-Item File for Kalat 11e**

Chris Gade (who taught the course online in the Fall and Spring semesters) and I agreed to use Kalat’s *Introduction to Psychology* for the online course; he was already using Kalat in the on-ground version of Psych 1, so this made life easier for him (and Jamie was a couple of years ahead of me in graduate school). But, as noted, the course can be taught with any standard textbook.

To access the test-item file for the Kalat text, go to [http://cengage.com](http://cengage.com)

Sign in with email and password (obtained from the Cengage representative)

Scroll Down to "Access Instructor Supplements"

Create a New Test

Highlight "Introduction to Psychology"

Build an Empty Test

Expand "Introduction to Psychology"

For Each Chapter, Choose “1”, etc., not “1A".
### General Format for Exams

There are two Midterm Exams and a cumulative Final Exam (which includes a noncumulative portion covering lectures and readings since Midterm 2). Students are told that roughly half the questions on each exam will be drawn from the text, and the remainder from the lectures. Here’s a scheme that has worked well for me (based on Kalat’s text).

**Midterm 1 (50 Questions):**
- 5 Chapters; 16 Lectures in Modules 1-5
- 5 Questions/Chapter = 25
- 2 Questions/Modules 1 & 3 = 4
- 7 Questions/Modules 2, 4, & 5 = 21

**Midterm 2 (50 Questions):**
- 7 Chapters; 16 Lectures in Modules 6-9
- 4 Questions/Chapter = 28
- 7 Questions/Modules 7 & 9 = 14
- 5 Questions/Module 6 = 5
- 3 Questions/Module 8 = 3

**Final (100 Questions):**

- **Noncumulative Portion (23 Questions):**
  - 3 Chapters; 11 Lectures in 3 Modules
  - 4 Questions/Chapter = 12
  - 11 Questions/Modules 10-12 = 11 (1/Lecture)

- **Cumulative Portion (77 Questions):**
  - 15 Chapters, 43 Lectures
  - 2 Questions/Chapter = 30
  - 1 Question/Lecture = 43
  - 4 Comprehension Questions = 4

### Scoring Exams

On Canvas, the results of the exam are automatically piped to the Gradebook. The results can also be viewed in the Quizzes section. There is a very good item analysis, reporting pass-percents and item-to-total analyses for various breakdowns of the exam. If you rescore an item, students’ grades in the gradebook are automatically changed.

Exams are edited retrospectively to identify and eliminate “bad” items. These are identified objectively through statistical analysis of the exam. If an item has a pass-percent less than 50%, and an item-to-total correlation less than .20, I rescore that item correct for all responses. Typically, such rescorings bring the average exam score to at least 65-70%. If, not (if it was an inadvertently difficult exam), I then add free points to
bring the average score up to the middle of that range. In that case, scores above 100% are truncated to 100%.

Feedback to Students

I also provide feedback to the students, consisting of the results of the item analysis plus a short paragraph explaining why the right answer is right and the wrong answer wrong. This promotes the use of exams as learning experiences. I often prepare these paragraphs myself; but this is also a good job for the GSI, if one is assigned to the course.

In the past, this feedback has been provided in the form of an HTML file, but it would probably be easier to prepare it in Word, following the format of previous feedbacks, and then uploading the feedback as a PDF file. For the time being, the IoR should send the file to John Kihlstrom, who will link it to the Exam Information page and upload it to Canvas.

Hints Concerning the Final Exam

UCB policy requires a proctored Final Examination in all undergraduate courses. This poses a problem for students and faculty, both of whom may be far from campus. However, off-campus students may arrange for an off-campus proctor, while students near campus can take the exam on campus as usual.

No less than six (6) weeks prior to the exam, the instructor should send the Final Exam to the Department for duplication, and distribution to the off-campus proctors.

- The Department scheduler should arrange for rooms for both a morning (9:00 AM-12:00 Noon) and afternoon (1:00-4:00 PM) sitting of the exam – the latter to accommodate students who may have a legitimate conflict with the regular morning sitting.
- The on-campus students complete their exam using a “red” Scantron sheet. It’s up to them to purchase this (e.g., from the ASUC Bookstore or at Pat Brown’s Grill).
- The off-campus students return their exam answers via a special answer sheet available on the course website (bCourses). These exams are automatically scored; if there’s a problem, we hand-score the exams.
- There will also be a few students whose Final Exams will be proctored by the Disabled Students Program. These students, like the students taking the exam with the off-campus proctors, will return their answers via bCourses. If there’s a problem, we must pick up these exams from DSP and hand-score them, but so far the system has worked perfectly.
- The Instructor should maintain a supply of extra Scantron forms, pencils, and even pencil-sharpeners for the inevitable student who neglects to bring either or both of these items.

Three days prior to the scheduled Final Exam, the instructor should deliver the DSP exams to the DSP office in Room 260, Cesar Chavez Student Center. Each student’s exam should be in a separate manila envelope (available from the supply closet in the Main Office), labeled with the student’s name, course number (Psych W1), the Instructor’s name, and the date and time of the exam (obtained from DSP). DSP requires that the exams be in their hands at least 24 hours prior to the scheduled exam.

Some students may ask if they can take the exam early. The answer is “no”.

On the day of the Final Examination, the instructor should arrive at the exam room by 8:30 along with a laptop and PowerPoint presentation giving the students instructions for the exam.

- In order to maximize breathing room, and minimize the opportunity for cheating:
  - Students should sit in every other seat, so that there is a vacant seat, or an aisle, on their left and right.
  - To the extent possible, students should form straight columns, front to back.
  - This is a closed-book, closed-notes exam. Laptops, tablets, phones, notebooks, everything should be down on the floor. ESL students may have access to a dictionary, including an electronic dictionary, but they shouldn’t need it.
- If a student arrives without a red Scantron sheet or a pencil, if there’s time, they should be sent them to Pat Brown’s to get one. If there’s not, the Instructor should give them one (they will have had plenty of time to get these things).
- Have students fill out the Scantron (instructions in the PowerPoint presentation).
  - On the front, they should fill in only their name (last name first) and Student ID. Nothing else.
  - On the reverse, they should fill in only their Student ID and “Test Form A”. Nothing else. Except, of course, their answers to the exam questions!
  - If the student has not filled in these properly, you should do it by hand before running the form through the Scantron.
  - They should not fill in anything under “Exam #”. That will automatically enter \( N \) points into their exam score, where \( N = # \), which will really screw things up. If a student has filled in an Exam #, you should erase it by hand before running through the Scantron.
  - Remind students to “bubble in” these items of information.
- Distribute the exams at 9:00. The easiest way to do this is to give a handful of exams to each student in the front row, and ask them to take one exam and pass the rest back. Then, when you have done this, take the remaining exams and fill in from the rear.
- Check to make sure that every student has an exam. I usually ask if anyone wants a different exam, and the joke usually falls flat. Students may begin the exam as soon as they receive it.
- Tell the students that if they need to use a restroom, they don’t need to ask permission (and give them general directions as to its location).
- When (not if) students arrive late, just give them an exam and tell them to take a vacant seat (again, leaving space right and left). Students who arrive late do not get any extra time past the allotted 3 hours. The exam is over at noon, even if the student arrives at 11:55.

The Instructor should proctor the exam lightly. It’s not necessary to patrol the room constantly. Remember, a student is caught cheating the Instructor will have to do something about it, and that can be painful for everyone involved (especially if, as has happened, the administration doesn’t back the Instructor up). Therefore, it is important to minimize both the opportunity for students to cheat (by spreading them out) and the likelihood that they will be caught (by not patrolling diligently).
  - Position yourself in the front so that you can easily see the entire room.
  - Once in a while, walk up one aisle, cross over to the other side of the room, and walk down the other aisle.
  - If a student has a question about an exam item, try to lead them to the correct answer; if they’ve already got it right, don’t lead them astray.
  - Give them a time-check every half-hour, both orally and on the board.
- At the 1-hour mark, say something like “All right, you’ve been working for an hour: Take a moment to stand up and give yourselves a stretch”.
  - Do the same thing at the 2-hour mark.
- Students may turn in their Scantrons as soon as they finish their exams. In order to protect the security of the afternoon sitting, they should also turn in the exams themselves.
  - If time permits, check to make sure they have filled out the Scantron sheet properly.
  - After the morning sitting, just recycle the exams themselves.
Many students will finish early, but there will always be some who stay until the absolutely last minute. Beginning at 11:45, give them warnings every 5 minutes. At noon, retrieve the last Scantrons, and move to the Scantron machine.

Follow a similar procedure for the afternoon sitting. By the time the first students finish, you may be able to hand-score their exams using the revised scoring key (see below). It’s probably not worth running them through the Scantron.

The procedure for scoring the Scantron involves two steps (maybe three). This process is described in detail later in this Handbook.

- **First**, run the morning exams through the Scantron to generate a roster and a preliminary scoring of the exam (these two steps can be done simultaneously).
  - Record the Mean and Standard Deviation, and Reliability, to be included in the Final Exam Feedback.
- **Then**, review the item analysis to identify “bad” items, which come in two forms.
  - Miskeyed items: Where the keyed answer is “A” but should have been “D”, for example, change the key accordingly.
  - Truly bad items: If less than 50% of the class got the answer correct, and the item-to-total correlation (point-biserial r) is less than .20, rescore the item correct for all responses.
- **Rescore the exam.**
  - Record the rescored Mean, Standard Deviation, and Reliability for me to include in the Final Exam Feedback.
- **Use the revised key for any exams collected over bSpace, or hand-scored from the afternoon sitting.**

Once all the exams have been rescored, the Instructor should enter the final scores from the morning sitting into the bCourses gradebook.

- The Scantrons must be retained for a year, in case a student complains about clerical errors in grading.
  - Blank Scantron forms, pencils, or pencil sharpeners, should be retained for future use.
- **Do not** enter the students’ preliminary scores into the Gradebook. Enter only the final scores, based on the resoring. Otherwise, this causes no end of confusion for the students.
  - Note that students who submit their answers via bSpace will have their exams scored automatically according to the *original* answer key. Therefore, the Instructor will have to correct their scores. Unfortunately, the students will already have received feedback on their scores based on the *original* scoring, which can cause a little confusion. But since the revised score is always either identical to, or greater than, the original scoring, they’re satisfied once the situation is explained to them.
- I include the individual item pass-percents and item-to-total rs from the preliminary scoring, so I can include this information in the Final Exam Feedback.

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**ParScore Scantron Quick Reference Guide for Psych W1**

**Step 0: Scantron forms and ParScore login information**

1. How should students fill out the Scantron exam forms?
   a. Student IDs should be entered in the first 8 columns: *No leading zeroes.*
   b. Student first and last name should be both written and entered in bubbles.
      - In the end, you will export student grades *either* by SID or by student name, but it is good to have both pieces of information in case students forget to enter one or the other, or they make errors in entering this information.
   c. Students *should* enter **Test Form A even if there is only one version of the test.**
i. If there is only one version of the test, make sure all students bubble in the same Test Form letter (e.g., A).
   - If they don’t bubble in the same letter it’s okay, you’ll just make multiple copies of the same key for “versions” A, B, C, etc. (see Step 4 below).
   - If they don’t bubble in a letter at all, you’ll have to manually enter the exam “version” after the scanner scans each exam. (It’s not that bad, but it’s tedious and will take extra time.)
   d. Students should not enter an “Exam #”. This will result in the addition of 1 “essay” point to the exam score, or 2 or 3 or more points, depending on the “Exam Number” entered by the student.

2. Log onto the Scantron account on the Scantron computer. The password is written on a post-it attached to the computer tower.
3. Obtain login credentials from the course instructor or from the Head GSI (psychgsi@berkeley.edu) if the instructor does not already have a course login.

**Step 1: Log into the ParScore scoring program**

1. Click on the **ParScore** icon on the Desktop.
   a. Or **Start ➔ Programs ➔ ParScore**.
2. Enter the Login name you were given, and the Password. Usually, the password will be the same as the Login name if you obtained the login info from the Head GSI. If you obtained the login and password from the instructor of the course, the password may be different.
3. Select **Login**. If you want to change the password, select **Change Password** and follow the steps below.
   a. Enter the old password (same as Login name).
   b. Enter the new password you want to use twice (in the New Password and Confirm Password fields).
   c. Select **Change**.
   d. Now log in again using the Login name you just created, but this time use the new password you created. Select **Login**.

**Step 2: Create the course**

1. Select **New**.
2. In the Course Setup dialogue box, enter **Course ID** and **Course Title** (Required).
   a. Optionally, enter Instructor Name, Description, Time and Day of class, and Term (e.g., Fall 2016).
3. Select **OK**.
4. The course you created will show up in the Course List. Double-click on the course to open it.
   a. (Optional) Enter a password if you want to protect the course data.
   b. (Optional) Select an alternative path to backup the course data.
5. Select **OK**.

**Step 3: Enter a new exam for grading**

1. Under the **Roster** tab, click on the **Create Score Columns** button (6th from the left, looks like 3 birthday candles).
   b. Select a category such as **Mdt** (midterm exam) or **Fnl** (final exam).
   c. Enter the **Possible Score** (the number of items on the exam, e.g., 100), enter the **No. of Columns** (this is the number of exams you will grade right now, the “number of columns” you want to add to the roster, it is usually 1).
   d. Click **Add**.
**Step 4: Create a Key**

1. Select the **Keys** tab.
2. Select the exam you just created under the **Category** menu in the upper right hand corner.
3. Click the **Scan Keys** button. This will initiate the scanner.
4. Set the Scantron form containing the answer key in the Scantron scanner tray as indicated by the arrows on the form (i.e., so that the answers are facing up and it will slide to the left in the direction of the arrow on the form).
5. Press **Continue**, or the right white button on the scanner (the display above this button says “Start”).
   a. After the key scans through you will get a dialogue box allowing you to scan additional keys or alerting you to any problems with your key.
   b. A common problem is that you didn’t bubble in the Test Form box (i.e., the exam version for that key), and you will get an error saying “Invalid test version.” If you have multiple versions (e.g., A and B), make sure you bubble in the appropriate letter.
      i. If you get the “test version” error, select **Edit** and enter an exam number and test version (e.g., A).
6. If you have additional keys (i.e., for different exam versions) place them in the tray and scan them now. If you have scanned all of your exam keys click **End**.
7. If you want to make edits to your key, e.g., allow multiple responses to an item, see Step 8 below (or pg. 25 in the ParScore manual).

**Step 5: Create a roster**

1. Instead of creating a student roster and then scoring an exam, it is possible to create the roster and score the exam simultaneously, by using the **Auto Enrollment** feature.
2. Go to **Options → Enrollment Setup**.
   a. Set the length of the **Student ID** number to 8.
   b. Check the **Allow Blank Name** box.
3. Under the **Scoring** tab, make sure the **Auto Enrollment** box is checked.
4. Now when you scan exams, the student roster (found under the Roster tab) will populate automatically with students’ first and last name and student ID number.

**Step 6: Score exams**

1. You may want to acquaint yourself with how the scanner works by putting just a few tests in the machine at first. After you are comfortable, you can put a substantial stack in the machine. It will grab them as it is ready.
2. **Put exams in the scanner tray** oriented according to the arrow on the form.
3. Go to the **Scoring** tab.
   a. You can decide whether you want the scanner to pause when it detects multiple responses to an item by checking the **Inspect Multiple Marks**.
      i. The scanner will stop scanning and the dialogue box will alert you to items with multiple responses. You can look at the individual exam and decide how to proceed. You can use the options in the dialogue box to edit that individual exam, or you can set it aside to deal with later, either to rescore or hand score. (See ParScore manual pg. 35).
   b. Similarly, if you want to inspect exams where students neglected to answer an item(s), check the **Inspect Omitted Marks** box.
4. Click the **Score** button.
5. This will initiate the scanner and give you a dialogue box that will allow you to deal with any issues as they come up (e.g., invalid student ID numbers, multiple responses to an item, etc.).
6. When you are done scanning exams click **End** to exit.

**Step 7: Item Analysis and Score Distribution Reports**

1. From menu options (at top), select **Report → Item Analysis Reports**.
   a. Helpful descriptions of various reports can be found in the ParScore manual (Chapter 6). Specifically:
      ii. Pg. 56-58: Narrative description of stats and guidance as to how to determine whether to take out items.
      iii. Tip: John Kihlstrom defines “bad” items as those that have a % Correct < 50% and an item-to-total point-biserial r < .20.
         1. These criteria are both "less than", not "less than or equal to".
         2. Occasionally, typos or other errors will need to be corrected in the original scoring key. When deciding whether or not an item is “bad,” check to see if there is an alternative answer to that item that has both a % Correct > 50% and an item-to-total r > .20. If so, the item may have been miskeyed.

2. You may want to (or the instructor may want you to) also run **Report → Score Distribution Report** (see ParScore manual pg. 67-68).

3. These reports allow you to see if you are going to drop any questions (Item Analysis Reports) or consider curving the exam (Score Distribution Report) if the distribution is not to your liking. Both reports give you basic statistics like mean, median, range, etc.

4. Change Report Heading (default is to use the last report that was made).

5. Select **Preview** if you just want to look at item stats to make decisions about whether you want to make edits to in individual items (i.e., changes to your scoring key). Select **Print** if you want to print out the report for future reference.

6. If you decide not to drop items, you can skip to Step 9 the printing/exporting of the final grade sheets by student name or SID.

7. If you plan to drop questions by some criteria, read through the item analysis reports, decide which questions you would like to edit, and move to Step 8.

**Step 8: Editing the key and rescoring the exam**

1. If you discover issues in your key or decide to delete items, you can make these changes directly to your scoring key.
2. Select the **Keys** tab.
3. Click on the item’s current answer in the **Answer** field.
   a. If you want to **remove** problematic items from the exam, a great way to do this (e.g., John Kihlstrom’s method) is to give all students credit for that question. You can do this by changing the correct Answer to *.
   b. You can also make **multiple answers correct**.
      i. Using + means students must have selected both answers in order to get the item correct (e.g., A+B).
      ii. Entering multiple responses (e.g., AB) in the Answer field means students could select either answer and receive credit (e.g., either A or B would be correct).
   c. If questions, see ParScore manual pg. 25 for details.
4. When you have finished making edits to your key, click the **Rescore** button. Exams will be rescored automatically; you don’t have to re-run the exams through the scanner.

