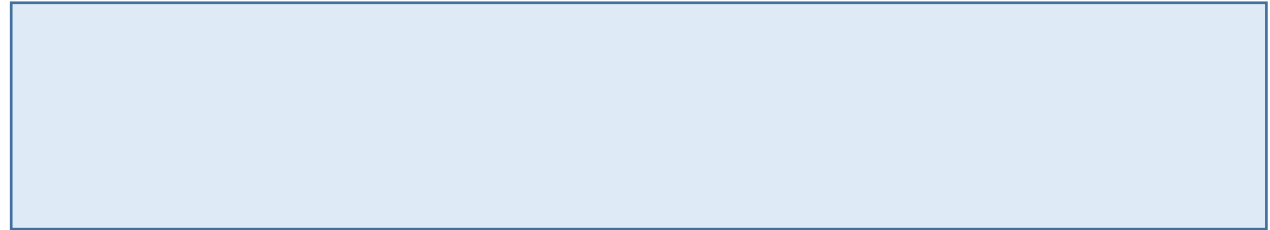


# Driving, Deepfakes and Disinformation: Applications of Visual Cognition in the Real World

PSYC423 - Winter 2026

Syllabus



## *General Course Information*

PSYC 423 – Visual Cognition in the Real World

3 credits

Pre-requisites: PSYC 221/3.0 or COGS 200/3.0

## *Course Description*

Visual cognition has been studied extensively in the lab, but it's not always clear how theoretical questions apply to the real world. In this course, we will examine both theoretical questions on perception, attention and memory as well as see how these apply to real world situations - examining x-rays, distracted driving and gaming.

## *Instructor Information*

Name: Dr. Monica Castelhana

Drop-In hours: (subject to change; please see onQ)

Email: [monica.castelhana@queensu.ca](mailto:monica.castelhana@queensu.ca)

## *Important University Dates*

Please visit the [Faculty of Arts and Sciences Sessional Dates website](#) for all academic deadlines.

## *Land Acknowledgement*

The territory that Queen's University occupies is included in the Dish with One Spoon Wampum Belt Covenant, an agreement between the Iroquois Confederacy and the Confederacy of the Ojibwe and Allied Nations to peaceably share and care for the resources around the Great Lakes. The Kingston Indigenous community continues to reflect the area's Anishinaabek and Haudenosaunee roots. There is also a significant Métis community as well as First Peoples from other Nations across Turtle Island present here today.

### *Equity, Diversity and Inclusivity Statement*

Queen's is committed to counteracting discrimination in this institution and developing a climate of educational equity that recognizes and respects the equal dignity and worth of all who seek to participate in the life, work and mission of the University. Such a climate is created and maintained by developing a university-wide commitment to and understanding of educational equity, supported by policies, programs, curricula, practices and traditions that facilitate individuals - and equity-seeking groups- free, safe, and full participation. See [Queen's Educational Equity Policy](#) for further information.

### *Course Learning Objectives*

By the end of this course students will be able to:

- Summarize current theories visual cognition with a special emphasis on scene processing, object recognition, visual attention, eye movements, visual memory and related applied fields
- Critically evaluate current, experimental literature in the field of visual cognition
- Develop writings skills
- Summarize and communicate research findings in one area of visual cognition
- Generate new research question in the field of visual cognition

### *Course Format*

Each week will focus on a particular topic. Think of the class as having two meetings per week, one is in-person and one takes place over two days and participation is asynchronous and online.

Here is the structure for each week:

- **Every week** you will have two readings focused on the topic for that week. You are responsible for reading them and taking notes for that week's in-class activities.
- Every **Monday** we will have in-person group work, individual assignments and some class discussion. The activities will vary from week to week and it'll be a fun way to explore the the readings and the topic for that week.
- Every **Wednesday by 6pm**, one person from each group will be assigned as the presenter and will post a video presentation describing a new study on the topic for that week.
- Every **Friday by 6pm**, other members of a group will post a reaction video answering a question posed by the presenter.

