

PSY 3680, Sensation & Perception, 3 credits Summer 2019, Online

Catalog Description

Overview of the methods and principles of sensation and perception as analyzed through the study of the major senses of vision, hearing, touch, taste, and smell.

Course Overview

We do not often think about the incredibly complex task that our senses have in detecting and encoding information from the environment, or the way in which we are able to organize this information into meaningful representations of the world. By the end of this course, you will have a much deeper understanding and appreciation for this ability.

This course will begin with a brief history and overview of methods related to the study of sensation and perception, followed by an in-depth study of vision for the first half of the course. Next, we will analyze the role of attention in vision, followed by the examination of the physiology and perceptual experiences related to hearing, touch, smell, and taste.

| Instructor: | Jeffrey R. Stowell |
|---------------|--------------------------|
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| Office Hours: | Tues 11:00 am - 1:00 pm |

Teaching Philosophy

"The mind is not a vessel to be filled, but a fire to be kindled" --Plutarch

Course Prerequisite

PSY 1879 or PSY 1890, Introductory Psychology

Course Materials

Wolfe, J. M., Kluender, K. R., Levi, D. M., et al. (2012). *Sensation & Perception (3rd ed.)*. Sunderland, MA: Sinauer Associates, Inc. View the <u>textbook resources</u> (for the 5th ed.)

Course Objectives

- 1. Evaluate major concepts, theories, and research in sensation and perception.
- 2. Apply innovative, integrative, and critical thinking skills to interpret psychological phenomena related to perception.
- 3. Interact effectively, sensitively, and ethically with people from diverse backgrounds and demonstrate understanding of the sociocultural contexts that influence individual differences in sensation and perception.
- 4. Apply knowledge of sensation and perception to real-world issues.
- 5. Write critically and effectively by evaluating evidence, issues, ideas, and problems from multiple perspectives.
- 6. Interpret how the anatomy/physiology of each of the major senses influences our perceptual experiences.
- 7. Develop a greater appreciation for your senses!



Guidelines for Studying and Test Taking

- I strongly recommend viewing Dr. Stephen Chew's video series on "How to get the most out of studying"
- View EIU Student Success Center's test taking tips at http://www.eiu.edu/~success/testtaking.php



Tips for doing well on the quizzes:

- 1. Read and understand the chapter.
- 2. Review the narrated PowerPoint lecture for the chapter.
- 3. Complete the online study questions and chapter summary, found on the publisher's web site for the textbook.
- 4. Do not try to rush through the course. Take time to really understand what you are learning.
- 5. If you do not understand something, please post a message on the discussion board or email the instructor.

Course Requirements and Grading

| Requirement | Points | % of Total | |
|--|--------|------------|--|
| Quizzes and Exams (300 points) | | | |
| Cumulative chapter quizzes | 250 | 50% | |
| Cumulative final exam | 50 | 10% | |
| Writing Assignments, Activities (200 points) | | | |
| Journal article critiques (2 x 40 points) | 80 | 16% | |
| Sensory deprivation project | 40 | 8% | |
| Online exercises (5 x 10 points = 50 points) | 50 | 10% | |
| Chapter applications (10 x 2 points) | 20 | 4% | |
| Discussion board replies (10 x 1 points) | 10 | 2% | |
| Total | 500 | | |



Grading scale: A (89%), B (79%), C (69%), D (59%), F (<59%)

Chapter Quizzes

- You may use your book, notes, and any other resources except for other people when taking your quizzes. Collaborating with others on the quiz is considered academic misconduct.
- Quizzes are designed to assess your fulfillment of the course objectives. Questions on the chapter quizzes are multiple choice and short answer from material covered in lecture and the textbook. The questions are based on the application of the information you have learned and will test your critical thinking and analytical skills.
- Quiz questions are randomly selected from a set of questions. Thus, you may end up with 2 questions that test similar concepts and you will probably not have the exact

