PSY 512
Visual Cognition Syllabus

Course Time: Mondays between 15:40 – 17:30
Course Place: https://sabanciuniv.zoom.us/j/93039221405 (**Meeting ID: 930 3922 1405**)
Instructor: Nihan Alp / nihanalp@sabanciuniv.edu
Teaching Assistant: Gizem Kazzaz (gizemhenden@sabanciuniv.edu)
Office Hour: Tuesday 11:40 - 12:40   – please contact me for an appointment and for a change in time if needed.

This course does not have a TA whose expertise is on Visual Cognition. If you have **course-related questions, please contact me;** about all other issues (**uploading documents, missing link, don't see the assignment, could not find the zoom link, cannot enter the webpage, etc.**), **please contact TA.**

Description: This course aims to survey research and theoretical discussions on Visual Cognition. Vision is central to our daily interactions with the world. It is the most salient sense modality, dominating our perception. Visual thinking plays a crucial role in several tasks such as object recognition, reading emotions from facial expressions, spatial orientation, and wayfinding, creative problem solving, planning for the future, understanding scientific visualizations or visual art. Topics to be discussed include theoretical research on cognitive and neural processes underlying visual cognition as well as applied research on visual thinking and individual differences in visual processing styles. This course will provide a venue for under/graduate students to discuss groundbreaking research on visual perception and cognition, including articles that students propose based on their research interests.

Teaching is through lectures, discussions, seminars, and demonstrations as well as through supervisions in assignments during the project. For every debate, one student will be assigned to chair the discussion.

Book: There is no assigned book, we will mostly go through the recent and well-known articles in the field. Make sure you are prepared for the course. The literature will be provided by the instructor. Please read the paper and come up with discussion questions before coming to the course.

Attendance (% 15): This course is a discussion-based course, therefore, participation is important. % 10 will be given if you are physically participating, %5 will be added if you are also mentally participating.

Project Proposal (% 55): You will form groups from day one and come up with a research idea that is related to "visual cognition". Please do not hesitate to contact me for your questions about your research idea.

1. Present your idea and get feedback (% 5)
2. Write the proposal (% 20) *Grads will write individually – (max 15 pages: Times new roman 11 / line spacing 1).
3. Review each other's proposal (% 15) – This is an in-class activity
4. Final Presentation (% 15) – Pitch your idea on the final week! *Grads will present individually

Final presentation grading (15 pt):
Introducing the literature = 2 pt
Clearly stating the research question = 2 pt
Explaining the experimental design = 2 pt
Explaining the data analysis steps = 2 pt
Interpretation of the results = 3 pt
Questions for enhancing discussion = 3 pt
Clarity of presentation (speaking and slides) = 1 pt.

Research proposal grading (20 pt):
Introducing the literature = 3.5 pt
Clearly stating the research question & hypothesis = 3.5 pt
Explaining the experimental design = 3.5 pt
Explaining the expected findings = 3.5 pt

Budget planning = 2 pt
Timeline planning = 2 pt
Clarity of proposal = 2 pt.

Find the checklist for research proposal in here.
Reviewer grading (15 pt): – max 1 page (Times new roman 11 / line spacing 1)
Language (try not to be so harsh) = 2 pt
Describing minor points = 3 pt
Describing major points = 4 pt
Comments on budget planning = 2 pt
Comments on timeline planning = 2 pt
Suggestions for further improvement = 2 pt

6 Reaction papers (% 30) – submit on Sunday (23:59) – max 1 page (Times new roman 11 / line spacing 1). You can pick any topic you want. Your lowest grade will be dropped.

Here are some topics you can think of:
1. What is the effect of color perception on preschool children's development?
2. Do preschool children have a difference in color-shape correspondence compared to adults?
3. What is integrated first, shape & color, motion & color, or motion & shape?

4. Is synchronous and coherent motion perceived the same?
5. Why some art pieces are more appealing compared to others?
6. Do we perceive emotional faces faster compared to neutral faces?
7. Do color and motion affect attentional allocation differently?
8. What is the role of interplay between conscious and unconscious information during the attentional process?

Only the accepted proposal will receive the grant! ;)

Week 1   – Introduction – what is visual cognition?
Week 2   – What is the importance of visual cognition? How do we study it?
Week 3   – Theories of visual cognition
Week 4   – Importance of mental imagery in visual cognition
Week 5   – "Precise Minds in Uncertain Worlds: Predictive Coding in Autism"
Week 6   – "Artists as Experts in Visual Cognition: An Update"
                                                         –Submit your project idea to receive feedback
Week 7   – Can you tell the difference: Is it man-made or AI-made art?
Week 8   – Crowding "Visual crowding: a fundamental limit on conscious perception and object recognition"
Week 9   – Project idea presentation & discussion (Pitch your idea to get our attention!)
– please do not ask me to postpone week 9, plan yourself accordingly.
Week 10   – From Visual Cognition to Social Cognition – Biological motion
Week 11   – Face, Object and Scene Perception
Week 12   – no class – Finalizing your project proposal (submit your proposal (Saturday 23:59))
Week 13   – Reviewing proposals (this is in-class activity; please read the projects you are assigned to review prior to course and bring your notes to the course)
Week 14   – Final Presentations (Pitch your idea to convince us to invest in your project!) – VSS (class day & time might be rescheduled)

- This is a tentative schedule/ selection of topics and can be updated.

Exam Policy: There won't be any written exam. The evaluation will be based on in class discussions, reaction & term papers, review and presentations.

Students who fail to submit research proposal, and fail to present on time without a valid excuse will receive F as their final grade.

Extra credit:
You can earn extra credits by participating in psychology experiments. These will be added to your final grade. The maximum research point you can earn from online experiments is 6 which will be converted to 3 bonus points for the course. Be careful! **If you sign up for the study but did not show up without any excuse, not only you won't gain any points but also you may lose points.** Experiments are available at different times of the semester. It is **your responsibility to check the SONA system regularly and read the SONA Guide for Students.** You will be able to sign up for the experiments and get your research participation credits though the online Sona system at http://sabanciuniv.sona-systems.com.

A	A-	B+	B	B-	C+	C	C-	D+	D	F
95	90	85	80	75	70	65	61	58	55	< 55