Generally, you will be introduced to a new topic through the weekly readings and a in-class activities. Then, each week you will participate *either* as the presenter for your Presentation group or as a viewer for the presenter. As the presenter, you will lead discussion on an article of your choosing related to that week's topic through the video presentation discussion board (on Padlet, more info below).

### *Course Materials*

There is no textbook. Articles will be assigned to be read for each class. You will be able to download the articles from the web/library – use your research skills! Any articles not available through the school library system or available on-line (through Google Scholar, the author’s own website or other repositories such as Research Gate, bioRxiv or PsyArXiv) will be provided via onQ in advance. *Please email me if you are having trouble finding a specific article.*

### *Building a Classroom Community*

University is a place to share, question, and challenge ideas. Each student brings a different set of lived experiences. You can help to create a safer, more respectful classroom community for learners by following these guidelines:

- Make a personal commitment to learn about, understand, and support your peers.
- Assume the best of others and expect the best of them.
- Recognize and value the experiences, abilities, and knowledge each person brings to the course.
- Acknowledge the impact of oppression on other people’s lives and make sure your words and tone are respectful and inclusive.
- Encourage others to develop and share their ideas.
- Pay close attention to what your peers say/write before you respond. Think through and re-read what you have written before you post online or send your comments to others.
- Be open to having your ideas challenged and challenge others with the intent of facilitating growth.
- Look for opportunities to agree with one another, building on and intentionally referencing peers’ thoughts and ideas; disagree with ideas without making personal attacks, demeaning, or embarrassing others.

### *Class Attendance*

Your presence and participation in class contributes to the knowledge and skills that you will develop throughout this course. I expect that you attend class regularly, participate in class conversations and learning activities. These types of activities provide active engagement, promote a deeper understanding of the course content, and contribute to your success in this course.

## *Workload*

### **Participation and In-Class Activities**

This is a discussion-based seminar. Your preparation and participation are essential to your learning and to the learning of others. To support careful reading and critical thinking, we will be doing a variety of in-class activities completed in small groups. These activities are designed to explore the readings further, encourage deeper engagement, and promote collaborative idea-building.

#### *In-Class Activities: Group Work*

Each week, you will work in your group (which will vary from week to week) to analyze key ideas from the readings, critique methods and interpretations, and propose extensions or future research directions. These activities are completed **during class only** and rely on discussion and application of the assigned readings. For group work, a single group worksheet will be submitted at the end of class, with all members' names listed.

#### *In-Class Activities: Individual written assignments*

Each class includes a short individual assignment connected to the day's topic. These are brief, focused responses rather than essays. Sometimes they are completed before class to prepare you for discussion; other times they are completed afterward as a reflection on what you learned. The purpose is to make your thinking visible and help you connect concepts across weeks. Individual work occurs every class, and your best 8 of 10 grades will count.

All members of the group normally receive the same grade, based on the quality of ideas and engagement (I-C-E rubric). For individual work, you will be graded on how you convey your own thinking.

**Grading of In-Class Assignments** is based on Young's I-C-E (Ideas, Concepts, and Extensions):

- **3/3** Comments and responses reveal a capacity to analyze, synthesize, and evaluate material and give evidence of original thinking and an extensive knowledge base. They demonstrate a careful, concise, critical analysis with a clear and well-argued hypothesis based on the material. They exhibit evidence of learning that is willing to explore beyond the initial learning situation.
- **2/3** Comments and responses reveal a good analysis and some critical reasoning. They demonstrate a reasonable understanding of relevant issues and familiarity with the material. They demonstrate a solid understanding of the relationship or connections among the basic concepts. They show a need to be more concise or precise in details and more careful in articulating arguments.
- **1/3** Comments and responses show an acceptable treatment of the subject matter. They demonstrate an understanding of the basic facts, vocabulary, details, and elemental concepts and show an ability to deal with simple issues arising out of the material. The student needs to engage the subject matter more fully and formulate ideas more clearly.