**Step 9: Exporting the final grade sheet by SID or student name**
1. Select **Options ➔ Export Wizard**
2. Use the dropdown menu to select the file type you prefer (usually .csv).
3. Select whether you would like to export data by student name or SID (left menu).
4. Select the exam scores you would like to export (right menu).
5. Click **Export**.
6. Navigate to save location (a USB drive is probably best) and click **Save**.
7. If you wish to print the grade sheet you can export the roster to the desktop, open it with Excel, and print from there.

**You're done!**

You are now finished grading the exam! For future exams the roster will already exist. To score future exams you will follow these same steps: log in, select your course, start a new exam (Step 3), etc. Essentially, you will be filling in another column of the Roster when you grade other exams. If any students take a subsequent exam who did not take the first one, they will be added automatically when their exams are scored.

**Troubleshooting tips**

1. If computer doesn’t appear to “see” the Scantron scanner:
   a. Turn the scanner on! (Left-hand button on top panel.)
   b. Go to the **Options** menus at top, Select **Scanner Configuration**.
   c. Select **Detect Scanner**.
   d. Close when scanner is detected.
   e. Exit ParScore and restart: select **Start ➔ Programs ➔ Scantron ➔ ParScore ➔ Parscore**
   f. Login again.
2. Ask for help!
   a. If you have hardware problems, e.g., the Scantron machine or the computer are physically broken, contact Eric Eichorn in the Electronics Shop at 642-5301 or eichorn@berkeley.edu
   b. If you have software problems with the ParScore software or difficulty with the instructions, contact the Head GSI at psychgsi@berkeley.edu.
   c. ParScore Technical Support (Mike McCray) can be reached at 1-800-445-3141. Scantron Main Phone is 1-800-2283628.

**ZAPS**

In order to provide students with a more active learning experience – something other than sitting in a chair, reading the text, viewing slides, and listening to lecture – I assign them a number of online exercises online using the ZAPS software published by W.W. Norton as the Norton Psychology Labs. ZAPS, produced by a group of Dutch psychologists, stands for **Zeer Actieve Psychologie**, which translates as Very
(Inter)Active Psychology. The ZAPS software is available from Norton for separate purchase, or it is sometimes available shrink-wrapped with Norton-published textbooks. URL: https://digital.wwnorton.com/zaps2. ZAPS is currently in its 2nd edition, known as ZAPS 2.0.

There are other online resources that serve this purpose, and the IoR is free to choose among them.

Currently, students purchase ZAPS online. When they register, they should enter their names with their last name (surname or family name) first, followed by their first (given) name, and middle name or initial. Many students don’t bother to follow this instruction, which makes the process of assigning them proper credit (described more fully below) somewhat aggravating, because the ZAPS roster will list “Brenda, Milner”, for example, when the roster in the Canvas gradebook lists her as “Milner, Brenda”. This is especially problematic for Chinese students, who frequently register for ZAPS as “Zedong, Mao”, when they’re listed in Canvas as “Mao, Zedong”. In addition, some Chinese students use an English name in addition to their Chinese name, so that they may register for ZAPS as “Xi, Wellington”, for example, when they should be registered as “Xi, Jinping”. When you catch such discrepancies, ask the students to try to correct their ZAPS registration. If they don’t, or can’t, it falls on the instructor to make the correction while entering credits – hence the aggravation.

Students should also register with the correct ZAPS “Student Set ID”. This is currently a 5-digit number (e.g., 12345) which identifies which course they are in. It is absolutely critical that they register with the correct Student Set ID, because otherwise their ZAPS activity won’t be recorded on the rosters downloaded from the ZAPS server. Accordingly, the instructor should obtain a new ZAPS Student Set ID for each new offering of the course before the syllabus is released to students. To obtain a Student Set ID, follow these steps:

2. Click on the “Getting Started” button.
3. Complete the request for a new Student Set ID.
4. Usually, you will be assigned a new Student Set ID immediately.

The ZAPS site requires MacroMedia Flash v. 7+ (most computers have this; otherwise, a free download is available from the ZAPS website). Unfortunately, some tablets (e.g., those using the Android operating system) don’t support Flash, but this hasn’t been a problem so far.
ZAPS for Active Discovery Learning

The Active Discovery Learning (ADL) component of the course requires nine (9) ZAPS exercises, one corresponding to each major module in the course (excluding the single-lecture Modules 1 (“Introduction”), 3 (“Methods and Statistics”), and 12 (“Conclusion”). They count five (5) points each on an all-or-none basis (just like a neuron). These are interactive exercises that illustrate some concept, principle, or method discussed in the course (e.g., synaptic transmission, signal detection, the serial position effect, and the Big Five personality traits). Each is due by 11:59 PM (Pacific Time) on the date indicated in the syllabus. That’s one minute before midnight, just like Cinderella. Note that the ZAPS server may run on Eastern Time, in which case the IoR should make the three-hour time correction.

ZAPS permits the class roster to be downloaded as an Excel file, which makes it easy to identify which students have completed the assignment on time.

- Sort by ZAP title, eliminate irrelevant ZAPS.
- Then sort by student name, and you’ve got an alphabetical list for each of the ZAPS assignments that makes it easy to enter credits in the online gradebook.

I keep copies of these files, in case students dispute the credits they have received. Here are the ZAPS 2.0 exercises currently assigned for ZAPS-ADL:

- #1 -- Synaptic Transmission
- #2 -- Classical Conditioning
- #3 -- Signal Detection
- #4 -- Serial Position Task
- #5 -- Mental Rotation 2-D
- #6 -- Emotional Stroop
- #7 -- Big Five
- #8 -- Student Stress
- #9 -- Narcissism

After each ZAPS-ADL deadline has passed, and I have posted credits, I post an announcement to this effect, giving the student’s one (1) business day to correct the record.

ZAPS for Research Participation Experience

ZAPS also serves as the base for the Research Participation Experience (RPE) component of the course. At UCB, the introductory course and the mid-level survey courses all contribute to the Research Participation Program (RPP), in which students serve as subjects in experiments conducted by faculty, students, and staff in the Department of Psychology. Although the economic benefits to the faculty are obvious,
the pedagogical purpose of the RPP requirement is to give students a laboratory experience roughly comparable to those provided in other science courses – providing them with first-hand experience with the methods by which scientific psychology does its work. As educationally desirable as the RPP requirement is, it is difficult to implement in an online course – again, for the simple reason that at least some students will be located too far from campus to permit them to participate.

For this reason, I have selected a subset of ZAPS exercises that involve actual data collection – mostly, replicas of classic experiments in psychology. Students actually participate in these experiments, they get pretty good feedback, and can compare their results to those of other students. At some point, the Department may decide to go with a hybrid system, in which students who are actually on campus participate in RPP, while those who are off-campus complete the RPE exercises instead. There are other possibilities.

In the past, data-collection exercises not assigned for ZAPS-ADL were grouped into five categories, and students were required to complete one (1) exercise in each category, in order to insure a variety of research participation experiences. However, the list of exercises for ZAPS 2.0 is not yet complete. Accordingly, beginning in Summer 2016, and until further notice, students will not be required to complete one RPE exercise in each of the categories. Instead, they will be allowed to fulfill the RPE requirement by completing any ZAPS 2.0 exercise that is not specifically assigned for ADL. When ZAPS is finished, we’ll revert to the original procedure. For the record, I’ve listed the original five categories below, with strikethroughs to indicate that the “1 per 5” requirement no longer applies.

Whether ADL or RPE, students receive full credit for completing each exercise by the deadline announced in the syllabus. Late completions will not receive any credit. Student completion of each exercise is recorded automatically, provided that the student has entered the proper Class ID.

Again, ZAPS permits the class roster to be downloaded as an Excel file, which makes it easy to identify which students have completed the assignment on time – although, frankly, the procedure for ZAPS-RPE is a little more complicated.

- Again, begin by sorting by ZAP title. Then eliminate exercises completed for ZAPS-ADL, and any irrelevant ZAPS.
- Then sort by student name, and you’ve got an alphabetical list showing which ZAPS-RPE assignments the student has completed, ready for transcribing into the gradebook.

I keep a copy of this file as well, in case students dispute the credits they have received.
Extra Credit for Extra ZAPS?

Students may do as many additional ZAPS exercises as they wish. In fact, some students misunderstand the instructions (which have been clarified over and over in different iterations of the syllabus), and complete all the ZAPS exercises. Or, those who read a little more carefully, but not carefully enough, will do all the ZAPS-ADL exercises listed under “Topic 1” on the ZAPS website for Module 1, all the exercises listed under “Topic 2” for Module 2, etc. Because there are 12 ZAPS “Topics”, and 12 course modules, I guess this is an easy mistake to make if you don’t read the syllabus. And, for good measure, they will do all the ZAPS-RPE exercises listed in Category A, etc.

However, I give no extra credit given for any ZAPS completed beyond the requirement (in my view, to give extra credit in this manner would be unfair to students whose other academic, work, or family responsibilities may not give them the time to do more than is required). Still, this is a policy for the IoR to determine, and ZAPS exercises are an easy way for students to accumulate extra credit if this is allowed...As a matter of fact, I take extra ZAPS exercises into account when entering “Participation” scores.

ZAPS Procedures

Before the term starts, the IoR should obtain a Class ID from Norton, and provide this ID to students on the syllabus. The Class ID will allow the ZAPS server to automatically record students’ completion of the ZAPS exercises.

Link for obtaining ZAPS Class ID: http://www2.wwnorton.com/zaps/. Click on the link “For Instructors”. Click on “contact us” to access the Norton instructor help desk, where you can request a Class ID. I have found the Norton support staff to be enormously helpful, and with usually a quick response time.

After the IoR requests a Class ID, you will get a reply that looks like this:

For Course: Psychology W1, 1 section, Summer 2013

Your new Class ID is: TQ5KPMBG

The class ID is used to identify the aggregate data collected anonymously from your students’ submitted ZAPS labs. Class IDs are good for one term and cannot be renewed. Please request a new one each term.

To enter the ZAPS site, visit:
http://www.wwnorton.com/college/psych/zaps/instructors.htm

To view your ZAPS data:

1. Visit the class-data page:
http://www.wwnorton.com/college/psych/zaps/class_data/

2. Please use the following log in credentials.
- In the User Name field: mappy
- In the Password field: zap2it
- Teaching Assistants may use this log in, but please do not share it with your students.

3. Enter your Class ID (TQ5KPMBG)

4. On the next page...

- To view experiment data, click the name of an experiment
- To view which students have performed which experiments, click the "Student Activity" link.

**To demonstrate an experiment or participate in a lab as a student:**

2. Use your Norton instructor resource log in credentials.

For technical questions, or to request a new class ID, please visit [support.wwnorton.com](http://support.wwnorton.com)

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For ZAPS, each Psych W1 IoR (i.e., those who are using ZAPS) should use their own User Name and Password, so as to prevent confusion at Norton.

When I teach the course, I take responsibility for recording students’ credits into the gradebook. But this is a responsibility that could be easily assigned to any available GSIs. Just remember to give them the User Name and Password.

I have attached a PDF of *Getting Started with ZAPS: Norton Psychology Labs Instructor’s Guide*, which has more information.

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**Queries and Comments**

An important feature of the course is the “Queries and Comments” discussion board, which is the principal vehicle for student-teacher interaction. Because the course lectures are prepared and recorded in advance, the IoR has plenty of time to deal with students’ questions and comments, and should encourage students in this respect.

Students are asked to post any questions they have about course material (lectures, readings, or psychology in general, including recent news articles) to the Q&C board on the course website. I monitor this daily, and respond immediately. The entire exchange is public, so that the entire class gets the benefit of the student’s question and the instructor’s response – and other students can chime in with their own questions, comments, and responses.
If a student sends an appropriate query or comment to me via private email, I copy that message into the Q&C board and respond publicly.

Of course, occasionally students have private concerns – a medical issue that interferes with an exam, for example. These are dealt with via private email.

**Letter Grades**

Of course, this is the responsibility, and at the discretion, of the IoR. My own philosophy of grading is set out in the Exam Information page. The IoR may deviate from this, but must announce these. It’s too hard to make any changes to the Exam Information page to accommodate instructors’ different grading policies.

My final communication with the class is an announcement that details the actual cutpoints used in assigning letter grades, and the distribution of letter grades for the class.

The Curriculum Committee (CurrComm) of the Department of Psychology is increasingly concerned about the distribution of letter grades in undergraduate courses. There are two issues.

1. Compared to other science departments, like Biology, we are easy graders, with more than half our students receiving final grades of A.
2. There is tremendous variance between different instructors of the same course.

As a result, the CurrComm is contemplating establishing standards for assigning letter grades that will be imposed Department-wide. No decisions have been made yet, and there are serious issues to be worked out – such as protection for academic freedom and fairness to students.

The message for now is: hew as close to the “industry standards” (93% = A, 90% = A-, 87% = B+, 83% = B, etc. – as you can.

Then check local standards. The Exam Information page contains updated information about the distribution of letter grades in lower-division biological and social science courses across campus. I aggregate these, and set those as my targets. That way the students in my course get, on average, what students in other courses get, and my standards are neither overly strict or overly loose.

If I determine that I should loosen the curve, to come closer to local standards (without feeding grade inflation), I lower the criteria one step at a time until I get a reasonable distribution of letter grades. So, for example, I might lower the cutpoint for an A to 90% (from 93%), and for an A- to 87% (from 90%). If pushed, I’ll drop down one more level, lowering the cutpoint for an A to 87%, and an A- to 83%. But I resist going any further than two notches. There have to be some standards!
Or whatever you do, be prepared to defend your grading system as reasonable, rigorous, and fair.

**The Disabled Student Program**

Occasionally, students will register for the course who are also registered with the Disabled Students Program, and who require accommodations for their disabilities (usually, some kind of learning disability like dyslexia). The UCB DSP is an excellent office, and I have found their staff to be exceptionally helpful. However, they are underfunded and understaffed, so anything we can do – like making requests for services early – will help both them and the IoR.

Unfortunately, students don’t always make their requests for DSP accommodations in a timely fashion, so announcements of new accommodations may dribble in over the course of the term.

Accommodations usually consist of extra time (usually 150%) on exams, plus the possibility of extending deadlines for written assignments. The latter usually cause no problems.

For midterm exams, the instructional designer should be able to create a separate section consisting of students who will get extra time. As noted, most accommodations are for 150% time. Students who receive 200% time will need to be placed in a separate section. Once the students’ names are known and they are assigned to a section, all of this will happen automatically.

The final exam is a little more problematic, as it must be proctored. Given sufficient notice, DSP should be able to arrange to proctor the students’ final exams. But the key here is *sufficient notice*. As soon as you receive your first DSP accommodation notice, you should contact them to get on the list for proctoring the final exam. If you have to add students later, do that as soon as you receive notification.

**Office Hours**

UCB policy requires instructors to hold weekly office hours. These don’t really make sense for online courses, especially one in which the instructor is pretty much always available to answer questions posted to the Q&C board, but the policy is what it is, and we obey it. So, I “go live” once a week for an hour in the Canvas chat room (see below). Hardly anyone ever logs on. Many who do just “lurk” to observe what goes on, which is not very much.
Chat Room

Canvas has a chat room for students to use when more than one of them is online at the same time. I don’t monitor it, or visit it. Maybe I should, but I don’t.

Grading

Grades in the course have several components: midterm and final exams, discussion postings, online laboratory exercises, and participation.

Participation

In many respects, “Participation” is difficult to assess. It’s inherently subjective, and often used by instructors as a “fudge factor”. Also, students may perceive themselves as having “participated” in the course more than the IoR or GSIs do. So, it’s good to have some kind of rubric for assessing participation. However, I am reluctant to specify this rubric in detail for the students. Faced with a clear and explicit rubric, students will work to the letter of the rubric to insure that they receive maximum points. My own view is that the important participation is more spontaneous and intrinsically motivated. Students aren’t required to participate, but those who do go “above and beyond” the formal requirements should get something in return. In any event, the Participation component counts for less than 3% of the students’ final grade.

There are 10 points to work with, divided between the IoR and GSIs.

Here’s a rubric for the GSIs to use:

1. Give everyone 1 point for free (this forestalls student complaints about receiving no credit for participation).
2. If a student attended office hours once, give 1 point.
   a. If often, give 1 more point.
3. If a student engaged with another student’s Discussion postings occasionally, give 1 point.
   a. If often, give 1 more point.
4. If the student’s own Discussion postings were consistently really thoughtful, give 1 more point.
5. If the student has not already topped out at 5 points, give additional points, as appropriate, up to a maximum of 5 points total.

GSIs should enter their component of the “Participation” score before students take the Final Exam. These scores should be muted, so that students do not see a partial grade, before the IoR has entered his component.

At that point, the IoR takes over, and add additional points based on the following rubric:
6. One point for attending office hours.
7. 1 or 2 points for extra ZAPS, attending my office hours, postings to the Q&C forum, to bring the student’s total up to 10 points, maximum.
8. 1 (occasionally) or 2 (often) points for answering the optional “Comprehension” questions attached to each lecture (see below).
9. 1 (occasionally) or 2 (often) points for posting to the Queries and Comments.
10. If the student has not already topped out at 10 (5+5) points, give additional points, as appropriate, up to a maximum of 10 points, total.

Nobody comes to office hours, and (in SS at least) there are remarkably few “voluntary” postings to the Q&C board or responses to the Comprehension questions (in Summer 2017, 18% of students answered Comprehension questions for Lecture 1, and 14% for Lecture 2; thereafter, responses dropped off to about a steady 7% per lecture), so very few people are going to get all 10 points, but I'm fine with that.

Participation points should be entered into the gradebook by the time of the final exam, or as soon as possible thereafter. This will give students time to register complaints, and for the GSI or instructor to make adjustments as necessary.

**ZAPS-ADL and ZAPS-RPE**

These are currently worth 5 points each, and I score them all or none (just like a neuron). Either the student completes the assignment on time, in which case they get the full 5 points, or they don't, in which case they get 0. Of course, I make allowances for equipment failure and the like.