- same questions as another student. Across all the quizzes, the average difficulty for everyone in the class will be very similar.
- As part of a cumulative testing strategy, each quiz contains two additional questions from each of the prior quizzes. As such, each subsequent quiz will have more questions (and more time to complete them). See further explanation in D2L under "Getting Started."
- You will have two attempts at each quiz. If you take the quiz twice, I take the higher score of your two attempts (of the multiple choice questions).
 - The short answer questions are the same for each attempt so I will only accept your answers for the <u>first</u> attempt on the short answer questions. You don't need to answer them on your second attempt--I'll just award the same number of points from your first attempt.
 - If you are happy with your 1st attempt score, it is not necessary to take it a second time. It is likely that you'll get some of the same questions on both attempts, so it is helpful to view your quiz results to see which ones you got wrong.
 - I recommend taking your first attempt after you've read the chapter and feel like you have a pretty good grasp of the information. Then, after you find out which questions you missed, study those topics until you've mastered them and then retake the quiz.
 - It's up to you how to best use the opportunity. Research on testing suggests that by simply asking students to retrieve information (i.e., testing), they are more likely to remember it.
- After the quiz has been submitted, you can immediately view only the questions that you missed. Because the short answer questions can't be automatically graded, they show up as "missed" points, but that's simply because I don't grade them until after the quiz deadline.
- I usually grade the chapter quizzes within 1-2 days after the due date. You can complete quizzes early, but they won't be graded until I do the grading for the entire class after the due date.
- Save each answer as you go. Don't wait until the end when you submit the quiz!
- If you have problems while taking a quiz, such as the network going down or your computer crashing, please complete the quiz at the next possible time. You may have a warning that your time has expired, but don't worry, your answers will be saved. Then, send me an e-mail explaining why your time went over. D2L records all the quiz times.
- Quiz deadlines will be adjusted for students with University-approved absences. Remember, you can work ahead!

Final Exam

Similar to the quizzes, the final exam is comprehensive and will contain questions selected from prior chapters.



Narrated PowerPoint Lectures

The PowerPoint lectures should supplement your textbook reading. They are not a replacement for the textbook, but they will have helpful information.

Most of the PowerPoint slides contain audio narration that you will hear while viewing the presentation in Slideshow mode. If there is accompanying narration, it will automatically start playing within a second or two after you advance to the slide. Some of the slides have a multiple-choice question to check your understanding. For these, you will need to click the mouse, or press spacebar (or right arrow-key) to advance to the next slide after you have taken time to answer the question. The correct answers for these questions are found in the notes panel of the slide (when not in "SlideShow" mode). However, sometimes I answer the question for you in the accompanying narration \odot .

All EIU Students have free access to download Office 365.

There are occasional text links in the PowerPoint lectures that will take you to other web sites. If you find a broken link in the presentation, please let me know which presentation and slide number.

Online Exercises

There are five online exercises available in D2L within their respective chapter content folders. Four of the five online exercises are located at http://ed.ted.com and will require you to register (the first time) and login **prior** to completing the online exercise. If you are not logged in prior to completing the online exercise, I will not have access to your submission. Each of the ed.ted activities requires you to view a short video (3-5 minutes), then complete up to 5 multiple-choice/short answer questions. To access the ed.ted quiz, click on "Think" to the right of the video. Your performance on your **FIRST** attempt of the online quiz will count toward your grade. However, you can watch the video as many times as you want before you take the quiz!

Chapter Applications & Discussion Replies

Note: Chapter applications are due the same day as the chapter's quiz.

For each chapter's discussion topic, you are to:

- 1. Submit one paragraph (minimum of 125 words) that describes how something in the chapter <u>applies</u> to your life. Your response must provide a clear connection between the course content and its application. For example, in the chapter about vision and optics, you might explain an experience with wearing glasses and the properties of your eye (the shape of the cornea or lens) that leads to the necessity of wearing glasses.
 - a. Your response should not simply be a summary of the textbook or a list of things you learned or found interesting.
 - b. Please do not disclose traumatic or exceptionally personal events that could make other students feel uncomfortable (e.g., divorce, abuse, personal health concerns).

- A list of verbs that are often used in writing about the application, analysis, synthesis, and evaluation of material are found in this <u>table of Bloom's</u>
 <u>Taxonomy of educational learning objectives</u>.
- d. You can earn up to 2 points for each chapter's post, where 2 points will be awarded for good or excellent application of the material, 1 point for minimal application, and 0 points for poor application.
- e. To promote originality, you will not be able to view other students' posts until you post your own.
- 2. Respond to one or more postings made by other students within 3 days of the chapter application deadline. Your response should be a few sentences long, be stated in a supportive manner, and can contain questions for further clarification, alternative viewpoints, and your own personal interpretations of the material. It should be more than simply a reaffirmation statement such as "Great post!"

