

Sensation and Perception

Psyc 3310

Spring 2025

Main First Session (2Jun-3Jul)
Monday-Friday 1:00 pm – 2:40 pm in White-Gravenor #203

Instructor: Dr. Dick Dubbelde (he/him)
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Office Hours: Tuesdays 12:30am-2pm or by appointment.
Office: 301I (that's an I, pronounced like 'eye') White-Gravenor Hall

Course Overview

What is real? How do you define 'real'? If you're talking about what you can feel, what you can smell, what you can taste and see, then 'real' is simply electrical signals interpreted by your brain. These electrical signals are shaped by our evolution and resultant physiology to make us perceive the world in ways that are beneficial to us, in ways that are adaptive. In this course we will study how the brain collects information, about both the external and the internal world, transduces it into electrical signals, and molds that information into the perceptions that we experience and the behaviors that we do.

Learning Outcomes

At the end of the course, students will be able to:

- Understand the anatomy and physiology which creates our sensations and presumably our perceptions.
- Understand the methods used to study our sensations and indirectly our perceptions.
- Evaluate the strengths and limitations of these methods in understanding our sensations and perceptions.
- Summarize and present key findings from scientific articles.

Instruction and Independent Work Time
2.5 hours of direct instruction per week
3-5 hours of independent work per week

Required Text(s)

There is a required textbook for this course: Sensation and Perception (Sixth Edition) by Jeremy M. Wolfe, Keith R. Kluender, and Dennis M. Levi. The exams in this course will be on material that is covered in lecture, but there is a large amount of dense material in the class, and specialized vocabulary, so you should be reading the text as a supplement to the lectures.

Additionally, nearly every slide in the lectures (unless the slide is just there to make a joke work) has one or more citations on it. It is expected that you read some of these citations with enough care that you are then able to discuss the experiments which were run. More information on this is in the section about exams.

E-mailing the Instructor

When you e-mail me (dd1137@georgetown.edu), please (PLEASE) tell me what class you're in (Sensation and Perception). I teach three classes a semester, and each class has many students, so there's nearly a 100% chance that I will not remember which of my classes you are in.

Computer Accounts

This class will use Canvas and your Georgetown email for all class announcements and submitting assignments. It is your responsibility to check Canvas and your personal Georgetown email frequently for course announcements and class updates. Canvas will also be used for submitting all assignments.

Academic Integrity

Academic integrity is taken very seriously, and so you take it seriously as well. The full details of what academic integrity entails can be found here: <https://honorcouncil.georgetown.edu/system/policies/> , but for this class, the main things that may come up are plagiarism (trying to pass off someone else's work as your own) and originality (the work that you do for this class should be new and turned in only for this class). Be careful to properly cite anyone else's work which you discuss in your papers or on your exams, write your own papers and exam answers, and write original work for this course.

Additional Policies

There are a number of other policies which are university-wide and thus apply to this class. These policies regard Accessibility and Accommodations, Equal Opportunity and Non-Discrimination, the Honor System (which was mentioned above), Protection of Minors, Religious Holidays, the Right to Privacy/FERPA, Study Days for Undergraduate Students, and Title IX/Sexual Misconduct. For full details on these university-wide policies which apply to this course, please use this link: <https://cndls.georgetown.edu/georgetown-policies/> .

Grading

Your final grade is dependent on two components: question sets and attendance.

Item	Points
Question Set 1	20
Question Set 2	20
Question Set 3	20
Question Set 4	20
Attendance	20
Total	100

Question Sets

At the end of each week I'll post a set of essay questions. There will be at least one question per lecture that we've covered since the last question set. These questions you'll answer over the weekend and submit by the time that class starts the following Monday.

Attendance

This class is in the summer and it is every day. The temptation to not be in class is going to be STRONG. With that in mind, I'll give you 5 points a week (One a day) if you show up to and engage with every class. If you do need to be absent, we can talk about an absence being excused, but you'll need to have an unavoidable reason. If for whatever reason a class needs to be cancelled (e.g. our school is in DC and we live in a tumultuous time), please watch your e-mail for an announcement about how we'll deal with that. If class is cancelled, you obviously won't lose points for not attending that class.

Grade Point Scale

Points are rounded to the nearest hundredth, but no more. That's two decimal points. No more. If at the end of the course your grade comes to 83.99, that is a B-. There is nothing that can be done. I know this might seem harsh, but please review the above note about how the grading scheme in this course is very flexible.

Grade Point Scale

Grade Point Scale	
A	94-100
A-	90-93.99
B+	88-89.99
B	84-87.99
B-	80-83.99
C+	78-79.99
C	74-77.99
C-	70-73.99
D+	68-69.99

D	64-67.99
D-	60-63.99
F	<60

SONA Research Participation

SONA is not required for this class.

How to Succeed

Come to every class and be prepared to actively listen and ask questions. Most importantly, if you are not understanding a concept in the lecture, tell me. You are almost definitely not the only person not understanding. After each lecture, review the slides and your notes, being diligent to identify the main concepts in each lecture. Each lecture has a table of contents slide. If you can explain why each of those bullet points are there, then that likely means you understood the main points of each lecture. It will likely not suffice to scan the material in the week before the exam, as we will be covering too much in too great a depth. If you are unclear on a concept or feel you are falling behind, talk to me immediately. I am here to help and I love answering questions.

Also, this course is designed to not require anything more than basic prior knowledge of the brain and the mind. That being said, there is a lot of dense material in this course and there is a LOT of specialized vocabulary. I will do my absolute best to define every concept and term, but it might be necessary for you to spend some amount of time looking things up, do a bit of background reading, or at the very least, raise your hand in class and ask me to spend a bit more time on a concept.

Additionally, and especially for this class, I highly (HIGHLY!) recommend using a spaced repetition flashcard system (SRS) to assist you in learning the material. I use Anki, I highly recommend it, and it is my best friend.

Course Schedule

The course schedule is subject to change. The exams and paper due dates will likely not change. The topic of each class is very likely to change depending on the pace of the class, how engaged the students are, how many questions are asked, and my erratic whims.

Weekday	Date	Topic	Due
Monday	2Jun	Syllabus and Introduction	
Tuesday	3Jun	Neurons and Measurement	
Wednesday	4Jun	Vision I – The Eye	
Thursday	5Jun	Vision II – Early Vision	

Friday	6Jun	Vision III – Object Recognition	
Monday	9Jun	Vision IV – Color	Question Set 1
Tuesday	10Jun	Vision V – Space	
Wednesday	11Jun	Vision VI – Motion	
Thursday	12Jun	Vision VII – Attention	
Friday	13Jun	Audition I – The Ear	
Monday	16Jun	Audition II – Creating the Soundscape	Question Set II
Tuesday	17Jun	Audition III – Language	
Wednesday	18Jun	Buffer Day	
Thursday	19Jun	No Class - Juneteenth	
Friday	20Jun	Vestibulation	
Monday	23Jun	Somatosensation I – Mechanoception	Question Set III
Tuesday	24Jun	Somatosensation II - Proprioception	
Wednesday	25Jun	Somatosensation III - Nociception	
Thursday	26Jun	Somatosensation IV - Mouthfeel	
Friday	27Jun	Chemosensation I – The Nose	
Monday	30Jun	Chemosensation II – Olfaction	
Tuesday	1Jul	Chemosensation III – The Mouth	
Wednesday	2Jul	Chemosensation IV – Gustation	
Thursday	3Jul	Flavortown	Question Set 4