**Discussion Postings**

At present, these are also worth 5 points each, and they’re also scored on an all-or-none basis (also like a neuron). If they’re on point and reasonably literate, they get full credit. If they’re not, they don’t. The reason for this is that, in the 8-week SS, there really isn't time to nitpick, or respond to student nitpicking, over partial credit. However, in the AY it would be nice to give students more leeway on this. I’ve contemplated, but not yet implemented, a system for distributing the 5 points such as the following:

- 0 points for failing to complete the assignment;
- 1 point for completing the assignment.
- 2-3 points (total), for good or excellent quality
- 1 point for responding to at least one other student’s post (it’s a discussion board, after all!).
- 2 points (total) for responding to several other students’ posts, or for high quality responses.
There are other systems possible, and of course it’s possible to give more points for each of these assignments. I don’t do this, because I don’t want to dilute the contribution of the exams to final grades. As it is, if a student completes all the assignments, it is still possible to get a B in the class while doing very poorly on exams:

- Full credit for Discussions: 60 points
- Full credit for ZAPS-ADL: 45 points
- Full credit for ZAPS-RPE: 25 points

Assuming 0 points for Participation, such a student is already starting out with 130 points, and needs only 171 points, half the total available, to pass (according to the criteria outlined in the Exam Information page). A student can cross that threshold by responding randomly to the questions on the two midterms and final exam (yielding approximately 50 more points, for a total of 180). Even by the industry standard, where the minimum for some kind of C is 70%, the balance is only 118 points, equivalent to scores of 29-30 on each of the midterms and 58 on the final! All the more reason, I suppose, to ratchet up the requirements for full credit for the Discussion posts.

Course Evaluations

Course evaluations are important – especially for a course like this one, which is somewhat experimental. Unfortunately, course evaluations are collected online, which means a very low response rate. In an “on-ground” course with discussion sections, we can have students bring their laptops to section and complete them then. We have no “live” discussion sections, and it is not a good idea to collect course evaluations during the Final Exam! We’re working on this problem.

Syllabus

I’ve attached the Summer 2016 syllabus to this manual.

Synopsis of Lectures

The lectures are recorded with [Audacity, an open-source recording software](https://audacityteam.org) using a [Yeti professional-grade microphone](https://yeti.auditya.com). When lecturing “on ground”, I employ the usual declamatory style, in order to connect with a roomful of people. When preparing the recorded lectures, however, I try to use a conversational tone of voice – following the advice of Steve Allen, the pioneering television talk-show host, who believed that broadcasters should talk as if they were interacting with a single listener or viewer.

The lectures are canonical with respect to organization and content, beginning with the brain and ending with mental illness. Naturally, they reflect my own point of view on
psychology. As noted earlier, Psych 1 really should extend over two semesters. If it did, I’d add more material on Emotion, Motivation, and Development, as well as lectures on health, education, and organizational/industrial psychology (e.g., personnel selection and organizational decision-making). But it doesn’t, so I use the Lecture Supplements to expand the treatment of the various topics.

The course is organized into 12 topical modules, each corresponding to one or more chapters of your textbook. Most modules contain four or five lectures; a few contain only one or two lectures. The lectures represent Prof. Kihlstrom’s organization and approach to psychology, and are not derived from any particular textbook. Think of the lectures and text as mutually complementary, but not isomorphic with each other.

Each lecture is accompanied by a set of 4-6 “Comprehension” questions, which give students an opportunity to review some of the major points of the lecture. The Canvas website allows students to type in their answers to these questions; these answers are visible to others in the student’s section (once these students have also responded to the Comprehension questions). This way, students can compare and comment on each other’s responses.

The Comprehension questions are optional, and thus ungraded – though they are considered in calculating the student’s “Participation” score. We have thought about requiring these, but in the 8-week SS, there just isn’t enough time.

Before beginning a lecture, students are encouraged to download the lecture slides and look them over, to get a sense of what the lecture is going to cover. After they have finished the lecture, they are encouraged to go back over the slides, answer the Comprehension questions, and then determine whether they have any remaining questions. If so, they are encouraged to post their questions to the Queries and Comments board on Canvas: They can expect a response from the instructor within one business day.

Another resource for clarifying any remaining issues are the Lecture Supplements provided on my scholarly website (see above).

**Module 1: The Nature and Scope of Psychology**
Lecture 1 is a pretty standard introduction to the field. Psychology is defined, following James, as the science of mental life – not the science of the brain or even the science of behavior. Still, psychology is a behavioral science, by virtue of the philosophical doctrine of Mentalism (or mental causation): a person’s action is caused by his or her mental states. As a science of behavior, psychology is situated at the middle level of explanation, between biophysical explanations above and sociocultural explanations below. Psychology is presented primarily as a social science; but psychology is also a biological and a physical science, raising the question of reductionism. Among the sciences, psychology is unique in that it explains the behavior of the individual in terms of that individual’s cognitive, emotional, and motivational states.

There follows a short history of psychology, beginning with psychophysics and ending with experimental social psychology – admittedly with an emphasis on the American scene. There’s no mention of the various schools of psychology – which are almost completely irrelevant to the contemporary scene. Borrowing Morton Hunt’s wonderful phrase, while the other natural and social sciences study the universe outside the individual, psychology as the science that tries to understand “the universe within” the individual.

Module 2: Biological Bases of Mind and Behavior

Practically every intro course, and practically every intro text, starts out with the brain. A former colleague, himself a social psychologist, once argued that the brain should actually come last in the syllabus: first we talk about what the mind does, and then we talk about how the brain does it (I later heard a cognitive psychologist make the same proposal, for the same reason, but also to blunt the influence of neuroscientists on psychology). I like the idea, but it’s too radical, so I do the standard thing.

Lecture 2 is basic neuroanatomy and neurophysiology. I don’t spend a lot of time at the cellular, much less molecular, level of analysis – interested students will have plenty of time to learn the names of all the neurotransmitters. I prefer to spend my time on the major divisions of the nervous system, leading up to the brain.

Lecture 3 focuses on hindbrain and midbrain structures, but especially on their functions. This isn’t a biology course, and the emphasis throughout these lectures is on the role of the brain in mind and behavior. It ends with MacLean’s concept of the “triune brain” – which, whatever its limitations, is a nice organizing principle for this level of course. This and the next lecture are oriented around the theme of functional specialization – again, what these various parts of the brain do. I know that there’s more to the Doctrine of Modularity than functional specialization, but I want students to recognize the term.

Lecture 4 brings functional specialization into the cortex. I don’t actually believe that the fusiform area is specialized for face recognition (Isabel Gauthier was a student at
Yale when I taught there), but it’s such a good, and popular, example of the logic of functional specialization that I teach it anyway.

**Lecture 5** continues the theme of functional specialization into the hemispheres. But the bigger idea is that there are limits to functional specialization. With respect to **content** as opposed to function, there’s Lashley’s Law of Mass Action. But more important, there are the implications of redundancy, plasticity, and neurogenesis for recovery of function. It all boils down to function.

**Module 3: Methods and Statistics for Psychology**

Some courses, and some texts, put methods up front – partly, I’ve always suspected, to make clear that psychology is a **real science** after all. But Henry Gleitman, who had a career as an actor and a theatrical director as well as a psychologist, always insisted that the audience does not need to see backstage. Also, frankly, methods are boring, and I prefer to give students some content before thrusting them into the “how we do it”. Majors will have plenty of time to get this material in other courses, and nonmajors don’t need or want anything more than a pretty abstract, conceptual introduction. Introductory students don’t need to know how the Gaussian distribution is derived; and they don’t need to know how to calculate a standard deviation or perform a \( t \)-test. What they need to know is that there are such things, and that they are part of the rhetoric of scientific psychology – how we know that what we know is actually true.

**Lecture 6** is not intended to be a full-fledged introduction to either methods or statistics. I use personality measurement and the Sternberg (1966) as vehicles for making the abstract concrete. Someday I’ll look for an experiment on aging that actually uses the Sternberg paradigm; but it was easier just to make up some data (and say clearly that it’s made up). Anyway, the lecture covers the basics: central tendency, variability, correlation, and hypothesis-testing. I’m a confidence-interval and effect-size skeptic; and, anyway, “\( p < .05 \)” is a good concept for novices to have, even if they reject it later as professionals. The lecture actually ends with a discussion of the literature on clinical vs. statistical inference.

In my attempt to be simple and conceptual, I have sloughed over some details. Anyone who has taken an advanced statistics course will likely throw up when they hear me describe the Analysis of Variance as a glorified \( t \)-test (though, frankly, that’s what it is). If you see any mistakes, or have suggestions as to how this material might be covered better, feel free to let me know.
Module 4: Learning

Now we get back to psychology. Of all the things that the brain does, the most important function is learning. The lectures build a cognitive approach to learning, which leads naturally into the modules on cognition itself – beginning with sensation and perception, and ending with thought and language. A second purpose of these lectures is to connect the student to the use of nonhuman animals in psychological research. There’s no mention of human learning until the end.

Lecture 7 starts out with unlearned behaviors: reflexes, taxes, and, particularly, instincts. It introduces students to ethology and the evolutionary point of view in psychology, as well as the limitations of innate behaviors. It ends up with Pavlov’s discovery of classical conditioning.

Lecture 8 employs classical conditioning to present the vocabulary of learning theory - acquisition, extinction, generalization, discrimination, etc. All of this could be done perfectly well with instrumental conditioning, but Penn was a hotbed of studies of classical conditioning, and I’m true to my school. But instrumental conditioning isn’t ignored: the lecture also presents Thorndike and Skinner, and even includes the Matching Law.

Lecture 9 begins with Mowrer’s two-factor theory of avoidance learning as an example of how learning can combines features of classical and instrumental conditioning, and introduces the Stimulus-Response theory of learning as a foil for what comes next. Garcia’s experiments on bait-shyness undermine some of the assumptions of S-R theory; the concept of preparedness brings evolution back into the picture. Then the results of various variations on classical conditioning are used to undermine the remaining assumptions of S-R theory, underscoring the importance of contingency (predictability) rather than contiguity. Leo Kamin’s blocking experiment supports his argument that animals are surprised by violations of expectancies, and search the environment for predictors of surprising events.

Lecture 10 presents a cognitive view of learning full-force, beginning with Seligman’s critique of the two-process theory of avoidance learning, then going back to Tolman’s classic studies of latent learning, and ending up with Bandura’s work on social learning and some recent work on probabilistic learning in infants. The bottom line is that learning is the acquisition of knowledge through experience, and is the cognitive basis of culture.

Module 5: Sensation and Perception

Learning, viewed as the acquisition of knowledge through experience, raises the question of how we acquire knowledge through our senses.
Lecture 11 is a tour through the various modalities of sensation – the ways in which we know the world. I try to cover them all, relying heavily on Sherrington’s classic analysis. I organize the sensory modalities according to four characteristic features: the proximal stimulus, the receptor organ, the sensory tract, and the cortical projection area.

Lecture 12 uses a modern version of Muller’s Doctrine of Specific Nerve energies to undercut this organization somewhat. What determines the modality of sensation isn’t the nature of the proximal stimulus, or even the receptor organ or afferent tract; what’s decisive is the cortical projection area. Put another way, it doesn’t matter where it starts out: it matters where it goes. The lecture also invokes a modern version of Helmholtz’s Doctrine of Specific Fiber energies (hey, I’m big on “doctrines”) to discuss the nature of various qualities of sensation within a sensory modality. Case in point: color vision. The lecture also introduces a theme that runs throughout this module: the connection between the psychology of sensation and perception and the psychology of the visual arts.

Lecture 13 introduces the student to classical psychophysics, and also to signal-detection theory and the problem of “subliminal” perception. Here another theme begins to emerge more clearly -- which is a critique of all forms of Stimulus-Response theorizing.

- S-R theory didn’t work for learning: in order to understand what an organism learns, we have to understand the cognitive structures and processes that mediate between stimulus and response.
- It doesn’t work for sensation: the modality of sensation, and the quality of sensation within a modality, is not determined by the stimulus, but rather by where the neural impulse goes.
- This lecture show that it doesn’t work for conscious awareness. Whether a subject detects the presence of a stimulus has less to do with the physical intensity of that stimulus, than with the observer’s expectancies, goals, and biases.
- The subsequent two lectures carry this theme through to perception, by promoting a “constructivist” view of perception as intelligent problem-solving that (in Bruner’s phrase) “goes beyond the information given” by the stimulus.
- Later lectures carry this theme into memory, by promoting a “reconstructivist” view of memory: memory depends less on the trace, than what the rememberer does with it.
- And it shows up even later in the course, in the lectures on personality and social psychology, which develop the idea that the situation to which the person responds is, in a very real sense, and cognitive and behavioral construction of the person him- or herself.
- And, one last time, in the lectures on development, a major theme of which is that mental development is not something that happens to the individual; rather, even the young child is an active agent of his or her own development.

But I digress.
Lecture 14 uses the ecological view of perception promoted by J.J. Gibson as a foil the constructivist view discussed in Lecture 15. When sharing drinks with other psychologists, I have sometimes speculated that there was an unholy alliance between the psychophysicists, the Skinnerian behaviorists, experimental social psychologists, and Gibsonian theorists – all of whom emphasized the stimulus (in the case of experimental social psychologists, the stimulus situation). But, as F.C. Bartlett warned, “the psychologist, of all people, must not stand in awe of the stimulus”; and I don’t. Another theme that runs through this course is that the stimulus doesn’t control behavior. What controls behavior is the mental representation of the stimulus, and that mental representation is, itself, very much a product of active, intelligent, cognitive processing. But we’re not there yet. Instead, I start with motion and depth perception to illustrate the stimulus cues that contribute to perceptual experience.

Lecture 15 takes the first crack at Gibson by taking about the Gestalt principles of perception, which exemplify the role of the perceptual apparatus in organizing perception of the stimulus. I then go on to discuss “bottom-up” (Gibsonian) and “top-down” (non-Gibsonian) processes in word perception, which illustrate how the perceiver’s knowledge affects perception of the stimulus. I also introduce the perceptual constancies as reasons for thinking that there might be more to perception than Gibsonian ecological optics.

Lecture 16 finishes this off with a discussion of reversible figures, perceptual illusions, cultural differences in perception, and “Gestalt completion” tasks as further reasons for doubting the Gibsonian point of view. We end up with non-Gibsonian discussion of Neisser’s “perceptual cycle”, illustrating the role in perception of effort after meaning, problem-solving, and hypothesis-testing.

Module 6: Memory

Working our way through the information-processing sequence: after sensation and perception comes attention and memory. The bulk of these lectures focuses on long-term episodic memory – which is what people mostly mean by “memory”, and is organized around seven principles governing encoding, storage, and retrieval. These seven principles, while not exactly unique to me, constitute one of the places where I introduce truly novel ideas or organizing principles into the course.

Lecture 17 deals with short-term and working memory, including the serial-position effect. The latter portion deals with the evolution of theories of attention, beginning with the filter theory and ending with capacity theories and automaticity.

Lecture 18 deals with encoding processes. It begins by developing a taxonomy of memory built on dichotomies – declarative vs. procedural, episodic vs. semantic, and introduces the verbal-learning paradigm for the study of long-term episodic memory. There is a discussion of the role of rehearsal, leading to a presentation of the first two principles of memory: elaboration and organization.
Lecture 19 deals with storage and retrieval processes. Time-dependency is explained in terms of decay, displacement, consolidation failure, and mostly, retroactive and proactive interference. There follows two more principles of memory: cue-dependency (explaining differences between recall and recognition) and encoding specificity (exemplified by state-dependent memory and analogous effects.

Lecture 20 focuses on the role of knowledge and inference in memory, as exemplified by schematic processing and reconstruction. A great deal of the lecture is taken up by a presentation of a classic experiment by Loftus on the post-event misinformation effect. This and the associative memory illusion (aka the "DRM effect") make the parallel between constructive processes in perception and reconstructive processes in memory.

Module 7: Thought and Language

These lectures complete the discussion of cognitive processes. Their theme, mostly, is the difference between prescriptive analyses of how people should think, and empirical descriptions of how people actually think – between logic, if you will, and psychologic.

Lecture 21 focuses on concepts and categorization. It begins by identifying a number of problems with Aristotle’s classical view of categories as proper sets, as exemplified by geometric and biological categories, and then turns to the alternative “prototype” view introduced by Eleanor Rosch. I am a big fan of Rosch’s work, which, using only paper and pencil, singlehandedly overturned nearly 2,000 years of philosophical thinking about categories. But even it has problems, and I illustrate these with alternative “exemplar” and “theory” views of categorization.

Lecture 22 does much the same thing with reasoning, judgment, and decision-making, starting with an initial focus on algorithms (like means-end analysis), and ending up with the classic work by Kahneman and Tversky on judgment heuristics. There are of course lots of heuristics, but the lecture focuses on the four big ones identified by K&T: representativeness, availability, simulation, and anchoring and adjustment.

Lecture 23 addresses the question posed by the departures from normative rationality observed in categorization and judgment: Are we rational beings after all? It begins with a discussion of rational choice theory, through K&T’s work on framing effects (especially the Disease Problem), problems with expected value and expected utility theory, and ends with K&T’s prospect theory and Simon’s concept of bounded rationality. The algebra may be a little off-putting for some students, but the lecture requires nothing that they shouldn’t have had in high school. This lecture also connects psychology with economics (especially behavioral economics), for the prospective business majors in the room.

Lecture 24 is a pretty standard discussion of intelligence and intelligence testing. I’m skeptical of strong views of general intelligence (g), and try to lead students to think of
intelligence as a collection of abilities that may be only modestly correlated with each other.

**Lecture 25** is on language. Much of it, frankly, is derived from the Language chapter in early editions of Gleitman, which was written by Lila Gleitman, Henry’s wife, who is closely associated with Chomsky’s views on language. In my view, Lila’s is the best single chapter on language that money can buy, and I simply can’t compete with it. But it’s not entirely derivative. The lecture starts out exploring the parallels between human language and communication between nonhuman animals. It then moves to a “classics illustrated” exposition of Chomsky’s classic distinction between surface structure and deep structure. I know that Chomsky has moved far beyond this, but for introductory psychology students, I think that this is pretty much all the Chomsky they need to know; and the basic concepts are important. Perhaps the most novel part of the lecture is the final portion on pragmatics (Grice, Clark). Its treatment of the Sapir-Whorf hypothesis (like Lila, I’m a Whorf skeptic) helps connect language to thought.

