**Attention**

PSY316 Course Syllabus Fall 2020

**When / Where**

Mondays 9:50-11:30 & Wednesdays 9:50-10:30

**Instructor**

Eren Günseli, Ph.D. <eren.gunseli@sabanciuniv.edu>

Office hours: TBA

**TA**

Sena Ataseven <[nursena.ataseven@sabanciuniv.edu](file:///D:\Users\suuser\Dropbox\Teaching\Attention\2020-2021%20Fall\nursena.ataseven@sabanciuniv.edu)>

**Prerequisites**

See the website

**Description**

This course explores the theories and mechanisms of attention. Topics include classical behavioral and modern neurocognitive models of attention, a brief overview of clinical impairments of attention, and the relationships between attention and other cognitive processes.

**Course website**

Please regularly check the course website because the syllabus is subject to change depending on your progress. The latest updates will be posted on the website.

**Materials**

Textbook: There is no textbook for this course. Instead, we will mostly cover scientific articles. This will help focus on less topics but in greater depth. Moreover, reading articles will help you learn how research questions are formulated and tested, how results of scientific experiments are interpreted, and how to critically evaluate these tests and interpretations. We will read book chapters instead of scientific articles for a few classes only. I will provide these chapters online.

Slides: This course heavily relies on student presentations. Slides of these presentations will be shared online. See below the Class Presentation(s) section for details. I will also present during the classes and these slides will be shared as well.

**Important**: Each presenter is expected to meet with me or a TA at least a week before the presentation! See below the Class Presentation(s) section for details.

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**Course schedule**

Note that the schedule below is tentative; depending on the questions asked during classes and the subjective difficulty of the topics for students we may cover less or more topics than shown here. Please check the course website for the latest updates on the syllabus.

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| **Dates** | **Topic** | **Readings** |
| Oct 5 | Welcome | - |
| Oct 7 | What is attention? | The Psychology of Attention by Elizabeth Styles – Chapter 2 |
| Oct 12 & 14 | Bottom-up vs top-down attention | Bacon & Egeth (1994), Theeuwes (2004) |
| Oct 19 | Effects of selection history on selective attention | Awh et al. (2012) |
| Oct 21 | How do past experiences guide attention? | Võ & Wolfe (2013) |
| Oct 26 | How does reward affect attention? | Anderson et al. (2011) |
| Oct 28 | Review *or* catching up | - |
| **Nov 2** | **Midterm exam 1** | **Papers discussed until here** |
| Nov 4 | Learning to inhibit. | Cunningham & Egeth (2016) |
| Nov 9 | *A brief introduction to memory* | Gazzaniga, Ivry, & Mangun. Book chapter on memory |
| Nov 9 & 11 | How does attention affect working memory? | Gunseli et al. (2015); Gunseli et al. (2019) |
| Nov 16 | How does attention affect memory encoding? | Fernandes & Moscovitch (2000) |
| Nov 18 & 23 | How does attention affect memory retrieval? | Dudukovic et al (2009) |
| Nov 25 | How does perceptual distraction affect memory retrieval? | Wais et al (2012) |
| Nov 30 | How does attention affect decision making? | Orquin & Loose (2013) |
| Dec 2 | Review *or* catching up | - |
| **Dec 7** | **Midterm exam 2** | **Papers discussed after the first midterm** |
| Dec 9 | Sustained attention and task performance | TBA |
| Dec 14 | Effects of TV and video games on the development of attention in children | Swing et al. (2010) |
| Dec 16 & 21 | Can we improve attention? | TBA |
| Dec 23 & 28 | When attention fails. | TBA |
| Dec 30 & Jan 4 | Attention in a social world. | TBA |
| Jan 6 | Review *or* catching up | - |
| **TBA** | **Final Exam** | **Everything** |

**Grading**

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| --- | --- | --- |
| **Assignment** | **Date** | **% of final grade** |
| Midterm exam #1 | Nov 4 | lower grade of the two midterms: 15% |
| Midterm exam #2 | Dec 9 | higher grade of the two midterms: 25% |
| Final exam | TBA | 25% |
| Presentation | Will take place during classes. Exact date(s) for each student will be determined during the first week | 15% |
| Quizzes and participation |  | 20% |
| Extra credit\* |  | Up to 3% |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A** | **A-** | **B+** | **B-** | **C+** | **C-** | **D+** | **D-** | **F** |
| >90 | 85-89.99 | 80-84.99 | 75-79.99 | 70-74.99 | 65-69.99 | 60-64.99 | 55-59.99 | <55 |

**Exams**:

Each exam will have multiple choice, fill-in, and short answer questions. Exam questions will aim to test your knowledge, understanding and critical thinking. While you will need to know some basics, I want you to try to challenge the studies you read about, connect what you learned across different chapters, and form a big picture.

