

PSCH 354 (Knowledge Acquisition)

Instructor

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Topic and Learning Goals

The topic of this course is how people learn new knowledge and skills. By knowledge is meant the kinds of subject matter a person might learn by reading, practicing, observing or in other ways, so it includes knowledge in the ordinary sense. Skills include the entire range of competencies that a person might possess, from cooking to tennis and including professional expertise. The course will draw on concepts developed within the cognitive sciences to answer the question how knowledge and skills change over time. Specific topics include learning from discourse, effects of practice, and educational applications of the psychology of learning. Students learn to recognize different types of knowledge, to understand various hypotheses about how knowledge might be acquired, to link such hypotheses to the behavior of learners and to think about how learning can be facilitated. Students also learn about the major methods used to study learning and the associated methodological problems.

Format

The format of the course is a mixture of lectures, reading materials, and take-home assignments. The lectures will introduce the central concepts, answer questions, and also serve as a time to discuss the reading materials. The latter include handouts and original research articles. We will also do some in-class demonstrations. There are also four take-home assignments ("labs") that generate data that we discuss in class.

Course documents, announcements, instructions, and all other course documents will be posted on the **Blackboard site** for this course. Because you are reading this, you obviously found your way to that site. If you have questions about or problems with Blackboard, contact the course TA as your first step in fixing it. Pay attention to Blackboard, because all announcements etc will be posted there.

Reading Materials

There is no textbook. The main readings are handouts authored by the instructor. They will be posted on Blackboard. There will also be a few original research articles. These will be posted on Blackboard as well. They will be discussed in class and there will be exam questions that refer to them. Notice that there are only 20 handouts, so there are fewer handouts than lectures. Look in the Schedule file for which handout to read in connection with which lecture.

In addition, we might post supplementary reading materials as the course goes on for those who might be interested in reading further about some particular topic. These readings will also be posted on Blackboard, but they might not be discussed in class and there will be no exam questions that pertain to them. The mandatory and extra readings will be posted in separate folders on Blackboard.

Take-Home Exercises (“Labs”)

The major activity outside class is to participate in demonstration experiments (a.k.a. labs). You will receive detailed instructions about what to do for each lab on the Blackboard site under “Assignments.” There are four such experiments altogether. For each, you download an instruction booklet from the Blackboard site. The booklet is self-explanatory; you follow the instructions and then turn in the data sheet that comes with the booklet to the instructor. The TA will enter the data into a data file and do some analyses; we then discuss the results in class.

Examinations

There will be two “mid-term” examinations, at the end of the 5th and 10th weeks, respectively, and one final examination. The final exam consists of three parts. The first part of the final covers the same material as the first mid-term and so serves as a make-up opportunity for that exam; the second part of the final likewise consists of questions covering the same material as the second mid-term. The third part of the final covers the material discussed in the last third of the semester. Details of when and where to take the final exam will be posted on the Blackboard site.

Each of the exams consists of multiple choice questions. There will be 20 questions on each of the two mid-terms. The questions are worth 1 point each, for a total of 20 points. The final exam will have three parts, each with 20 questions, for a total of 60 questions. The first part of the final covers the same content as the first mid-term, the second part the same content as the second mid-term, and the third part covers what you study in the last five weeks after the second mid-term. Parts one and two of the final exam serves as make-up opportunities for mid-terms 1 and 2.

The relation between the mid-terms and the final exam are handled as follows: Your score on the first part of the course is *either* your score on the first mid-term *or* your score on the first part of the final, *whichever is highest*. Likewise for the second part of the final. This means that you can't loose by trying to improve your score.

Neither the mid-terms nor the final exam are mandatory. In particular, you can choose which section(s) of the final exam you want to take. If you do well on one of the mid-terms, you can ignore the corresponding part of the final, turning the final from a cumulative to a non-cumulative exam.

Grading

The grading system is simple: You earn points for every take-home lab you participate in as well as on the exams, and the sum of your points at the end of the semester determines your grade.

There are no other activities that earn points over and above those that are described in this syllabus; no "extra credit" activities.

See the table on the next page for what each activity is worth in terms of points, and the grading scale. Notice that the grading scale is in terms of *points earned*, not *percentage points*. A 85 cut-off point refers to 85 points earned, not 85 % of 130.

As the grading table shows, YOU CANNOT DO WELL IN THIS COURSE BY ACING THE EXAMS. You have to engage in at least one of other activity to get a higher grade than a "D." However, if you do all four take-home exercises and collect all the associated points, you only need to answer 2/3 of the questions on the exams correctly to get a "B" grade.

The various activities are worth the following points:

Activity	Max points
Wacky Town Lab	10
Body & Soul Lab	10
Practice Lab	10
Why Knot? Lab	10
	40
Midterm 1	20
Midterm 2	20
Final, Part III	20
	60
Sum	100

The grading scale is as follows:

Score interval	Grade
91 - 100	A
81 - 90	B
66 - 80	C
50 - 65	D
< 50	F

Dr. Ohlsson does not grade on a curve. You do not compete against the other students in the class. If you help another student study, and he/she does better as a result, this will not affect your own grade. The ideal outcome of the course is that everyone gets an "A".

Policies on Late Submissions Etc

Dr. Ohlsson's policies on extra credit, late submissions, missed exams, incompletes and academic dishonesty are detailed in a separate document posted on the Blackboard site. You should read that document. Dr. Ohlsson will not accept "I didn't know this because I didn't read it" as a valid excuse.

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