**Module 8: The Trilogy of Mind**

After all this cognition, it’s important to remind students that there’s more to mental life than knowing – there’s also *feeling* and *wanting*. If this were a two-semester course, I’d do more on both topics, but at least I talk about them a little. In the on-ground course, with only two lectures per week, I never got to talk about them at all!

**Lecture 26** focuses on emotion, and especially the shifts from the James-Lange theory to the general arousal theory, then Schacter-Singer, and finally Ekman. It ends with a little affective neuroscience, and a nod toward embodiment.

**Lecture 27** gives motivation the same treatment, beginning with homeostasis to the opponent-process theory of acquired motivation (and addiction), to social motivation. The lecture ends with a discussion of intrinsic motivation, and achievement motivation, based largely on the work of Judy Rodin and Judy Harackiewicz (who was my very first graduate student).

**Module 9: Personality and Social Interaction**

This module has the most unique organization of any in the course, and it’s admittedly idiosyncratic. We talk a lot about the integration of personality and social psychology, but nobody ever seems to do anything about it. These lectures use Lewin’s “Grand Truism”, $B = f(P,E)$ to present the two subfields in an integrated manner. Although the approach is idiosyncratic, the content is actually pretty traditional – though framed in a rather unique way. Notice that there’s no Freud. Freud was introduced briefly in the lecture on Motivation, and that’s all the student is going to get from me: into the dustbin of history he goes.
Lecture 28 unpacks Lewin’s Grand Truism, and introduces four important theoretical positions, stated as “Doctrines”: Traits, Situations, Interactions, and Reciprocal Determinism. The full scope of Reciprocal Determinism is decomposed into three Dialectics: between the Person and Behavior; between the Environment and Behavior; and, returning to interactionism, between the Person and the Environment. There’s still some time left over, so I talk about the structure of personality traits and attitudes (e.g., the “Big Five”), as an introduction to the Dialectic between the Person and Behavior.

Lecture 29 expands on the Doctrine of Traits, and goes over the basics of personality measurement in the context of coherence, stability, consistency, and predictability. I actually have little use for the Doctrine of Traits, and think it was a mistake for personality research to become so focused on traits, but at least students ought to know what it’s all about.

Lecture 30 directly attacks the heart of traditional personality psychology, via the problem of predicting an individual’s specific behavior from knowledge of his personality traits – the problem being that such predictions are very poor, as illustrated by Mischel’s critique of the “personality coefficient”. Equally if not more important, is the reciprocal influence of behavior on the person, as exemplified by self-perception theory, the James-Lange theory of emotion, and the facial-feedback hypothesis.

Lecture 31 gives the same treatment to classic experimental social psychology. Some classic examples of social influence, such as Asch’s conformity experiment, aggression, and altruism are presented. But again, equally important, are the reciprocal influences of behavior on the situation.

Lecture 32 brings us back to the Doctrine of Interactionism, but with an important new element. Previously, interactionism was presented in terms of the ANOVA model, with main effects of persons and situations on behavior, and their interaction. But this presentation is much more dynamic, and focuses on the essence of the Doctrine – which is how people create the situations to which they respond, through processes of evocation, selection, behavioral manipulation, and cognitive transformation. The last one is the most important, reinforcing the point that people don’t respond to the situation – they respond to their mental representation of the situation.

Module 10: Psychological Development

The developmental lectures are also somewhat unique, as they focus on personality development, continuing themes developed in the lectures on personality and social interaction.

Lecture 33 introduces the problem of nature vs. nurture, and the twin-study method for decomposing population variance into its genetic and environmental components. The general point is that, while there is a significant genetic contribution to individual
differences in personality, the contribution of the nonshared environment is just as
great, if not greater.

**Lecture 34** takes up the question of why children from the same family are so different
from each other. It is based mostly on the work of Judith Harris on sources of within-
family environmental differences, including birth-order effects as a provocative example
of sibling differences in family micro-environments. When I teach intro on campus, I try
to time this lecture for right before Thanksgiving – with the hope that the students will
think about family microenvironments while sitting at the dinner table. The basic
message being: each child is raised in a different family.

**Lecture 35** focuses on gender dimorphism. It is unabashedly influenced by the ideas of
John Money – not so much his controversial work on gender reassignment, but more
importantly the idea that even such fundamental aspects of personality as gender
identity, gender role, and erotic orientation develop out of the interaction of nature and
nurture.

**Lecture 36** picks up cognitive development, which is covered so well in most textbooks
– Piaget being almost as seductive as Freud! I view the theories of cognitive
development as swinging back and forth between continuous (e.g., maturation,
expertise) and discontinuous (e.g., Piaget) views of cognitive change. The “theory of
mind” view of cognitive development, and the “theory theory” of development generally,
is only the most recent manifestation of this trend.

**Module 11: Psychopathology and Psychotherapy**

These lectures constitute a basic introduction to abnormal and clinical psychology. The
first lecture is on unconscious processes: it really belongs in Module 8, “The Trilogy of
Mind”, but had to be moved here because there wasn’t room in the schedule before
Midterm 2. The module includes a lecture on “Experimental Psychopathology”, showing
how the concepts and methods introduced in earlier lectures on “normal” mental life can
help us understand “abnormal” mind and behavior. The lectures are organized around
the “diathesis-stress” framework for understanding the origins of psychopathology,
picking up on the “interactionist” theme developed in the lectures on Personality and
Social Interaction and Psychological Development. The material on interventions
emphasizes psychotherapy as opposed to medication.

**Lecture 37** covers unconscious cognition, emotion, and motivation. I had originally
planned it as the third lecture in the module on the Trilogy of Mind, but I couldn’t fit it into
the 8-week Summer School schedule before the second midterm, and I didn’t want it to
stand alone as a separate module before the one on Development, so I stuck it in the
beginning of the is module, where it’s not completely uncomfortable. This is a one-
lecture, intro-level summary of my work on unconscious mental life, including automatic
processes and things like implicit memory, implicit perception, etc. The corresponding
Lecture Supplement contains a more extensive treatment of consciousness per se.
Lecture 38 is essentially a quick tour through descriptive psychopathology. Some of the language I use is a little archaic (e.g., “psychoses” and “neuroses”, but these terms have historical resonance and I want students to understand what they mean. The organization is a little different from what you'll find in *DSM-IV* or *DSM-5*, but I've long argued that psychologists shouldn't adhere slavishly to *DSM*. Anyway, the major departures from the *DSM* organization are in the dissociative and somatoform disorders.

Lecture 39 links back to the earlier lectures, on “normal” mental function, and illustrates the use of laboratory methods, including animal models, to understand the nature of psychopathology.

Lecture 40 links back to the material on the person-by-situation interaction (from the module on Personality and Social Interaction), and the material on nature and nurture (from the module on Psychological Development), to explore the diathesis-stress framework for understanding the origins of psychopathology. Genes play a role, but so does the environment – otherwise, the concordance for mental illness between identical twins would be a lot greater than it is.

Lecture 41 examines biological and psychosocial approaches to the treatment of mental illness. Frankly, I’m skeptical of drug treatments for schizophrenia and depression: (1) I’m skeptical of the biological theories (e.g., the dopamine hypothesis) on which they’re based; and (2) I’m skeptical that antidepressant drugs are much more than placebos. Still, there are likely to be students taking antidepressants, and maybe even some taking antipsychotics, and so I don’t lay out those objections. Anyway, psychologists should be focusing on psychological treatments, in my view, and that’s where the emphasis lies. What’s novel here is my objection to Lester Luborsky’s “Dodo Bird Verdict”. It’s simply not true that all modes of psychotherapy are equally effective. The cognitive-behavioral therapies are by far the most effective, and for good reason, and I think it’s important to say so.

Lecture 42 views individual mental illness in sociocultural context, and reinforces a point, made several times during the course, that we humans are social animals, and so our experience thought, and action – even when twisted by mental illness – have to be viewed in a social context. Here we talk a fair amount about the stigma of mental illness, mental-health policy, and also the importance of promoting evidence-based practices.

**Module 12: Conclusion**

In which we bring the course to a close by reviewing the main themes we’ve covered.

Lecture 43 brings the whole course to an end by recapitulating its main themes: mind as the basis for action; cognition as an active process; and interactions -- among
cognition, emotion, and motivation; between the person and the situation, in
development, and in the origins and treatment of mental illness. Mind is the basis of
human freedom.

Attachments

1. UCB Course Approval Form
2. Response to Supplemental Questions Concerning Online Courses
3. Responses (2) to Further Questions from COCI
4. UCEP Course Approval Form (Fall 2012)
6. Description of GSI duties for Summer 2015
7. Sample Schedules for Fall and Spring Semesters (based on the 2013 Academic
Calendars).
8. ZAPS Instructor's Guide

This document last revised 04/04/2018.
## Committee on Courses of Instruction

### Academic Senate - Berkeley

### Course Approval Form

To Request Course Modification, Approval, or Withdrawal

See bottom of page for Link to Course Toolbox

Fields marked with an asterisk (*) are required for any change. Fill out the form with NEW information. See the Toolbox for detailed instructions.

### Department and Course Number

Psychology W1

### Date Submitted

03/27/2012

### Effective Term (e.g., fall 2011)

Fall 2012

### Course Title

General Psychology

### Abbreviated Transcript Title (19 spaces maximum)

General Psychology

### Grading (Letter, P/NP, S/U, IP)

Letter

### Units

3

### Offered (F, Sp, Su)

F/SP/Su

### Course Repeatable for Credit?

No

Yes (note conditions of the repeat in the Remarks section)

### Prerequisites

None

### Final Exam (for undergraduate courses, check one)

- [ ] Written final exam conducted during the scheduled final exam period
- [ ] None (explain in Remarks section)
- [ ] Alternative method of final assessment (describe):

### Duration of Course (check all that apply)

<table>
<thead>
<tr>
<th>Format (e.g., 3 hrs LEC + 1 hr DIS per week)</th>
<th>TIE Code</th>
<th>Estimated Total Number of Required Hours of Student Work Per Week</th>
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<tr>
<td>3 hrs LEC</td>
<td>WBL</td>
<td>9</td>
</tr>
<tr>
<td>6 hrs LEC</td>
<td>WBL</td>
<td>18</td>
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</table>

### Course Description

Introduction to the principal areas, problems, and concepts of psychology.

### Check as many as apply. * New courses or substantial changes should have complete syllabus attached.

- [ ] New course
- [ ] Withdrawal of course (last offered: )
- [ ] Special purpose course to be offered only once
- [ ] Summer session only course
- [ ] American Cultures course
- [ ] Restoration of course (previous course # ; last term offered: )

### Remarks (or attach separate sheet)

This online version of Psychology 1 was already approved by COCI for the Summer Session. We now propose to offer the course during the regular academic year, both Fall and Spring Semesters, as well as in the Summer Session, under the auspices of the Online Instruction Pilot Program.

### Chair's Signature

John F. Kihlstrom

### Committee on Courses of Instruction

Approval Date

Retain: Academic Senate: 5 Years – Permanent

Other copies: Until superseded

Last modified 11/2009 by Academic Senate

Course Toolbox
Supplemental Questions for Online Course Approval Requests
Berkeley Division of the Academic Senate
Committee on Courses of Instruction

The following 15 questions are to be answered by the instructor proposing the course, to be submitted along with the course approval form and syllabus. In this context, COCI considers an “online course” to be one in which a significant portion of contact hours (e.g., lectures, discussion sections) will be delivered by web-based instruction rather than face-to-face instruction; please refer to Section 2.5 of the COCI Handbook and/or contact COCI Senate Analysts for more detailed information on the threshold of online content that requires submission of answers to these additional questions.

Instructor Name: John F. Kihlstrom

Department and Course Number: Psychology W1

Proposed Term to be Offered: Fall and Spring

NOTE: This online version of Psychology 1 was already approved by COCI for the Summer Session. It was offered in 2010 and 2011, and is scheduled again for 2012. We now propose to migrate this course to the UC Online Extension (UCOE), and offer the course during the regular academic year, both Fall and Spring Semesters, as well as in the Summer Session.

Overview questions:

1. What modes of instruction will be used, particularly those specific to technologically-mediated instruction (e.g., webcast lectures, moderated discussion lists, synchronous or asynchronous web-based discussion sections, email, chat rooms)?

The main body of the course is a series of online lectures consisting of narrated slideshows, identical to the lectures that would be delivered in a "face to face" course on campus. The writing component consists of a series of discussion questions, to which students respond with short essays. There is also a "laboratory" section consisting of a series of online demonstrations.

The instructor and GSIs will hold weekly synchronous office hours via the Internet. An unmoderated chatroom allows students to communicate among themselves while online, as desired.

There will be a moderated discussion list for students to post comments and queries concerning course material (lectures and text): the instructor will respond to all postings within 2 business days, and all students in the course will have access to these asynchronous exchanges. Private communication between students and the instructor (e.g., concerning course progress, special circumstances, etc.) will be conducted by email.
2. What specific pedagogical advantages and disadvantages will the technologically-mediated format offer?

Students will be able to review lecture material, and supplements to the lectures, at length and at leisure.

3. How will this way of delivering the course change modes of learning (e.g., auditory or tactile) and affect learning experiences? If this course has a corresponding face-to-face version, please compare the two and explain the differences.

There would be no change. The primary modes of learning in this course are visual (reading, examining graphics) and auditory (listening to lectures), and this will not change in the shift to the online format. What the online students will miss, mostly, is a view of the instructor pacing back and forth across the Wheeler Auditorium stage. Of course, there is some positive benefit to be derived from putting a face to a name; the students, at least, will do this by virtue of short video introductions prefacing each module of the course.

By virtue of the "Comments and Queries" discussion board, online students will actually have more opportunity to have individual comments and questions addressed. In addition, as indicated in #2 above, students will be able to fit the course lectures more easily into their schedules. Note that the empirical literature does not support the popular view that there are different "types" of learners who respond best to teaching methods that are geared to their particular "learning styles" (see Pashler, H., McDaniel, M. A., Rohrer, D., & Bjork, R. A. "Learning Styles: Concepts and Evidence" in Psychological Science in the Public Interest, 9, 105-119, 2009.

4. Is specific technical or pedagogical expertise (on the part of the student or instructor) necessary for this course? If so, what? If using GSIs, are there needs or plans for specialized training to enable them to work successfully in an online environment to elicit/follow/stimulate discussion?

No specific expertise is necessary. The instructor already maintains a website for the introductory psychology course. Participation in the course, on the part of both instructional staff and students, requires no more than rudimentary familiarity with the Internet.

5. What specific technical support does the department have available for instructors and students? What plans are there for malfunction, disruption, or unavailability of technical support?

Technical support will be provided by UCOE and by campus Instructional Technology Services, which already supports webcasting, podcasting, and the bSpace internet presence.
6. How many students are expected to take this course? If there is a face-to-face equivalent on campus, please indicate the semester(s) taught and typical enrollment(s) and whether the face-to-face version will continue to be taught after development of an online version.

Projections are that enrollment in the online version of Psych 1 will run into the hundreds. The face-to-face equivalent course on campus is taught every semester, and enrolls between 500-700 students each term, depending on the availability of GSI support. The face-to-face version will continue to be taught as usual.

7. Is there a specific problem or set of problems that online delivery is intended to address (e.g., increasing access, relieving impacted courses, reducing costs)? If so, please explain.

The online version of the course is primarily intended to increase access to the course, both for UCB and non-matriculated students. Although UCB students will still have access to a face-to-face version of the course, many may wish, for a variety of reasons, to take the online version instead. The introductory psychology course is typically one of the most popular courses on any college campus. When taught on campus, the course typically generates a substantial waitlist. In addition, UCOE has identified the introductory psychology course as one of its most desirable lower-division offerings. The availability of the course online should increase access while simultaneously relieving course impaction and reducing the cost of instruction.

8. Will this course satisfy major/degree requirements? If so, are there face-to-face courses that meet the same requirements? Will both the face-to-face and online options be treated the same when determining if students have met these requirements? If not, please explain.

Psychology 1 or its equivalent is one of the pre-requisites for entering the Psychology major at UCB. The online version of the course will meet the same requirement as the face-to-face version.

9. Have you considered how this course will relate to other courses, both online and face-to-face, that your department may offer, or that may be offered by other departments? For example, will this course serve as a prerequisite for other courses? Please explain.

Psychology 1 is typically a prerequisite for enrolling in upper-division courses in Psychology. Like its face-to-face counterpart, the online version will satisfy this requirement.

Course Mechanics and Logistics Questions:
10. What is the nature of instructor involvement in the proposed alternative mode of instruction? What are the means by which the instructor will foster learning, and how will the instructor be available for consultation?

The instructor will prepare and record the narrated slideshows for presentation as lectures, and revise and update these materials periodically. During the semester, the instructor will also be available via the "Comments and Queries" discussion board to answer questions and comments of general class interest. The instructor will also be available via scheduled synchronous office hours and private email to respond to individual student concerns. The pre-recorded lectures will actually free up instructor time to deal with questions and comments from students.

11. In the case of distance learning courses offered collaboratively between campuses, what are the specific responsibilities of instructors on this campus? How will coordination be maintained between campuses, and who will be responsible on this campus for consultation with students?

Students may enroll in this course from other UC campuses (through the existing simultaneous enrollment process), as well as from outside the UC system. Course content and staffing will be the responsibility of the UCB Department of Psychology, and the instructional staff assigned to the course will be responsible for consultation with students. Intercampus coordination will be provided by UCOE.

12. How will student progress be monitored? Describe graded activities mediated through technology and how materials will be handled to verify student identities and to ensure that students only receive credit for their own work.

The syllabus contains a number of firm deadlines: for posting responses to Discussion questions and completing online laboratory exercises, as well as for the midterm and final examinations (described more fully in #13, below). Except for medical excuses or other authorized "absences", students receive credit only by completing their assignments by the posted deadlines. This is intended to insure that students keep up with their coursework. Students can only gain access to the Discussion bulletin board or online laboratory exercises by signing in with their own passwords.

13. What are the plans for evaluating student learning outcomes, both at the end of the term and as students move through subsequent courses in a sequence of courses or curricula?