Make-up exams will be allowed only when a written justification (e.g., a doctor’s report) is provided. Make-up exams must be taken within one week after the exam.

**Class Presentation(s)**:

Each student is also expected to form groups of two or three people and present for at least one class period. The presentations should be given using a slide presentation to lead the class through the paper. Each presentation is expected to last about 20 minutes with an additional 5-10 minutes of discussions. To facilitate discussions, presenters are expected to come up with discussion questions. Coming up with good discussion questions will constitute 3 out of 15 points of your presentation. See the ‘Presentation grading’ section below for more details.

Presentation Content:

Most papers will be empirical papers.

If you are presenting an empirical paper, describe the question, the method, the results, the conclusions, and then bring up points for discussion. Don’t get bogged down by details in the methods, especially for neuroimaging studies: convey the critical parts of the method that we need to understand the paper.

If it is a review paper, describe the big question it attempts to answer, the different theories it brings up, the evidence for each, the conclusions reached, and then bring up points for discussion. Often, papers are much too comprehensive to go over in detail in a short presentation; you therefore must decide what the main points are, and communicate those. If some sections in a paper are tangential to the main topic, feel free to skip them in your presentation.

And remember: presentations are meant to be engaging, and you should try to involve your classmates as much as possible (e.g., by posing questions or asking for opinions regularly). Do your best to understand the background, main findings / arguments, and conclusions of each paper — but it’s okay if you don’t understand everything. You can also bring up challenging aspects of the paper(s) in class, and we can discuss them together. But try your best to figure things out on your own first.

Some general tips for your presentation: Start by proposing the main research question. However, you are not expected to give any answers to the research question here. Instead, you are expected to make a brief introduction regarding the main purpose of the paper. You can also try to link this to a real-life example. Then, briefly providing proper background information and the findings of previous studies would be beneficial to introduce the audience to the topic. Afterward, you can start presenting specific research questions and/or hypotheses of the paper, and you should explain the methods they used to test these hypotheses. When you are presenting the results, make sure that the meaning of the results is clearly explained. Please remember to include the relevant tables and figures from the paper in your presentation. You can continue by sharing how the authors discussed the findings; you may also share your opinions and ask the audience to discuss as well. At the end of the presentation, you can draw an overall conclusion by reminding the research question, results and their implications. Remember to provide some discussion questions during the presentation to create a more interactive and encouraging environment.

Pre-presentation meeting:

Each student is required to meet with me before their presentation so that they can receive feedback and have time to incorporate edits before their class presentation. Doing so can substantially improve your grade, and not doing so will result in an automatic 5 point deduction from your presentation. You need to schedule your meeting at least 1 week before your presentation!

Presentation grading:

Your class presentation is worth 15% of your grade, and is graded out of 50 points. Describing the questions of each paper is worth 5 points, describing the method (empirical paper) and/or theories discussed (review paper) is worth 10 points, describing the results (empirical paper) and/or evidence for each theory (review paper) is worth 10 points, describing the conclusions reached is worth 5 points, and bringing up points for discussion is worth 10 points. Clarity of presentation (speaking and slides) is worth an additional 10 points.

**Extra credit**:

Through participating in psychology experiments (online), you can receive extra points on top of your final grade, with a maximum of 3 points. I recommend you to volunteer in experiment participation not only (i) to receive extra course credits, but also to (ii) contribute to the scientific advancement performed at Sabancı University, and (iii) experience how psychology and cognitive neuroscience experiments are performed.

For this course, you will be able to earn up to 3 bonus points (1 research point equals ~ 30 minutes of research participation). Six research points (6PRs) will be converted to 3 bonus points added to your overall total at the end of the semester. More information on the available research projects will be provided during the semester. You will be able to sign up for the experiments and get your research participation points through the online Sona system at http://sabanciuniv.sona-systems.com. Please, carefully read the Guide for Students: Sabancı University Experiment Credits System (Sona). Note that this option is subject to availability: There may be not enough experiments available to complete 3 bonus points.

**Attendance:**

I recommend attending classes and if possible participate during the classes. If you don’t understand something, please ask. If you don’t agree with something, please raise your concern. Participation will enhance the learning of the whole classroom, will make the classes more fun for you, and also will make teaching more fun for me (instructors are also human ☺). Also, together will quizzes, attendance will make up 20% of your grade.

**Plagiarism (Extremely critical. Make sure you read this part):**

If you use someone else’s thoughts or sentences without mentioning that these thoughts and sentences are theirs, then you are conducting plagiarism. Do not use someone else’s idea as if it is yours. That means, no copy pasting, no stealing of ideas without acknowledging that they are someone else’s. For more information in plagiarism, check out this [link](https://www.plagiarism.org/article/what-is-plagiarism). If you plagiarize you can get zero points for your quizzes or take-home exams. Please, never plagiarize!