Journal Article Critique

Specific Learning Objectives:

- 1. Integrate material learned in the course with current research published in professional journals.
- 2. Summarize, analyze, and evaluate research methods used by the authors of the article.
- 3. Practice using the electronic library resources to find information so that you can more easily do so for other writing assignments.
- 4. Earn course credit through critical writing as a complement to taking tests or other assignments.

View the complete instructions in the D2L. This writing assignment is not suitable for EWP submission.

Rewriting the Journal Critique

After both of the journal critiques are graded, you may rewrite one of them to earn up to full credit (I would choose the one with the lowest grade!). If you would like to rewrite one of them, you may do so by resubmitting your revised critique through the same dropbox link as you submitted the original. Every file that you submit is saved so it is easy to see which one you submitted most recently. You can improve the paper that you wrote by making changes to it (which I recommend) or you can write a completely different one (only if there's no hope for improving the one you already did). The deadline for the rewrite will be announced after the 2nd critique is graded.

Sensory Deprivation Paper

Your assignment is to deprive yourself of vision, hearing, or both for a minimum of 4 consecutive hours during part of the day that you would normally be active. See instructions in D2L for further details.

Reading Schedule, Important Dates

Due dates listed below are for the quizzes, online activities, discussion postings, and any other assignments listed next to the due date.

Warning! A 3-credit class during the 4-week session is like taking 12 credits during a 16-week semester. It moves fast, and will require a significant amount of time! Do not get behind, and work ahead if you can!

| Week | Due Date | Chapter |
|--------|-----------------|--|
| Week 1 | May 14 | 1. Introduction |
| | | 2. The first steps in vision: Seeing stars |
| | May 16 | Online Activity: How do glasses help us see? |
| | May 18 | Journal Critique #1 Due |
| Week 2 | May 21 | 3. Spatial vision: From stars to stripes (only pages 62-74)4. Perceiving and recognizing objects |
| | May 23 | 5. The perception of color Online Activity: Synesthesia |
| | May 25 | 6. Space perception and binocular vision Online Activity: Explanations of the Moon Illusion |
| Week 3 | May 28 | Journal Critique #2 Due |
| | May 30 | 7. Attention and scene perception10. Hearing in the environment (only pages 275-285)Online Activity: The Distracted Mind |
| | June 1 | Hearing and psychoacousticsOnline Activity: Dangerous Decibels |
| Week 4 | June 4 | 13. Touch |
| | June 6 | 14. Olfaction Sensory Deprivation Paper |
| | June 7 | 15. Taste Final Exam Extra Credit |

View the <u>university's academic calendar</u> for add, drop, and withdrawal deadlines.

Late Work Policy

Late work submitted after the deadline may be penalized by up to 20% of the points for the assignment. Requests for extensions of deadlines may be made for university excused absences or for extenuating circumstances.

Academic Integrity

Students are expected to maintain principles of academic integrity and conduct as defined in <u>EIU's Code of Conduct</u>. Violations will be reported to the Office of Student Standards. Cheating, plagiarism, and other forms of academic misconduct will not be tolerated. As a student, you have a personal responsibility to maintain high standards of academic conduct to preserve academic integrity. Academic misconduct will result in zero points for the assignment and appropriate disciplinary action, according to university guidelines.

Students with Disabilities

If you are a student with a documented disability in need of accommodations to fully participate in this class, please contact the Office of Disability Services (ODS). All accommodations must be approved through ODS. Please stop by Ninth Street Hall, Room 2006, or call 217-581-6583 to make an appointment.

Student Success Center

Students who are having difficulty achieving their academic goals are encouraged to contact the <u>Student Success Center</u> for assistance with time management, text taking, note taking, avoiding procrastination, setting goals, and other skills to support academic achievement. The Student Success Center provides individualized consultations. To make an appointment, call 217-581-6696, or go to 9th Street Hall, Room 1302.

Early Alert System

Eastern maintains an Early Alert System (EAS) to help students know when they are not performing up to academic standards. Alerts may be given for poor attendance, not turning work in on time, or doing poorly on an assignment or test. EAS staff will contact you to help you find resources to help you be a successful student. Resources may include time management, study skills, test-taking, finding tutors, or other resources related to academic issues. I will use the EAS if I believe you could benefit from talking to a success coach about these issues.