Student outcomes will be assessed by means of two midterm examinations and a comprehensive final examination. These exams are carefully constructed with respect to content and empirical validity, so that performance on them reasonably represents the student's mastery of the factual and conceptual material of the course. In addition, student performance will be used to revise the course to support learning in areas where students have difficulty with the course material. The
"Discussion" questions are expressly designed to give students an opportunity to connect what they have learned to practical and policy arenas.

As with the face-to-face versions of the course, these examinations will be in multiple-choice format. Machine scoring will permit us to easily identify and correct bad items, and give rapid feedback to students. The two midterm examinations will be administered online, with students given a strict 50 minutes to complete the exam. In accordance with UCB policy, the three-hour final examination (consisting of both noncumulative and cumulative portions) will be proctored: UCB students and others residing near Berkeley will take the proctored exam administered on campus; students residing some distance from Berkeley will be able to arrange for local proctoring, following procedures developed for the UCB Summer Session. In face-to-face versions of the course, performance on the midterms correlates highly (in the .70s) with performance on the midterms; experience in the 2010 and 2011 Summer Session indicates that the same high correlation is maintained when the midterm exams are administered online.

14. How will course material that is archival in nature (e.g., recorded webcasts, voiceover slides) be updated for future offerings? Can it be easily moved to other platforms or adopted by other instructors?

The course currently exists in the ANGEL learning environment, and will be ported to the UCOE Common Learning Environment (CoLE). Responsibility for updating course materials rests with Prof. John F. Kihlstrom of the Department of Psychology. The course material can certainly be moved to other platforms and adopted by other instructors, and the recorded lectures can be supplemented by any standard introductory textbook (many of which are now available online as well). In fact, given Prof. Kihlstrom's undergraduate teaching responsibilities in the upper division, we assume that day-to-day responsibility for conducting the course during the regular academic year (Fall and Spring Semesters) will be assigned to a Lecturer who will be supervised by Prof. Kihlstrom.

15. COCI will be reviewing approved online courses after 4 years, consistent with the recommendations in the Berkeley Division's Final Report of the Online Graduate Degree Working Group (which can be found at http://academic-senate.berkeley.edu/sites/default/files/recommendations-reports/final_report_online_graduate_degrees_working_group.pdf) and COCI's current practice of seeking input from the instructors of new online courses on their teaching experiences – a practice which has been in place since COCI's first provisional approval of online courses in 2003. If you believe your proposed course would benefit from review before the 4-year mark, what is the alternative time-scale for review that you would prefer and the reasoning behind it?

We believe that a four-year review cycle is appropriate.

Version 11/12/2010. This version supersedes any older versions.
September 20, 2012

Prof. Daniel F Melia, Chair
Committee on Courses of Instruction
University of California, Berkeley
320 Stephens Hall

Dear Prof. Melia:

Thank you for your letter of September 17 concerning our proposed online course, Psychology W1 (“General Psychology”). As the faculty member responsible for this course, I appreciate the Committee's concerns, and hope to address them in this letter.

First, a little background. At the request of UCB Summer Sessions, I developed an online version of my introductory psychology course, which was approved by COCI for the summer session and launched in Summer 2010. Subsequently, UCOP sought to develop a series of online undergraduate courses as part of its Online Instruction Pilot Project (OIPP), which has now morphed into UC Online Education (UCOE). Because introductory psychology is one of the most popular courses on any college campus, UCOE is eager to offer it. However, out of nine UC campuses on which the course is taught, not one expressed any interest in developing the course for UCOE. Accordingly, I suggested that UCOE take my existing online course “off the shelf” and offer it in the regular academic year as well.

One problem we encountered immediately is that I would be unable to teach the course myself. At present, my academic-year teaching is fully committed to the upper division of the undergraduate curriculum, and to graduate courses. To add the introductory course to my current teaching plan would constitute an overload. While I have been willing to teach a Freshman Seminar as an overload, teaching “Intro” as an overload is another matter entirely. The only way to mount the course would be to have it taught by adjunct faculty. I would prepare and refresh a series of online lectures, as I would do in any event for the Summer Session course, but an adjunct would have to take responsibility for actually running the course during the academic year – preparing and grading exams and other assignments, handling queries from students, and the like. The Department has identified at least one adjunct faculty member, currently teaching Psych 1 for us on campus, who would be willing to undertake this responsibility; other potential instructors are available as well, including the graduate students who staff Psychology 2 (“Principles of Psychology”), our introductory course for nonmajors.

I agree that, ideally, the course developer should be the person who actually delivers the course to students. But this is simply not possible in this case. I would be spending all of my teaching time, and more, on this single introductory course, and be denied the opportunity to teach at the upper division and graduate levels. If we are to offer Psych 1 online, it should be offered every semester (and summers), as part of a year-round curriculum. No single person can do that, even if he or she has no other teaching commitments. But it would be a great inefficiency to identify a rotating pool of Psych 1 instructors, and ask each of them to develop his or her own online course, and deliver it personally when his or her turn came up in the rotation. Psych 1 is a foundational course, and its content does not change much from year to year. This is also true for many foundational science courses, such as introductory physics, and I believe it to be true for introductory courses in the social sciences, arts, and humanities as well. I am informed that the content and organization of the introductory physics course differs very little from what I took as a college freshman in 1966-1967; the concluding week might talk about string theory, but the bulk of the course is mechanics, optics, and electromagnetism as understood before Einstein. Courses in the lower division are perfect opportunities for online instruction, precisely because they follow a canonical syllabus that changes slowly over time -- provided that the courses themselves are carefully conceived. And they free instructor time, which would ordinarily be
devoted to lectures, and which now can be devoted to addressing students’ individual comments and questions.

A second problem with taking my Summer Session course “off the shelf”, which you have identified at COCI, is that the version of Psych 1 taught on campus (“onground” as it were) includes weekly discussion sections, while the Summer Session version taught online does not (I should note that the Psych 1 “discussion” sections in the summer are themselves very different from what occurs in the academic year, and afford very little actual discussion). I understand that Berkeley traditions favor discussion sections, but in my view they are not feasible for an online course, because students may be widely dispersed across time zones, making it impossible for them to gather together at any appointed time. A major advantage of an online course is that it frees students from a lockstep schedule. Instead, I opted to increase, by roughly 50%, the number of lectures in the course. This allows me to cover more material, in more depth, than would otherwise be possible. Students still have some benefits of a discussion section, by virtue of the nine required “Discussion” postings. In addition, they have the opportunity for considerable contact with me (or whoever the instructor of record is), by posting questions and comments to the “Comments and Queries” board. The three hours per week that I am not giving face-to-face lectures can be devoted to dealing with students on a more individual basis.

I want to emphasize that, by focusing on lectures, as opposed to formal discussion sections, I have not embraced a “speaking textbook” model. My lectures adhere to the canonical organization of an introductory psychology course, working from the brain to mental illness, but they do much more than impart “specific, repeatable information”. They organize the material in a unique manner, impose a narrative framework on the course material, and set the stage for the student to learn from the textbook and other sources. The Socratic method is fine for some educational purposes (I had a professor in college who taught that way exclusively, and I took every one of his courses), but the academic lecture remains the single most efficient means of imparting knowledge and sharing insights -- communicating to students what a teacher has to teach.

I should also stress that the Department in no way anticipates that the proposed online course will replace the onground course. We will continue to mount Psych 1 online as well as on ground. Students who desire a face-to-face experience will still be able to get it. But students with scheduling conflicts, or who encounter enrollment limitations, will still be able to take what has, historically, been one of the most popular courses on this or any other campus. The primary goal of the online offering is to increase student access to the course. We see this enterprise as an experiment, to determine whether, and how, we can offer an online course that is, in every way, the intellectual equivalent of its onground counterpart. We think we can do it. We want to try.

Now let me turn to the Committee’s specific concerns.

Synchronous Discussion Sections. As discussed above, I believe that synchronous discussion sections are a practical impossibility. Psych W1 will be an option for matriculated UCB students, and for that matter students on other UC campuses, but part of the goal of UCOE, as I understand it, is to expand UC’s outreach to students in other parts of the country, and in other countries – meaning other time zones. It is extremely unlikely that we will be able to convene a discussion section of 25 students on Thursdays at 9 AM, or any other convenient time. However, that does not mean that the essential purposes of a discussion section are not served by the course.

• In the first place, there are the nine required “Discussion” assignments. For the purposes of managing this component of the course, we will divide the students into sections of 20-25 students, just like onground discussion sections. For each assignment, the students prepare a short essay responding to a question related to the current series of lectures – often one which asks them to connect the science they are studying to matters of public policy. This is intended to give students some opportunity to express their thoughts in writing.

• The GSIs will respond to these postings, offering comments on both content and structure, suggesting additional reading, and asking questions for clarification.

• Students in a section are also required to respond to each other’s Discussion postings – at least one other section member, who of course will have the opportunity to respond in turn. By allowing for some “back and forth”, we hope to create even more of a “discussion” environment online
• We have also considered dividing the sections further into smaller study groups – a practice used successfully in MBA and JD programs, among others. This would encourage students to collaborate in their learning of the course material – perhaps by preparing outlines that make explicit connections between lectures and the textbook; there are lots of possibilities.

• Students are able to go beyond the lectures and text, as they see fit, by consulting the “Lecture Supplements” posted to the course website. These Supplements constitute a kind of alternative textbook for the course: the include, but also go far beyond, the lectures delivered via the screencasts, so that interested students can explore particular topics in greater breadth and depth. I put a lot of effort into maintaining these Supplements, which constitute an important part of my “signature” as an undergraduate teacher.

• Some of the purposes of discussion session are also served by the “ZAPS” exercises (or similar exercises offered by alternative commercial platforms). Students complete two sets of these. One set, labeled “Active Discovery Learning”, consists of demonstrations that are selected to supplement material in the text or lectures. Another set, labeled “Research Participation Experience”, is intended to give online students something of the flavor of an actual laboratory session, in which they participate as subjects reproducing classic experiments, and can compare their responses to data generated by other students working with the software worldwide.

• A central feature of the course website is the “Comments and Queries” module, in which students are able to post any questions they may have concerning course material, make comments about various topics that have been discussed, and draw attention to course-relevant material that they have encountered in the news or other media. These postings are available to the entire class. Students are free to respond to them, but primary responsibility for responding lies with the instructor (and, secondarily, the GSIs if they have something to offer). These responses (and any followup) are also available to all students, so that the entire class gets the benefit of the exchange.

So, the online students are not simply lying on their couches viewing screencasts and typing in essays. Throughout the course, they are actively engaged with the course material.

I would also remind the Committee that the absence of formal weekly discussion sections has allowed me to increase lecture material by roughly 50% over what we are able to offer on campus. The introductory psychology course really ought to be taught across two semesters, as is common in the rest of the sciences (and most of the humanities, too). Two lectures a week is barely enough time to cover the fundamentals, and increasing contact hours to three lectures per week allows the instructor to cover the syllabus in greater depth and breadth.

“Vice Kihlstrom”. As noted earlier, this arrangement, in which someone other than myself takes day-to-day responsibility for the course during the academic year, is necessitated by the constraints on my teaching schedule. Even if I were teaching nothing else, it would be impossible for me to offer Psych 1 online every semester, and every summer, of every year – which is one of the goals and advantages of online instruction. I apologize if, in my original application, I confused matters by referring to myself as “instructor of record”. I only meant to take formal responsibility as the course developer.

Hands-Off Instruction. The “hands-off” mode of instruction is necessitated by the press of my other teaching commitments. But it is not the case that I am not “teaching” the course. Nor is it the case that the course is “canned” – at least, no more than any lecture course taught by an experienced instructor following a canonical syllabus. The lectures are mine, as are the Lecture Supplements, and they have been developed over more than 30 years of teaching the introductory course. Other instructors would give different lectures, and have different emphases, while still covering the canonical syllabus. When students take this course, they are taking my course, even if I am not the instructor of record. Even when I am not teaching the course, I am continually revising and updating the Lecture Supplements, which remain accessible to students even after the course has been concluded. So my hands are very much on this course, at all times.
When I cannot teach the course myself, the instructor of record serves as a kind of co-instructor, engaged in day-to-day management. But the instructor of record is not simply an aggrandized clerk: He or she is responsible for day-to-day engagement with students, responding to their comments and queries, holding office hours, preparing exams and feedback, and assigning grades. My recorded lectures free the instructor of record from the task of preparing and delivering lectures, so that he or she can spend more time actively engaged with students – just as I am similarly freed, when I teach the course in the summers.

**Gateway Status.** The Department of Psychology has been quite clear that it accepts the online Psych W1 as fully equivalent to the onground Psych 1 gateway course for prospective majors. There has never been any question about this: if it did not endorse Psych W1 as an appropriate gateway, there would be no point in offering it. We would offer this course, if we offered it at all, as Psych 2, intended for nonmajors. But, as noted above, the Department does not see the online course as a replacement for the onground version. Current plans call for offering the onground and online versions simultaneously. Psych 1 remains one of the most popular courses on campus – studies show that the majority of matriculating freshmen intend to take an introductory psychology course at some time in their college careers. But we are not always able to accommodate all of the students who want to take the course on campus. First, there are inevitable scheduling conflicts (we offer only one section of Psych 1 each semester). Then there is the problem of finding enough GSIs to staff discussion sections: We could easily fill all 700-plus seats in Wheeler Auditorium, and then some, if we were able to staff enough discussion sections. As it is, we turn many students away every semester, including some who are not even allowed on the waitlist. The online Psych W1 would make this course accessible to these students, as well as to students on other UC campuses who want to take the course locally, but cannot fit it into their schedules. And then there is the matter of non-matriculated students, and UCB’s outreach to the world beyond Berkeley, and students in developing nations and elsewhere who would like the kind of instruction that Berkeley has to offer, which they cannot obtain locally.

In closing, let me say that I am sorry that the student members of COCI were disinclined to take this course online, if a face-to-face version were available to them. Regardless of who is the instructor of record, this is the same course I would teach onground: the same lectures (but more of them), the same textbook, the same Discussion assignments, the same Comments and Queries module, the same ZAPs exercises, the same exams, the same feedback -- the same course, for all intents and purposes, that has received more than satisfactory course evaluations wherever it has been taught, and garnered me a student-voted award for teaching excellence during my brief tenure at Yale.

True, the online version lacks a formal discussion section, but there are plenty of opportunities for discussion, and students are getting 50% more lecture material online in recompense. And those lectures are prepared and delivered by an instructor who has more than 30 years’ experience teaching the course, whose lectures are hardly “canned” in the sense that they could be delivered by anyone; who understands that psychology is both a biological and a social science, with strong connections to the arts and humanities, and teaches accordingly; who teaches the course not because he was assigned to it by a superior, or has to make a living, but because he believes it is the most important course in the psychology curriculum, and a critical component of general education – part of that examination that makes life worth living; who has prepared a course geared more toward general education in the liberal arts than pre-professional development; who is an active researcher as well as a teacher, whose scholarship is cited in every textbook; who, over the course of his career, has lived through, and contributed to, the three great revolutions in our understanding of mind and behavior: cognitive, affective, and neuroscientific. And when they had comments or questions, they could pose them to an instructor who, because he is not standing at the front of Wheeler Auditorium lecturing, has more time available to deal with them as individuals. They would be able to take some other course Mondays and Wednesdays at 10 AM – one of the most popular timeslots for teaching in the University. And instead of sitting with 500-700 other students being lectured at through a public-address system subject to the squeals and whistles of acoustic feedback, they could be getting exactly the same material, and more, delivered at their leisure in a tone of voice more appropriate to a conversation between peers.

We believe that the actual advantages of an online course, as we have constructed it, outweigh any potential disadvantages. But this is an empirical question, and we are willing to do what it takes to make online instruction a viable alternative to onground courses.
If I have not adequately addressed your concerns, or if you have additional comments or questions, please forward them at your earliest convenience. We are eager to move forward with this course.

Thank you for your consideration.

[Signature]
September 25, 2012

Prof. Daniel F Melia, Chair
Committee on Courses of Instruction
University of California, Berkeley
320 Stephens Hall

Dear Prof. Melia:

Thank you for your letter of September 25 approving our proposed online course, Psychology W1 ("General Psychology") for offering in the Fall and Spring semesters as well as the Summer Session. I appreciate, and sympathize with, the Committee's continuing concerns about the place of online instruction at UCB. Let me offer brief responses to each of them in turn.

The model in which one faculty member constructs the course and another actually delivers it is, admittedly, somewhat unusual. But we think it is the only economical way to insure that the introductory course is available online every semester and summer. I think I misappropriated the term of art when I referred to myself as the "Instructor of Record" (IoR) for the course. I suppose I am merely the course developer. There will be only one IoR – the person who actually delivers the course, and is responsible for day-to-day interactions with students, preparing exams, and assigning grades. Effectively, however, I think of the IoR and myself as co-instructors. My own view is that the syllabus is a kind of contract with students, and is to be adhered to slavishly. Fortunately, as I pointed out in my response of September 20, Psych 1 is based on a canonical syllabus whose general outline varies little from teacher to teacher and campus to campus. If we cannot find individuals willing to serve as IoRs under these circumstances, then we will simply be unable to offer the course except in summers, when I am able to teach it myself. But we will have tried, and we will know that one potential model for online instruction is unworkable.

It may well be that coordination with UCOE will be problematic. However, we are developing this course at the request of UCOE, and we leave it to them to work out the details with the campus(es). Now that COCI has approved the course, the next step for us is to seek statewide course approval from UCEP. It’s worth pointing out that the problem of reconciling UCB’s semester-based courses with other UC campuses isn’t unique to online instruction. As things stand, for example, Psych 1 is offered at UC Davis for 4 credits, but at UC Berkeley for only 3; yet, as I understand it, there is no problem transferring course credit between the campuses. Given that all UC campuses offer their own versions of Psych 1, it is not clear how many non-UCB students will take the course from UCB online. But if the numbers get high, I presume that UCOP will institute a system whereby tuition more closely follows the student (they already have such a policy for non-matriculated students). But these policy issues are way above my paygrade. Again, if the Department or the Campus begins to lose money in this enterprise, I would expect (and hope) that it would be terminated immediately.

So, again, I think we all see this as a grand experiment, to see what can be done for online education, how it can be accomplished, and how well. We’re all prepared to do something else if it doesn’t work out.

