Dr. F.L. Bedford, Univ. of Arizona, Psych 330, Perceptual Learning and Adaptation

**Course Syllabus**

*Note to short version class: This was the syllabus for the web based version of the course but during a regular school semester. Because this “semester” is so short, requirements for this short class will just be the submission of 1 exam at the end of the session, but all the materials from the regular class will be available for your inspection during the whole time. You will also see the exam from the first day of class so that you know what you must master during those 3 weeks of session. There isn’t enough time for any group projects or individual projects (including the patient discussion/project), but you’ll see all that material because it may help you with the exam. Half way through, you have the option of submitting answer to one question on exam for feedback; that grade can then be replaced if desired when you submit the real exam at the end.*

*Regular syllabus follows—but see above note since requirements do not apply to you and course format is such that everything will be visible to you at all times starting at the beginning of the winter session*

Let me start out of order with a task so that no one misses it: If you want to be a "patient" for the first project, email me as soon as you can. I plan to assign them at random (you'll get the word over email if you're selected), but if you email me before I get to assign them, you can be. There's more about this later.

Ok, back to the beginning:

In addition to deciding if the content of this course meets your needs and interest, you also have to decide if taking a class delivered over the internet is right for you as well.

**Should you take the internet version of this course?** A lot of what makes the in-class version of Perceptual Learning user-friendly are the group projects done in class. They are hands-on and interactive. In addition, in class, there's a lot of discussion and interaction. All of that keeps some very sciency material from being dry and hard to deal with (don't let the first project involving patients fool you - the rest of it is quite tough and not touchy-feely). If you ask others what they liked about the course, most will say getting to participate in the projects. The internet version has projects, but without being able to discuss them out loud in a real room, they may not have the same impact.

In addition, the readings for the class are quite difficult. I don't believe in textbooks and the course uses 100% primary journal articles. That is, these are articles written for other experts in the field- not for novices. But when we get to discuss them in class and I can warn you about each difficult article, they become much more manageable. You might find them impossible without in-class step by step contact on them.

Finally, another disadvantage is technical. There are likely to be technical glitches as you try to view things on the computer and/or download files. Also, at times of high traffic on D2L, not everything works exactly when and how we want them to. You'll also need to get used to the menus on D2L that allow you to navigate in the course- dropboxes for assignments, chats for interactive discussions with others, discussion space for email-like discussion with others and so-on.
So think about it and decide if you want to take this course or not. Of course, this is the time when I hope to scare almost everyone away and try to get almost everyone to drop since there's way too many people in here…

**Class format:**

*Audio lectures:* Usually each week there will be 2 audio lectures posted of about 45 minutes each. They can be listened to while you're on-line. They can also be downloaded to be listened to on your own computer whenever you want. If you want to listen to them on your iPOD, let me know so that I can see if I can convert the files to the right file format.

*Visual handouts:* Sometimes, there will be "handouts" posted as well. You can view them on the computer.

*Articles:* The readings will also be posted to be downloaded and read. There is about 1 journal article every week or so. You'll have to decide if you prefer to read the article before the lectures on the topic, or after them- whatever works best for your learning style.

*Projects:* Everyone will be participating in projects in a group. The first project will involve everyone at once, but after that, you'll be dividing into groups and will be carrying out the projects there. The first project requires that you participate but does not require that you hand anything in; for all the others, you will be handing in the assignment (submitted via your group dropbox). You'll work with others to submit a group written answer to the question/puzzle/or task that you've been given. Answers only need to be about a half a page usually, sometimes a page. There are about 10 projects over the course of the semester. Due dates will be posted when the project is announced and I can only accept 1 group answer on or before the due date. Note you may miss 2 of the projects without any penalty, though I give extra credit for doing all 10 and doing them will help you on the exam as well. To put your name on the project as having contributed, you should have at least one (usually more) comments on your group-specific discussion board or group-specific chat. I am a member of each group, so I will be checking to see what people are saying. Note I do this in the in-class version too, where I circulate and see what people are thinking so far and how they are reasoning about the problem; same idea, except here, the mingling will be virtual.

The assignments will usually be described during the audio lecture and sometimes posted visually as well. They usually require material from the lecture and sometimes from the readings. As referred to above, there will be 2 places that each group can discuss and work on the project. One is a chat that only your group can go to where you can discuss the issues in real time. The other is a discussion board that only your group can see where you leave messages for each other but don't have to be logged on at the same time. (I believe there is also a "locker" where you can store half written documents as you work on them- I will check on this)

**Prerequisites:**

1) *Introductory Psychology* (Psych 101, or the Psychology section of Indv. 101). If you're not sure your intro course was optimal, try reading the text *Psychology* by Henry Gleitman.

2) Either *Psychological Methods* (Psych. 290a) or at least one course in the Cognitive and Neural Systems (CNS, formally known as CEM) sub-area of our Psychology curriculum (e.g. cognitive, memory, devo., perception, problem solving…) or permission of instructor.

3) *Psychology Major.* Students should already be a major in Psychology or planning to declare their major as Psychology shortly. Psychology minors or other students need to get permission from the instructor.
This course is designed with the junior Psychology major in mind, but may be taken by sophomores and seniors. Motivated freshman can enroll with permission of instructor.

**Requirements and grading:**
60% of grade: Two "take-home" exams. You will be given 1 week to complete each exam. The exam questions cover both lectures and readings. The exams are of the sort that require a fair amount of thought rather than just reciting back facts you have heard and read. They are also all essay questions - answers are about 1 to 2 pages per question with about 7 questions. Exams are due on:

1. October 23, (30% of grade)
2. December 9 (30% of grade)

40% of grade: Projects. You will be collaborating with a small team of others to solve problems and you will be submitting short written solutions as a group at the end of each project. There are about 10 project over the course of the semester.

**Contact:** Email address is bedford@u.arizona.edu. You can try phoning in an emergency, but email usually gets to me faster 520-404-2669.

**Content:**
"He picked up the holly and phoenix wand and felt a sudden warmth in his fingers, as though wand and hand were rejoicing at their reunion."

That's a quote from the final Harry Potter book. Have you ever thought about how toys, tools, sports equipment, and even cars and cell phones feel like they become part of your body? Your body image is not fixed but changes with experience.

You play Marco Polo and easily find your friends without peeking. Yet as a child grows, this auditory system has to change too or you'd never get it right.

Do you take what you see for granted? Think you see everything there is to see? Yet miss things that are right in front of your eyes? Assume your neighbor sees exactly what you do? Not so. Experience changes what you see.

We will look at all sorts of ways that experience affects perception through life. Perception refers to the way you get information about the world through your eyes, ears, fingertips and other sense organs. Think about how difficult a time Helen Keller must have had without vision or hearing. The sense organs are your gateway to the world; without them, you'd be trapped in your own head with nothing but your own thoughts and no new information to drive those thoughts. Could a person even continue to exist if all sensory organs were lost? Yet perception is not as simple as just being fortunate enough to not be blind or deaf. It is being continuously modified by experience, even in fully-grown adults. This course will examine the relation between learning and perception.

Critical, deep, and *abstract* thinking is an important part of the course. If that's not for you, you might want to consider taking a different course instead. Also, some of the material is difficult, including the readings. Note finally that it's good to relate the work we cover to your everyday life. This is encouraged and if I can support that in some way let me know. You'll get more out of the material and it adds another dimension of interest.
Life is short and I want to see you think and what you're capable of as a unique individual. If I don't get to see you think, it is a waste of precious time for both of us. So show me what you've got. Bring it.

For information on individual topics covered, contact the instructor.