Thank you again for approving this course.
Request for Systemwide Course Approval
Submitted to UCEP

September 21, 2012

Psychology W1: General Psychology
UC Berkeley

John F. Kihlstrom, Professor, Department of Psychology
jfkihlstrom@berkeley.edu

1. Materials submitted for Campus Senate Approval

1. UCB Course Approval Form (March 2012)
2. Supplemental Questions for Online Course Approval Requests (March 2012)
3. Example Syllabus (March 2012)
4. COCI Notification of Initial Review (September 17, 2012)
5. Response to COCI Initial Review (September 20, 2012)
6. COCI Notification of Approval (September 25, 2012)
7. Response to COCI Approval (September 25, 2012)

2. Syllabus

See #3, above.

A. Justification of Number of Course Units

3 hours of lecture per week = 3 course units. Students are informed that they are expected to devote 2-3 hours per week to work outside of class for each course unit.

B. Estimate UC x non-UC Students Enrollment

55% UC; 45% non-UC. We hope that this online offering will serve the needs of UCB and other UC students who wish to take an introduction to psychology, but cannot fit it into their on-campus course schedules. We also want to make it available to non-UC students through the UC Online Education project.

C. Request for UC or UCO Designation

We seek UC designation. The presence of even a large proportion of non-matriculated students should not alter the course in any way that would be detrimental to UC students taking the class. As a lower-division “gateway” course, Psychology 1 is designed as a general-education
course whose material should be accessible to anyone who would qualify for college admission. We will make clear that the language of instruction is English, and that students should have had at least a secondary-school preparation consistent with admission to UC – that is, several years of English, math, science, history, and other social studies at the secondary-school level. Current high-school students who wish to take the course will be asked to provide a letter from their principal, guidance counselor, or teacher attesting to their readiness. Because office hours and discussion sessions are conducted online, and mostly asynchronously, attention given to one student will not compromise the attention due to another. A major benefit of recording lectures as screenshows is to free up instructor time to deal with students on an individual basis. Therefore, questions from students with more modest preparation should not detract from better-prepared students’ interactions with the course material. Between the instructor and the graduate teaching assistants, everyone will get the attention that he or she needs. In the unlikely event that less-prepared non-matriculated threaten the education offered to UC students, we will consider assigning UC and non-matriculated students to separate discussion teams and study groups. However, this tack would also compromise the goals of diversity, so we will try to avoid the problem at the outset by improving the screening of non-matriculated students.

D. Student/Instructor/Teaching Assistant Interaction

Students will be able to interact with both the instructor and teaching assistants through synchronous office hours, asynchronous exchanges on a “Comments and Queries” discussion board, and through private e-mail. We will assign TAs to the course on a 70:1 teacher-student ratio, and hope that it will be possible to reduce this ratio to 50:1. Experience in Summer Session indicates that students will rarely make use of synchronous office hours.

E. Not Denying Registration to UC Students

Our first responsibility is to students enrolled at UCB and other UC campuses. No matriculated students will be denied access to the course. Note that funds generated by non-matriculated students will support our general instructional program, enabling more UC students to take this and other courses offered by the Department.
This course will survey the scientific study of mental life and the mental functions that underlie human experience, thought, and action. The emphasis is on cognitive processes and social interactions characteristic of adults. However, research on nonhuman animals, as well as biological, developmental, and pathological processes, will be introduced as relevant. This course, or its equivalent, is a prerequisite for admission to most upper-division courses in the Department of Psychology. Psychology 1 (or its online equivalent, Psychology W1) is required for prospective majors in Psychology, and is intended for lower-division students (freshmen and sophomores).

Course credits

Three (3) semester hours (approximately 45 hours of class time)
Prerequisites and Workload

There are no prerequisites for this course. Anyone with a college-preparatory high-school diploma should be able to understand the material.

In order to do well in the course, however, students should be prepared to put in some time. Traditionally, college courses assume that students devote two to three hours of study at home for every one hour in class. In the summer session, there are six (6) 1-hour lectures per week. Following the "industry standard", then, students should be prepared to put in at least 12 hours per week outside of class.

Required and Recommended Readings

Students should purchase two items for the course.


For details, see Cengage website.

(2) ZAPS: The Norton Psychology Labs (2009), by Ton De Jong and colleagues, allows you to experience various psychological phenomena firsthand, via demonstrations programmed by a team of Dutch psychologists (hence the sometimes awkward English) and presented over the Internet (see below for details). You will be required to complete a selection of these exercises during this course. ZAPS is an online resource, and requires the Adobe Flash player. The registration code for this website must be purchased separately through the above website. Approximate retail price: $30.00. ISBN: 978-0-393-11623-6.

For details, see http://books.wwnorton.com/books/detail.aspx?id=22664.

Schedule for Summer 2015

The schedule shown on the following pages is based on six 1-hour lectures weekly, except for days devoted to midterm exams. For convenience, the schedule conforms to a Tuesday-Wednesday-Thursday format. Note that the July 4 holiday falls on a Saturday. However, all lectures are available all of the time, from the very beginning of the 8-week summer session, so that students can complete lectures at their own pace. Assignments are due, and exams will be administered, on the dates indicated.

The entire course is delivered online, employing the Canvas learning management system. To access the course, point your internet browser to http://summer.berkeley.edu/courses/online-courses. You will need to authenticate with a CalNet ID (follow the link and the instructions on the homepage). Your access to Canvas will terminate one week after the end of the summer session, after the final exam has been administered. The Lecture Supplements (described later), are permanently available on the internet.

You must log in to Canvas either the Monday or Tuesday of the first week of the Summer Session. For details, see the Orientation materials distributed to all registered students by Berkeley Summer Sessions.
The course is divided into 12 topical modules, each covering a large segment of psychology. A typical module consists of about 4 lectures (some more, some less). You access these modules by clicking on the "Module" link in the Canvas navigation bar. Each module begins with a video overview, followed by one or more lectures.

Here is the schedule of events for Summer 2015:

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<td>Nature and Scope of Psychology</td>
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<td>Classical and Instrumental Conditioning</td>
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<tr>
<td>16-Jul 22</td>
<td>Algorithms and Heuristics</td>
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<td>21-Jul T 23</td>
<td>Are We Rational?</td>
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<td>22-Jul W 25</td>
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<td>Analyzing Social Interaction</td>
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<td>28-Jul T 29</td>
<td>The Doctrine of Traits</td>
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<tr>
<td>28-Jul 30</td>
<td>The Dialectic Between the Person and Behavior</td>
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<td>29-Jul W 31</td>
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| 30-Jul R                                | **Second Midterm Examination**          |
|                                       | *Administered Online.*                   |
|                                       | *Covers Modules 6-9 and Kalat, Chapters 7-9, 11-14* |
Module 10: Psychological Development

<table>
<thead>
<tr>
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<td>4-Aug</td>
<td>T</td>
<td>33</td>
<td>Nature and Nurture</td>
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<td>4-Aug</td>
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<td>Within-Family Differences</td>
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<tr>
<td>5-Aug</td>
<td>W</td>
<td>35</td>
<td>Gender Dimorphism</td>
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<tr>
<td>5-Aug</td>
<td></td>
<td>36</td>
<td>Continuity and Change in Psychological Development</td>
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Discussion Comment #10
ZAPS for Active Discovery Learning #8

Module 11: Psychopathology and Psychotherapy

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<th>Date</th>
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<th>Chapter</th>
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<tr>
<td>6-Aug</td>
<td>R</td>
<td>37</td>
<td>Unconscious Mental Life</td>
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<tr>
<td>6-Aug</td>
<td></td>
<td>38</td>
<td>The Diagnosis of Mental Illness</td>
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<tr>
<td>11-Aug</td>
<td>T</td>
<td>39</td>
<td>Experimental Psychopathology</td>
<td>15</td>
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<tr>
<td>11-Aug</td>
<td></td>
<td>40</td>
<td>Diathesis and Stress</td>
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<tr>
<td>12-Aug</td>
<td>W</td>
<td>41</td>
<td>Treatment of Mental Illness</td>
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<td>12-Aug</td>
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<td>42</td>
<td>The Social Context of Mental Illness</td>
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Discussion Comment #11
ZAPS for Active Discovery Learning #9

Module 12: Conclusion

<table>
<thead>
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<td>13-Aug</td>
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<td>43</td>
<td>Conclusion</td>
<td>Discussion Comment #12</td>
</tr>
</tbody>
</table>

Complete ZAPS for Research Participation Experience (See Below for Details)

Final Examination

Administered, 9:00AM - 12:00 Noon in Lewis 100
First Portion Covers Modules 10-12 and Kalat Chapters 5, 10, and 15
Remainder Covers All Modules and All of Kalat

Supplementary Materials

A set of Lecture Supplements is available on my website at http://socrates.berkeley.edu/~kihlstrom/IntroductionWeb/index.htm.

These are, essentially, written versions of lectures that I would give if this course occupied two semesters (or maybe two years), instead of just one. The Supplements also include some essays I have written (or in some cases co-authored) on general-interest topics within psychology – again, you can think of them as general-interest lectures. Students will not be held responsible for additional material in the lecture supplements, beyond what is in the lectures actually delivered online, but those who intend to major in Psychology may find them informative and useful. The lecture supplements are updated throughout the semester.

You’ll also find a link to the Lecture Supplements, click on the Canvas navigation bar.
Online Videos

Canvas also contains links to a number of other supplementary materials, including a number of videos, mostly produced by Annenberg Media, a project of the Annenberg Foundation that produces video resources in conjunction with the Public Broadcasting System. None of these are required, and some of them are a little dated, but all of them are interesting.

- **Discovering Psychology**, a televised introduction to psychology hosted by Prof. Philip Zimbardo of Stanford University (a legendary teacher of introductory psychology), first presented on PBS in 1990 and updated in 2001 (26 half-hour videos).
- **The Brain: Teaching Modules**, drawn from *The Brain*, a series presented on PBS in 1997 (32 videos 5-20 minutes in length).
- **The Mind: Teaching Modules** drawn from *The Mind*, a series presented on PBS in 1999 (35 videos 5-20 minutes in length).
- **Seasons of Life**, a telecourse on developmental psychology, first presented on PBS in 1992 (5 one-hour videos and 26 half-hour audios).
- **Against All Odds: Inside Statistics**, yet another telecourse, hosted by psychologist Teresa Amabile, and hands down the best introduction to probability and statistics ever (26 half-hour videos).
- **Seeing Beyond the Obvious: Understanding Perception in Everyday and Novel Environments**, produced by the NASA Ames Research Center and the University of Virginia covers basic issues of depth perception and perceptual issues that arise in novel environments such as high-speed flight and microgravity.

To view these videos, click on “Supplemental Materials” in the various modules.

Midterm and Final Examinations

There will be two midterm examinations and a final. Due to the size of the class, all examinations will be in multiple-choice format. Midterms will be administered online, via Canvas, on dates announced in the syllabus, and are noncumulative. The final exam is partly cumulative, but will include a portion covering topics not previously examined. By UC Berkeley policy, the final exam must be administered on campus, though it is possible to arrange for a proctored exam to be administered off-campus. For Summer 2015, the final exam is scheduled for **Friday, August 14, 2015, 9:00 AM - 12:00 Noon, in Lewis 100**.

Students whose University or personal obligations may conflict with a scheduled exam should consult with the instructor in advance. In particular, students should plan their end-of-session travel schedules to permit them to take the final exam at the scheduled time. The final exam will not be rescheduled.

Students who are unable to take the final will need to arrange for an approved proctor to administer the exam off-campus. Summer Sessions’ student support staff will manage the off-site proctor approval and tracking process. **The deadline for finalizing these arrangements is July 17, 2015.**

If you have a personal emergency that prevents you from taking an exam at the scheduled time, leave a telephone or E-mail message with the instructor, take care of whatever the problem is, and then consult with the instructor as soon as possible afterwards.

Examinations are computer scored. Requests for hand-rescoring of any examination must be received within **one (1) day** of the posting of scores for that exam to the course website.
Complete information concerning exam construction and scoring, study hints, review materials, and feedback concerning exams is posted to the course website on Canvas, which also contains copies of old exams. To access these materials, go to the lecture supplements and click on "Exams".

There is also a link to Exam Information from the course website.

Discussion Postings

In order to foster a sense of community in this online course, we have established a "discussion board" on Canvas that will permit students to share their ideas about psychology with each other, and get some feedback from the group. For this purpose, students have been assigned to "sections" of approximately 30 students, roughly analogous to on-campus discussion sections.

For each major module in the course, we have proposed a question for discussion. By the deadline indicated in the syllabus, you should post a response to the question posed. It doesn’t have to be long: 50 well-chosen words will do, and responses shouldn’t be longer than 250 words (the equivalent of one page, double-spaced, 12-point type). All we ask is that you respond to the question thoughtfully. Your comments should be based on what you’ve read in the text, and what’s been presented in lectures, and your own reflections. It is neither necessary nor desirable that you do any additional reading. Discussion postings are scored on an all-or-none basis, 0 or 5 points, just like a neuron. So long as your comments are on time, responsive to the prompt, and reasonably acceptable from the point of view of grammar and spelling, your responses will earn full credit.

There are 12 such discussion questions, earning five (5) points each. Each is due by 11:59 PM (Pacific Time) on the date indicated in the syllabus. That's one minute before midnight, just like Cinderella.

Your postings will be visible to other members of your section. After students have posted their comments, other section members are encouraged to respond to them, and for the original commentator to respond in turn – in other words, to get a real discussion going. The responses can add points that support the original student’s point of view, for example. It can also be critical, but the criticism has to be constructive. No ad hominem remarks, no simple dismissals. If you offer a criticism, it should be friendly and constructive in nature, as if you were helping your friend or roommate think through a problem.

1. Introduction. Introduce yourself to your fellow students in your section (and your GSII!). Tell us your name (and nickname, if you have one), where you're from (and describe your home town a little), what high school you went to, and what your major (or prospective major) is in college. Then tell us how “General Psychology” fits into your academic program. Are you thinking of majoring in Psychology? How is this course relevant to your personal, academic, or career goals?

2. Biological Bases of Mind and Behavior. The successful use of methylphenidates such as Ritalin or Concerta, in the treatment of attention deficit hyperactivity disorder (ADHD) has led to suggestions that these amphetamine-like stimulant drugs could be used to enhance cognitive performance (attention, memory, even intelligence) by people who do not have ADHD or a similar condition. Assume that these “smart drugs” actually work as advertised to enhance cognition in “normal” individuals (which, frankly, is an open question). Is such a use fair? How is the use of “smart drugs” to enhance cognitive performance in students different from “blood doping” to increase aerobic capacity and endurance in athletes, and which is prohibited by the International Olympic Committee and other athletic organizations?

3. Methods and Statistics. A wealth of data indicates that “actuarial” predictions made by a statistical combination of quantitative data are more accurate than “intuitive” predictions made by a human judge reviewing the same information. In the criminal justice system, it’s sometimes been proposed that decisions made about sentencing, parole, probation, and release be based on statistical predictions of future risk of re-offending, rather than the intuitive judgments of
judges, prosecutors, probation officers, and the like. Do you think this is a good direction for policy to take? Why or why not?

4. Learning. Pavlov thought that all learning entailed classical conditioning, whereas Thorndike thought the same thing about instrumental conditioning. Given what you know about predictability, controllability, and the role of reinforcement in learning, is there any learning that does not reflect classical and instrumental conditioning, either alone or in combination?

5. Sensation and Perception. Jerome Bruner, a pioneering American cognitive psychologist, introduced what he called a “New Look” in perception by drawing attention to the role of mental set, emotion, and motivation in perception. Can we really see the world through “rose-colored glasses”? Can we see only what we want to see? Or are these just metaphors? Provide an example of how either emotion or motivation can affect either the detection of a stimulus or the perception of some object or event.

6. Memory. One of the core symptoms of post-traumatic stress disorder (PTSD) is intrusive memory: disturbing, unwanted memories of the traumatic event keep coming back, either in waking life or in dreams. Recently, it has been suggested that this enhancement of memory is due to stress hormones, and that administering certain drugs shortly after a traumatic event could prevent traumatic memories from being consolidated, leaving the victim essentially amnesic for the trauma itself—and therefore, presumably, reducing the likelihood of PTSD. Assuming that this were possible, is it a good idea? Discuss the pros and cons.

7. Thought and Language. People don’t always make choices that are in their best interest. For example, given the opportunity to enroll in a tax-sheltered 401(k) retirement plan to which their employers will also contribute, most people don’t “opt in”. As a result, many Americans have not accrued sufficient retirement savings. But if enrolling in such a plan is made the default, so that employees must actively “opt out”, most employees stay enrolled, to the benefit of their later retirement. Both outcomes are predictable, given what we know about the role of heuristics and biases in judgment and decision-making. Some social scientists have suggested that policymakers capitalize on these biases to “nudge” people in the direction of making optimal choices—those which are most beneficial to them (and society). Others argue that this is psychological manipulation is an unacceptable infringement on personal freedom. Evaluate these arguments, and take a position on this issue.

8. The Trilogy of Mind. There is increasing evidence that the relatively large amounts of salt, fat, and sugar found in convenience and processed foods not only enhances their flavor, but also encourages overeating and puts consumers at risk for diseases like obesity and diabetes. In view of these considerations, should public-health and other officials issue laws and regulations limiting the size and content of these foods?

8. Personality and Social Interaction. Does personality exist in a social vacuum? Can we describe individual differences in personality in the abstract, without reference to social context, the way we describe individual differences in IQ? Or is individual personality inextricably bound up with social interaction? Are there any individual differences in personality that exist independently of the social context?

10. Psychological Development. On January 1, 2014, a California law went into effect which permits transgender students in grades K-12 to choose public-school restrooms and athletic teams in accordance with their gender identity, not their biological sex. Opponents of the law argue that this policy will violate the privacy rights of the majority of public-school students. There will be a referendum on this law on the November 2014 ballot. Make a science-based argument concerning this issue, either pro or con, as if you were discussing this with your family at the dinner table.
11. Psychopathology and Psychotherapy. California and New Jersey both have laws outlawing “gay conversion” therapy for minors, which attempt to “convert” homosexuals into heterosexuals. The rationale for the law is that (1) homosexuality isn’t an illness and (2) the treatment itself may harm patients, increasing their risk for depression and suicide. Still, some practitioners objected that any such restriction represented an illegal restraint on trade, preventing them from offering their patients certain services. And some parents objected that they were prevented from seeking treatment in the best interests of their children. In New Jersey, one set of parents sued on behalf of their 15-year-old son, who said that he wanted the treatment. Comment on any aspect of this issue from the perspective of scientific psychology. Should providers be able to provide any treatment to their patients, so long as the patients understand the risks involved?

12. Conclusion. Philosophers sometimes talk about “folk psychology”, meaning the intuitive ideas about mind and behavior that we all carry around in our heads. One of the goals of scientific psychology is to refine and correct these intuitive notions. Looking back over the course, what one concept, principle, or research finding surprised you the most? How did learning about this fact change your understanding of how our minds work, or why we behave the way we do?

Here’s how to complete a Discussion assignment.

• Click on the “Assignments” tab in the navigation bar on the left of the Canvas page.
  o You will then see a set of “Discussions” These are the required Discussion postings.
  o You can also access these assignments by clicking on the “Discussions” tab, and look under “Pinned Discussions”.
    ▪ You will also see a Pinned Discussion labeled “Queries and Comments”, which students will use to post questions and comments concerning course material, as described elsewhere in this Syllabus.
• Click on the link for the current Discussion assignment (e.g., “Discussion #1 – Biological Bases of Mind and Behavior”).
• For administrative purposes, the class has been divided into a number of Discussion Groups.
  o Click on the link for your Discussion group. Post only to your Discussion Group. If you post to a Discussion Group other than the one to which you have been assigned, you may not receive credit for the assignment.
• You will then see the Discussion prompt and a “Reply” box.
  o Type your Discussion posting into this space.
  o Or, better yet, prepare your posting in advance, using your favorite word processor, and copy and paste it into this space.
  o When you are finished, click on “Post Reply”.
• You will not be able to see the postings of other group members until you have posted your own contribution.
  o Afterwards, you will be able to read, and comment on, other group members’ postings. Feel free to make comments on these postings, but remember to be constructive in any criticisms.

ZAPS Exercises for Active Discovery Learning (ZAPS-ADL)

In order to provide you with a more active learning experience – something other than sitting in a chair, reading the text, viewing slides, and listening to lecture – we have arranged for you to complete a number of exercises online using the ZAPS software. ZAPS, produced by a group of Dutch psychologists, stands for Zeer Actieve Psychologie, which translates as Very (Inter)Active Psychology. The ZAPS software is purchased from the publisher directly. URL: www.wwnorton.com/zaps.

The ZAPS site requires MacroMedia Flash v. 7+ (most computers have this; otherwise, a free download is available from the ZAPS website).
The Active Discovery Learning (ADL) component of the course requires nine (9) exercises, one for each major module in the course. They count five (5) points each on an all-or-none basis (just like a neuron). Each is due by 11:59 PM (Pacific Time) on the date indicated in the syllabus. That's one minute before midnight, just like Cinderella. Note that the ZAPS server may run on Eastern Time, but we make three-hour time correction.

Click on the “Assignments” tab in Canvas, and then scroll down to find links to the ZAPS-ADL assignments.

Students will receive full credit for completing each exercise by the deadline announced in the syllabus. Late completions will not receive any credit. Note that the deadlines are all one minute before midnight, just like Cinderella, according to the official time recorded by the computer at the time you logged on. Your participation in these exercises is recorded automatically; but as a backup, you should print out each exercise (click “Print Version” on the last screen). If for some reason the ZAPS server fails to record your participation, presenting this printout will ensure that you receive proper credit.

You may do as many additional ZAPS exercises as you wish. However, there will be no extra credit given for any ZAPS completed beyond the requirement (to give extra credit in this manner would be unfair to students whose other responsibilities may not give them the time to do more than is required).

- When you first register for ZAPS, you are asked to enter the Registration Code on the ZAPS booklet that came with the textbook package (or which you purchased elsewhere). The registration code will most likely consist of a pair of four-letter strings, like this: EMOM-RHAO (but each person’s registration code is different).
- You then get Emailed a password. This can take a little time, so don’t expect to log into ZAPS for the first time a minute or two before the first deadline!
- When you login, you will be asked for this password. After you enter the correct password, you are taken to a page with two sorts of links. In the top half of the page, there is a link to enter the site. In the bottom half of the page, there are links to update your user profile, including your name and Class ID.
- First, update your user profile.
  - Enter your name last name first, followed by your first name and middle name or initial.
    - Be sure to enter your last name first, followed by a comma, then your first name and your middle name or initial. Otherwise you may not receive credit for completing the ZAPS exercises. THIS IS VERY IMPORTANT.
    - And be sure to use the same name by which you registered for the class (check how your name is listed in the Gradebook). THIS IS VERY IMPORTANT.
  - Our Class ID for Summer 2015 is 8Q6672L5.
    - Be sure to enter the proper Class ID, which is case-sensitive, or else you will not receive proper credit for completing the ZAPS exercises.
    - Type in all UPPERCASE. If you “cut and paste” the Class ID from this or any other document, be sure not to include the leading space ( ) or trailing period (.).
- ZAPS Experiments rely on popup windows, cookies, and JavaScript. Be sure to turn off all popup blockers in your web browser before you try to do anything with ZAPS.

After you enter the site, you will see a long list of ZAPS exercises (click on ZAPS Listed Alphabetically”). There are dozens of these, and you may do all the ZAPS exercises you want, and you’ll learn from each of them. But you are only required to complete the nine specific exercises indicated on the syllabus -- one for each of nine major modules in the course:
### ADL Assignment

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<th>ZAPS Exercise</th>
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<td>“Synaptic Transmission”</td>
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<tr>
<td>2</td>
<td>“Classical Conditioning”</td>
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<td>3</td>
<td>“Signal Detection”</td>
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<td>(“Signal Detection 2” is optional)</td>
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<td>4</td>
<td>“Serial Position Task”</td>
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<td>5</td>
<td>“Mental Rotation 2-D”</td>
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<td></td>
<td>(“Mental Rotation 3-D” is optional)</td>
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<tr>
<td>6</td>
<td>“Emotional Stroop”</td>
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<td>(“Stroop Effect” is optional)</td>
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<td>7</td>
<td>“Big Five”</td>
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<td>8</td>
<td>“Moral Development”</td>
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<td>9</td>
<td>“Obsessive-Compulsive Disorder”</td>
</tr>
</tbody>
</table>

There are no assigned ZAPS-ADL exercises for Modules 1, 3, or 12.

- No substitutions are permitted. You will complete additional ZAPS exercises for the Research Participation Experience component of the course, as described below.

- When you finish each exercise, you will see a link, on the left-hand side of the page, for "Further Info". Click it. At the top of the new page, on the right-hand side, you will see a link for "Print Version". Click it. You may be asked to enter your name. If so, enter your name.

- Then you will see a page with a complete account of the ZAPS exercise you have just completed, without animations, but with your name on it. You may print this out and keep it for your future reference.

- Some ZAPS exercises may ask you to input your Class ID. But not all of them do. Just follow the instructions, using the Class ID given above.

- Your participation in each ZAPS exercise will be recorded in the online gradebook. But this is done by hand, and takes time. I have to retrieve the information from the ZAPS server and enter it into the online gradebook by hand. The class will receive an Email notice as soon as the credits for each exercise have been posted. After that time, if your participation has not been properly credited, write me via email and I will recheck the roster. If I cannot find you on my roster, then click on “My Activity” link on the “Explore ZAPS” page. This will take you to the ZAPS Student Activity Monitor, which will show which ZAPS exercises you have completed, and when. Take a screenshot (“Print Screen”) of this page and paste it into an Email it to me. If the Student Activity Monitor shows that you completed the assignment by the deadline, we’ll give you credit. You will have two days after credits are posted to correct the record.


### ZAPS Exercises for Research Participation Experience (ZAPS-RPE)

Because psychology is a scientific discipline, research experience is an integral part of Psychology 1 (and many other lower-division and survey courses in the Department). On campus, this component of the course is satisfied through student participation in the Research Participation Program (RPP). RPP is somewhat analogous to the laboratory sections offered in the natural sciences, except that students serve as subjects rather than experimenters. Although students do contribute data to ongoing research...
projects, the primary purpose of the RPP requirement is to familiarize students with the methods by which scientific research in psychology is conducted.

Because of the online delivery of this course, to students who may be located far from Berkeley, it is not feasible for students to participate in on-campus research projects. However, a similar experience may be had by completing a subset of ZAPS exercises that involve the actual collection of data. In each exercise, you will be asked to participate just as an ordinary research subject would; the exercise also contains an explanation of the experiment and allows you to see that data that has been collected.

The online version of Psychology 1 requires students to complete five (5) such exercises, taken from the list below. Each exercise will take about 15 minutes. For grading purposes, the Research Participation Experience (ZAPS-RPE) requirement is worth 25 points (5 points for each of 5 ZAPS exercises).

Click on the “Assignments” tab in Canvas, and then scroll down to find links to the ZAPS-RPE options. Then follow the general instructions for ZAPS-ADL. Do not create a separate Class ID: use the same User Information for both sets of ZAPS exercises.

In order to insure variety of research participation experiences, you may select any one from each of the five (5) groups of ZAPS exercises listed below. You are required to complete only one experiment in each of the five groups.

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<thead>
<tr>
<th>Group A - Perception</th>
<th>Group B - Attention</th>
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<tbody>
<tr>
<td>“Ponzo Illusion”</td>
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<tr>
<td>“Stereotypes”</td>
<td>“Dichotic Listening”</td>
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<td>“Visual Search”</td>
<td>“Selective Attention”</td>
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<td>“Simon Effect”</td>
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<td>“Spatial Cuing”</td>
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<td>“Stroop Effect”</td>
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<tr>
<th>Group C - Memory</th>
<th>Group D - Thinking</th>
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<td>“Brown-Peterson Task”</td>
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<td>“Mental Rotation” 3-D**</td>
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<td>“Mental Scanning”</td>
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<td>“Recalling Information”</td>
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<th>Group E – Language</th>
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<tbody>
<tr>
<td>“Lexical Decision”</td>
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<td>“Sentence Verification”</td>
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<tr>
<td>“Word Superiority”</td>
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</table>

*“Emotional Stroop” is required as part of the ZAPS-ADL
**“Mental Rotation 2-D” is required as part of the ZAPS-ADL

Your selection must be made from this list (because other ZAPS exercises do not involve actual data collection). No substitutions are permitted. As with ZAPS-ADL, described above, you may do as many additional ZAPS-RPE exercises as you wish. However, there will be no extra credit given for any ZAPS completed beyond the ADL and RPE requirements.

You must complete the ZAPS-RPE exercises by 11:59 PM (Pacific Time) on Thursday, August 16, 2014. Accumulated credits for ZAPS-ADL will be entered into the Gradebook.
Comments and Queries During the Course

Because of the online format of this course, there are no discussion sections as such, and no opportunity to ask questions during lectures. However, the instructor and GSIs will be available in weekly “synchronous”. Feel free to make use of these resources: that is what we are here for.

Canvas includes a general discussion area which will be used for a wide variety of communications among students, GSIs, and the instructor. These messages will be distributed to the entire class, so don’t post anything of a personal or confidential nature!. Responses from the instructor or the GSIs also will be posted to the entire discussion board. Do not send questions on course content to the instructor’s private Email address; post them to the course website instead – so that everyone can benefit from the exchange.

- Click on the “Discussions” tab in the Canvas navigation bar.
- Click on “Queries and Comments” link under “Pinned Discussions”.
- Type your question or comment in the “Reply” box. This will initiate a conversation.
- The instructor or a GSI will respond within one (1) business day.
- Other students in the course may chime in, as well.

Feel free to post Queries and Comments. It’s the only way you’ve got to get your questions answered. And answering questions is what we’re here for!

Please do not send questions or comments about course material to the instructor or GSIs via email. Post them to the Queries and Comments discussion board, so that the entire class can have the benefit of the exchange.

If you have a communication of a personal nature, such as a family emergency, you should send private Email to the instructor and your GSI.

From time to time I will post announcements (e.g., about exams) concerning the course; I may also post corrections to my lectures.

Grading Policy

Final grades will be calculated on the basis of 340 points distributed according to the following rules:

- two (2) midterm examinations, 50 points each
- final examination, 100 points
- 12 Discussions, 5 points each, for a total of 60 points.
- 9 ZAPS exercises for Active Discovery Learning, 5 points each, for a total of 45 points.
- 5 ZAPS exercises for Research Participation Experience, 5 points each, for a total of 25 points.
- 10 points for “Participation”, assigned at the discretion of the GSIs, recognizing special effort and interest as reflected in participation in the Discussion postings, posting Queries and Comments, or attending online “office hours”.

Letter grades will be assigned according to the following scheme. If necessary, the distribution of final letter grades in this course will be adjusted to conform to the overall distribution of grades in lower-level courses at UC Berkeley.

- The accumulation of at least 90% of the total possible points (i.e., 306 points) will result in some kind of A (i.e., A or A-; I do not give grades of A+ under any circumstances, as it contributes to grade inflation and grade grinding)
- Accumulation of at least 80% of the total possible points (i.e., 272 points) will result in some kind of B (i.e., B-, B, or B+).
• Those who accumulate more than 50% of the total possible points (i.e., more than 170 points) are guaranteed some kind of C (i.e., C-, C, or C+).
• Those who accumulate more than 25% of the total possible points (i.e., more than 85 points) will receive some kind of D.
Intellectual Property Notice

In this class, you may share any notes you take with other members of this class. You may also record the class, if you wish, as long as that recording is only for use by you and other members of this class. You may not post notes, recordings, class materials, etc., anywhere except on our class websites. Any commercial use of materials from this class is forbidden by University policy and California state law.

UCB Honor Code

The student community at UC Berkeley has adopted the following Honor Code:

“As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others.” The hope and expectation is that you will adhere to this code.

Collaboration and Independence: Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, unless otherwise instructed, homework assignments are to be completed independently and materials submitted as homework should be the result of one’s own independent work.

Cheating: A good lifetime strategy is always to act in such a way that no one would ever imagine that you would even consider cheating. Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct. In order to guarantee that you are not suspected of cheating, please keep your eyes on your own materials and do not converse with others during the quizzes and exams.

Plagiarism: To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism and how to avoid it, see, for example:
http://www.lib.berkeley.edu/instruct/guides/citations.html#Plagiarism
http://gsi.berkeley.edu/teachingguide/misconduct/prevent-plag.html

Academic Integrity and Ethics: Cheating on exams and plagiarism are two common examples of dishonest, unethical behavior. Honesty and integrity are of great importance in all facets of life. They help to build a sense of self-confidence, and are key to building trust within relationships, whether personal or professional. There is no tolerance for dishonesty in the academic world, for it undermines what we are dedicated to doing – furthering knowledge for the benefit of humanity.

Your experience as a student at UC Berkeley is hopefully fueled by passion for learning and replete with fulfilling activities. And we also appreciate that being a student can be stressful. There may be times when there is temptation to engage in some kind of cheating in order to improve a grade or otherwise advance your career. This could be as blatant as having someone else sit for you in an exam, or submitting a written assignment that has been copied from another source. And it could be as subtle as glancing at a fellow student’s exam when you are unsure of an answer to a question and are looking for some confirmation. One might do any of these things and potentially not get caught. However, if you cheat, no matter how much you may have learned in this class, you have failed to learn perhaps the most important lesson of all.

In accordance with this new Honor Code, students will be asked to sign the following UC Berkeley Honor Pledge prior to examinations:

“On my honor, I have neither given nor received assistance in the taking of this exam.”
ATTACHMENT A
DESCRIPTION OF DUTIES FORM

Term: _Summer 2015   Instructor: _Kihlstrom__
Course #: _Psychology W1______    Course Title: _General Psychology (Online)_
Location: _Online______________ Day/Time: _Online________

The job duties designated below are required of the Academic Student Employees (aka GSIs).
Please check the appropriate items and describe, as applicable:

_X___ Attend lectures
____  Instruction of _____ sections/labs per week
____  Preparation
_X___ Hold ___1___ office hours per week
_X___ Supervisor/ASE(s) meeting _1/2__ hours per week
_X___ Read and evaluate __4___ papers per student
_X___ Proctor ___1___ examinations
____  Prepare drafts of narrative evaluations and make grade recommendations as appropriate for students in TA section/lab (Santa Cruz only)
____  Perform individual and/or group tutoring
____  Class/faculty visits
_X___ Maintain/submit student records (e.g. grades)
_X___ Perform other task as assigned. Please list:

This course is taught entirely online, and GSIs "attend" lectures by viewing them online.

There are no discussion sections as such, but the students are divided into nominal "teams" for bookkeeping purposes.

GSIs are asked to comment on students' responses to "Discussion" questions, such that each student receives comments on at least 3 of 9 assignments.

The GSIs also record students "Discussion" and "Participation" credits. The instructor is responsible for the entry of other grades, determination of letter grades, etc.

The midterm exams are administered online, and graded automatically; only the final exam is proctored on campus: the instructor and GSIs share this responsibility. The final exam is machine-scored.

GSIs are asked to draft feedback on the exams, consisting of paragraph-long analyses of correct and incorrect answers to the multiple-choice questions.

See attached memo for more details.
A Teaching Assistant with a 50% appointment shall not be assigned a workload of more than 220 hours per quarter (340 hours per semester) or a workload of over 40 hours in any one week. The number of hours worked in excess of 20 hours per week may not total more than 50 hours per quarter (77 hours per semester). This standard shall apply proportionately to other percent appointments.

In addition, a Teaching Assistant with an appointment of 50% or less shall not be assigned a workload of more than 40 hours in any one week or more than 8 hours in any one day.

This check sheet is designed to be distributed to all ASEs except those who are designated as the Instructor of Record for the course.
Term: Summer 2015 Instructor: John F. Kihlstrom
Allotted Reader Hours: 10/week Projected Enrollment: 200 maximum
Course #: Psych W1 Course Title: General Psychology
Location: Online Day/Time: Online

Check the appropriate duties and if necessary for clarity describe below:

___ Supervisor/ASE meeting ___ hours per week
_X_ Read and evaluate 4__ papers per student
___ Read and evaluate 1__ exams per student
___ Proctor 1__ examinations
_X_ Maintain/submit student records (e.g. grades)
___ Make copies of handouts and exams
___ Perform other task(s) described below:

Dates of service: Summer Session C: June 23-August 15, 2015

Clarification of duties (optional):

The Reader(s) will help the GSI(s) with the “Discussion Postings” component of Psychology W1, the online version of our introductory psychology course. Each student is required to respond to 9 Discussion prompts with a short essay, roughly 150-250 words.

- The GSI and Reader will record each student’s completion of each assignment in the online Gradebook. Grades are assigned on an all-or-none basis, either 0 or 5 points, depending on whether the posting is on time, reasonably responsive to the assignment, and reasonably literate.
- Then, for one-third of the Discussion assignments, they will provide substantive feedback on the students’ postings – brief comments on the student’s response, and also any necessary comments on grammar, spelling, or style.

For this purpose, the class will be divided evenly into 6 sections, with approximately 30-35 students per section. The GSI will take responsibility for three of these sections, as well as for other duties as previously assigned. The Reader will take responsibility for the remaining three sections, with no other duties. Each will comment on postings from one (1) section per assignment, rotating through the sections in turn (GSI: Section 1, then 2, then 3, returning to Section 1; Reader: Section 4, then, 5, then 6, returning to Section 4, etc.), so that each student receive substantive feedback on four (4) or his or her nine (9) Discussion postings.
Arianna,

John Schindel tells me that you'll be the GSI for Psych W1, the online version of Psych 1, this summer.

Welcome! It'll be a pleasure to work with you again. Right now, enrollment is at about 102 students. If enrollment gets too big, we'll add another GSI, or perhaps a reader, to help, but I think you'll find the workload to be pretty light.

I've attached the syllabus for the course. Psych W1 is a little different from the "on-ground" offering of Psych 1, and from most of our other undergraduate courses, because there aren't discussion sections as such. But there are writing assignments, just as in the regular on-ground version, and dealing with those will be your chief responsibility.

I hope that it will be possible for us to get together before the course begins, or shortly thereafter. But in the meantime, here are some pointers about the GSI responsibilities for the online Psych W1.

The entire course is provided online, so there are no discussion sections as such -- there are, instead, 50% more lectures.

However, there are 12 "Discussion Questions", to which students post their responses. I'd like you to monitor these, responding to them, and logging them into the gradebook. We'll divide the class into “teams” of about 30 students each, analogous to discussion sections. I suggest that you respond to one team for Discussion #1, then another team for Discussion #2, and so forth, rotating through so that everybody gets some feedback but the task remains manageable. There are 12 discussions, so if you are covering 4 teams, every student will get some feedback on three of his or her postings. Just make some kind of substantive comment, maybe pointing them in the direction of a relevant study, or a finding that is on point, something constructive. Comment on grammar and style as appropriate. Then record the students’ credits in the Canvas gradebook.

Credits are all or none, just like a neuron. No partial credit. Five points or zero.

Actually, I suggest that you go through all your teams first, recording credits, to get that job out of the way. Then go back and make comments. I'd do this the morning after each deadline. Occasionally, students will ask for some variance from the deadlines. Use your judgment on this, but don't be a patsy.

Deadlines are deadlines, and if they want, students can complete all 12 assignments well in advance of their due dates.

Don't be a patsy, but don't be a Nazi about deadlines either. My view is that somebody's work has to be read last, and that the real deadline is when I've gotten to the last paper. So, if you are looking at students' postings at 9 AM after the deadline, or the afternoon, or the evening, don't deny full credit to a student who posted after 11:59 PM the night before, so long as the posting occurred before you enter credits. That's the same policy I apply with the ZAPS assignments described below.

Actually, two of these 12 discussion assignments are easy.

- In Discussion #1, students just introduce themselves to each other. You should do the same thing, introducing yourself to each of the sections (write it once and cut and paste). Who you are, home town, where you were an undergraduate, what you're interested in, whose lab you work in, a little about your research, favorite sport, favorite music, whatever you want to say about yourself without being inappropriately self-disclosing. Just something to chime in and let them know you as a person.
- Discussion #12 is a throw-away, due the night before the Final Exam. You won't have time to respond to the students’ postings, and they won’t be particularly interested in your response. So, just record credits and let it go.
You'll also be holding an online office hour once per week, at a time of your convenience. Live office hours don't really make any sense in an online course, but University policy requires us to hold them. We hold ours online, instead of in an office somewhere. For example, I hold mine from 8-9 AM on Fridays. I'm available 24/7 via email and the Queries and Comments discussion board, which is where students can transact most of their business.

Students will occasionally use the office hours, but more often they'll contact you (and more likely me) via Canvas email with some question or comment. Keep track of these encounters, because at the end of the class you'll have 10 points to assign to each student as a "participation" grade. You should enter each student's participation grade into the online gradebook by the end of business on Thursday, August 13 -- the night before the final exam on Friday, August 14.

There are also 9 "ZAPS" Active Discovery Learning exercises (ZAPS-ADL). If you want to take a look at the ZAPS exercises, which are mostly pretty good, use my instructor's login, "mappy" (don't ask -- it was assigned by the publisher), and password, "zap2it".

Ditto for the 5 ZAPS Research Participation Experience (ZAPS-RPE) exercises. Because the course is online, and for all we know some of the students are sitting at computers in Bhutan, we don't hold them to the regular summer RPP requirement -- at least not for the present. But ZAPS-RPE will at least give them some sense of what it's like to serve as a subject in an experiment.

There are two midterm exams, both administered online, and a final exam administered on campus. I provide feedback to the students about the correct answers (look in Exam Information on the course Canvas website to see examples). I write the exams, but I'll ask you to prepare feedback for them. Just a paragraph about why the right answer is right, and maybe why some of the wrong answers are wrong. I can give you the actual exams, in Word, well in advance, so you can get a head start. Actually, MTs 1 and 2 are available now, if you want to get a head start.

When you prepare the feedback, just type in your feedback paragraph, right below the question, after the reference (e.g., "Chapter 1" or "Lecture 1") and let me have it back when it's finished. I like to post these feedbacks the day after the exam. If we get another GSI, or even a reader, this job will be even easier: One of you can do MT 1, the other do MT 2 (50 questions each), and then split the final (100 questions). I'll deal with posting to the website. But even if you don't get another GSI, this is a pretty easy job: you've taken a lot of psychology, and you can probably prepare most of the feedback while in the bathtub, without even listening to the lectures.

The midterm exams are automatically scored. I edit the exams retrospectively to eliminate bad items, but you don't have to do anything about that. If I need help, I'll let you know.

The final exam is administered on campus, except for our students in Bhutan and elsewhere, who arrange for off-campus proctors. The final is scheduled for Friday, August 14, from 9 AM to 12 Noon, for most of the students, and then a second, smaller sitting from 1-4 PM that same day. We should both show up -- if for no other reason than to get some face time with at least some of the students. I'll take the AM sitting alone (maybe you can drop by for a minute in the morning), and then get started on scoring at the Scantron, while you take the PM sitting (which should be about a dozen students). With any luck we can run the bulk of the exams through in early afternoon, and then pick up the holdovers from the afternoon sitting, and then we're done. But block out Friday afternoon, August 15.

I enter the students' Final Exam grades, and calculate, enter, and report the students' final letter grades.

The other thing I'll ask you to do is to view each lecture online. You're a teaching assistant, but this is also a learning experience. You've already had most of this material as an undergraduate, but I've got a fairly unique point of view on some of this material (especially the way I use the person-situation interaction to integrate personality and social psychology), so you'll get another pass through psychology "as a whole". I'm arranging for you to have early access to these lectures on Canvas, so you can just sign on and listen whenever the spirit moves you. While you're listening, keep your eyes and ears open.
for errors -- both technical errors, like something that's garbled or misspelled, and substantive errors and ambiguities. I can then clean these up.

I think that's about it.

This is all a great experiment, so I'm sure that there will be some surprises along the way, but I'm trying to minimize surprises, as well as your workload. This will be the sixth time for this online course, so we've got most of the bugs worked out, but there is always some kind of surprise. Fortunately, the technical staff at UCB Extension is excellent.

Let me know if you have any questions.

Again, I look forward to working with you on this course.

JK
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<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Module</th>
<th>Lecture</th>
<th>Topic</th>
<th>Discussion</th>
<th>ZAPS-ADL</th>
<th>ZAPS-RPE</th>
<th>Day</th>
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<td>Nature and Scope of Psychology</td>
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<td>Assume TWR schedule of 3 lectures/week</td>
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<td>Organization of the Nervous System</td>
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<td>Allow roughly 5 sessions between assignments</td>
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<td>Hindbrain, Midbrain, Forebrain</td>
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<td>Avoid due dates during scheduled holidays</td>
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<td>Cerebral Cortex</td>
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<td>Hemispheric Specialization, Recovery of Function, and Plastic</td>
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<td>Ignore Other holidays except for exams and due dates</td>
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<td>What is Learned?</td>
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**Exam A**

Final Exam (Noncumulative portion covers 11 Lectures)
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Exam A FINAL EXAM  
Due F 10-May TBA  
End of RRR period  
Noncumulative portion covers 11 Lectures
In this Guide: Click on a topic to access that section.

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<td>Locate your Norton Representative</td>
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<td>Complete ZAPS list</td>
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Quick Start:

- **ZAPS homepage:**
  - Use to enter the ZAPS site.

- **Students can purchase ZAPS as a standalone lab here:**

- **Log-in page for students and instructors demonstrating or participating in ZAPS:**
  - Use to log into ZAPS as a participant.
  - Log in with the email and password you used to register for ZAPS.
  - Registration codes are included with hard copies of Norton Psychology textbooks bundled with ZAPS.
  - Norton Psychology ebooks provide instant online access to the ebook and ZAPS with one log in.
  - ZAPS purchased separately online provides instant access with password generated at time of purchase or previously established.

- **Log-in page for instructors to view student activity or anonymous, aggregate data:**
  - Used by instructors and TAs only
  - Log in with the credentials supplied in class ID email
  - The Student Activity tab lists student names and their ZAPS activity date.
  - Aggregate data is collected and reported anonymously. (Student names are not attached to their data.)
  - Students see their own data immediately following the submission of a ZAPS activity.

- **Technical support:** [support.wwnorton.com](http://support.wwnorton.com)
  - Use each term to request a new class ID.
  - Use for technical support during the term.
  - Use for password or log in issues.
  - Use for any questions related to using ZAPS.
  - Mark support request ZAPS; these are escalated.
Overview

The Norton Psychology Labs (produced by the psychology departments at the University of Twente and the University of Rotterdam) are a collection of interactive online labs that allow students to participate in classic psychological studies. Perfect for introductory psychology or cognition courses, ZAPS: The Norton Psychology Labs is a set of 56 interactive computer experiments that allow students to experience psychological phenomena and classical experiments in an exciting and interactive online environment. Each ZAPS lab is designed to be completed in 15 to 30 minutes.

ZAPS cover a wide range of topics in psychology. There are ZAPS that cover biological and physiological phenomena, such as the gate-control theory of pain, and ZAPS that cover findings from social psychology, such as cognitive dissonance and stereotypes.

What makes ZAPS unique is that they focus on active learning. ZAPS puts students in the role of the subject to experience the phenomena themselves or places them in the role of the researcher to learn by discovery.

All ZAPS begin with an Introduction, starting with a concrete example from everyday life, so that students can easily identify themselves with the experiment. The Introduction is followed by the Activity, the interactive component in which the student learns by experiences, experiments or discoveries. A Theory section follows the activity, in which students read about the theoretical basis used in the activities.

ZAPS end with a Further Info section that offers additional examples from everyday life or discussion of similar phenomena or experiments in which the theory plays a role.

Instructors using ZAPS are given free access to the labs and associated resources. Students may need to use two distinct numbers in ZAPS; a registration code and a class ID.

Registration Codes

Students who purchase a hardcopy of their text will use a registration code to enroll in ZAPS and set up their account. They should receive their registration code as part of a text purchase if ZAPS is bundled with their text. Registration codes are 8-letter codes formatted as XXXX-XXXX.

Purchasing Access to ZAPS

Students purchasing a W.W. Norton Psychology ebook that is linked to ZAPS from the W.W. Norton website will log into both the ebook and ZAPS with the same email and password. They will not receive a registration code, as their online purchase automatically generates access.

Students whose textbook purchase did not include ZAPS or who are using ZAPS as a standalone lab may purchase online access to ZAPS here:

Class IDs
Student data is collected via a unique class ID. Instructors who want to collect and view aggregate data generated by their students will need a class ID, which we generate at your request. The class ID format is 8-characters, including letters and numbers, with no breaks between characters.

Requesting your Class ID
For each term that you’ll be using ZAPS, request a new class ID by opening a support request and marking it ZAPS here:

support.wwnorton.com

Please include the title of your course, the number of sections you teach, and the name of the term. We’ll generate the class Id(s) and send them via email with log-in instructions that will allow you to retrieve your class data and see student activity.

Please note: Class IDs are good for one section of your class and for one term; they cannot be renewed or extended and the system will automatically end them when they expire. Please be sure to request your class ID at the beginning of each term.

ZAPS Data Collection
Instructors have two separate log-in sites while using ZAPS. To demonstrate a ZAPS activity or to participate in one, instructors will log in here using their email address and Norton password:

http://books.wwnorton.com/studyspace/Logon.aspx?SiteId=zaps

To view your class data or student activity, use the proprietary log-in credentials supplied in your class ID email to log in here:

http://www.wwnorton.com/college/psych/zaps/class_data/

Enter your class ID on the next page to see your data.

Aggregate data for your class is collected anonymously. Students can view their own data immediately after submitting a ZAPS activity, and have the option to print it. Instructors view the collected data for their class, but no names are attached to the data itself.

Aggregate Data
You can view anonymous, aggregate data of your entire class for these ZAPS:

• Attentional Blink
• Big Five
• Brown-Peterson Task
• Emotional Stroop
• Encoding Specificity
• Fan Effect
• False Memory
• Iconic Memory
Student Activity Monitor:
While logged in as an instructor, you may view ZAPS submission information under the tab that reads Student Activity.

To access the Student Activity Monitor, click the "Student Activity" link (tab) at the top right of the ‘Teaching with ZAPS’ page. This feature allows you to see which students have completed a ZAPS activity and is designed to work with all of the ZAPS experiments. It provides basic sorting by student name, ZAPS lab, or date of experiment. For more robust sorting capabilities, simply copy the unsorted data into Microsoft Excel™.

Technical Information

The Basics
- ZAPS require enabling of JavaScript. They are Flash-based activities that will open in a new browser window.
  - Users may download the latest Adobe Flash Player here: http://get.adobe.com/flashplayer/
  - Check your browser settings here: http://www.wwnorton.com/techsupport/browsercheck/
- ZAPS open a new window to run experiments. You must either disable your pop-up blocking or allow pop-ups from the ZAPS site.

Find technical support for your browser here:
- Mozilla: http://support.mozilla.org

Some ZAPS depend on monitor settings to function correctly. Word Superiority is one activity where browser settings can affect the student’s experience. The developer offers this: ‘In the Word Superiority ZAP the stimuli are shown during a very short time (20 milliseconds). This is required to demonstrate the Word Superiority Effect. No student will recognize ALL stimuli.

There could be some interference with the refresh rate of the display: the refresh rate should not be too low (like 50 Hz). My advice would be to use a refresh rate of at least 70 Hz. ’
For further information, students should visit the support site for their machine.


Apple: http://www.apple.com/support/

### Have further questions? Need Support?
Support for ZAPS users is available by filling out a request at support.wwnorton.com. Mark your request ZAPS and give us as much information as you can about the question or issue. ZAPS requests are escalated and responded to quickly, usually within one business day.

### Further Information on ZAPS Resources:

#### ZAPS Workbook
A student workbook for ZAPS is available for instructors to use in the classroom. It is downloadable by instructors who’ve been approved for access to electronic instructor resources.


**Request Instructor access**
To request access to instructor resources, log into the homepage with your email and password:

https://books.wwnorton.com/books/ssl/WebLogin.aspx

Navigate to the webpage for your text and then click on an Access Resource link to open the form which allows you to request instructor access.

#### Locate your W.W. Norton text:

Or, use these links to find your W.W. Norton Psychology text.

- Psychology, 8th edition by Gleitman, Reisberg and Fridlund

➤ Psychological Science, 3rd edition by Gazzaniga and Heatherton


Locate your Norton Representative:
ZAPS is free for students when bundled with one of W.W. Norton’s Psychology texts. Contact your Norton rep for more information:

• Find your U.S. or Canada rep: http://books.wwnorton.com/books/find-your-rep/
• International Representatives: http://books.wwnorton.com/books/aboutcontent.aspx?id=4394

Complete ZAPS list
Below is a list of all available ZAPS experiments.

Topic 1: Neuroscience
• Gate Control Theory
• Genetics
• Split-Brain
• Synaptic Transmission

Topic 2: Learning
• Classical Conditioning
• Concept Formation
• Implicit Learning

Topic 3: Perception
• Ames Room
• Ponzo Illusion
• Signal Detection
Topic 4: Attention
- Attentional Blink
- Selective Attention
- Simon Effect
- Spatial Cueing
- Stroop Effect

Topic 5: Memory
- Brown-Peterson Task
- Encoding Specificity
- False Memory Task
- Fan Effect
- Iconic Memory
- Memory Bias
- Memory Span
- Operation Span
- Recalling Information
- Serial Position Task
- Sternberg Search

Topic 6: Thinking
- 2-4-6 Task
- Decision Making
- Gestalt Problem Solving
- Mental Rotation 2-D
- Mental Rotation 3-D
- Mental Scanning
- Misconceptions
- Missionaries and Cannibals
- Syllogisms
- Wason Selection Task

Topic 7: Language
- Feature Net
- Lexical Decision
- Sentence Verification

Topic 8: Development
- Balance Task
- Conservation
- Moral Development

Topic 9: Personality
- Big Five
- Emotional Stroop
- Recognizing Emotions

Topic 10: Social psychology
- Cognitive Dissonance
- Prisoner’s Dilemma
- Stereotypes

Topic 11: Industrial Organization
- Selection Procedure

Topic 12: Abnormal Psychology
- Dissociative Identity Disorder
- Obsessive-Compulsive Disorder
- Bipolar Disorder