You will receive feedback on your in-class work throughout the semester.

## **Paper Presentations/Response Videos**

As a presenter, you will lead the discussion for your group. For each presentation, you will choose a new article related to that week's topic and provide a **~5 minute summary presentation**. The video must feature you as a "talking head" throughout, summarizing the study's key points, including its stimuli, methods, and results, and posing three discussion questions orally. To help with the summary, each presenter can use up to 3 powerpoint slides to present visualization of stimuli or results or other key figures.

The video presentations can be done via Canva or other software and then uploaded to Padlet. Padlet offers a platform to post presentation videos and then response videos. The class will be divided into groups (see onQ for your group assignments), and you will comment on each other's presentations from your group. The powerpoint files and a copy of your chosen article are to be uploaded on onQ (under Assignments for the Presentation number). They are due at the same time as the video is due.

The uploads and the presenter's video must be posted by **Wednesday at 6pm** and each group members' response must be posted by **Friday at 6pm**.

**How it will work:** At the start of each week, I will send *an invitation link* to all presenting members of each group. Every presenter must upload their presentation video by Wednesday at 6pm. The link will then be posted to the class (via Class Announcements).

- **Presentation Videos:** For presenters, summarize the main question, experiment task and the main pattern of results. Then present 2-3 discussion questions for your fellow group members to respond to and comment on. These videos can be up to a max of 5 min in length. Be sure to **label your video with your name and Group Letter (A-E)**.
- **Response Videos:** If you are not presenting in a given week, you are expected to post a response video. You are assigned to respond to the presentation of your group member. For groups who have fewer group members and no presenter on a given week, you may choose one of the other group presenters to respond to for that week. Response videos must be at least 30 sec long and a max of 5 min long.

## **Group work and Presentation Responses Guidelines**

University is a place to share, question and challenge ideas. I want you to keep in mind that each person brings a different lived experience from which to draw upon. To help one another learn the most we can from this experience please consider the following guidelines.

1. Make a personal commitment to learn about, understand, and support your peers.
2. Assume the best of others and expect the best of them.
3. Acknowledge the impact of oppression on the lives of other people and make sure your writing is respectful and inclusive.
4. Recognize and value the experiences, abilities, and knowledge each person brings.
5. Pay close attention to what your peers say before you respond. Think through and review your responses before you post or send them to others.
6. It's ok to disagree with ideas, but do not make personal attacks.
7. Be open to being challenged or confronted on your ideas and to challenging others with the intent of facilitating growth. Do not demean or embarrass others.

### ***If You're Sick or Having a Rough Week...***

*Reaction Paper assignments, participation in class discussions and presentations have been designed with flexibility for academic consideration for all students. This means that "Short term Requests for Academic Consideration" (submitted through the Faculty of Arts and Science portal without documentation) are not needed. For long-term requests, these will be handled on a case-by-case basis, as needed. In either case, please send me an email ([monica.castelhano@queensu.ca](mailto:monica.castelhano@queensu.ca)) asap and we will work something out that works for you and your group.*

### **Research Proposal**

There is no exam in this course. Instead, you will be writing a brief research proposal. On **Wednesday April 8<sup>th</sup> at 11:59pm**, you will be required to submit a research paper (10 pages max) on a topic of current interest within the field of scene perception/scene processing. The final paper will include a review of past research relevant to your topic, and a proposal for future research (i.e., a new experiment). Late papers will be penalized 10% per day and receive a grade of 0 after 5 days. More information will follow (submit under Assignments on onQ).

To help you get a head start on this assignment, you will choose your topic and hand-in a **one paragraph summary** (1/2 page long max) describing your idea for the final paper on **Friday March 20<sup>th</sup> at 11:59pm**. This half-page summary will be part of your final research proposal grade (5%; submit under Assignments on onQ). Each student will receive feedback on their idea.

### **Use of ChatGPT and Other AI Tools**

You may use AI tools to brainstorm or clarify ideas, but your research proposal must reflect **your own thinking, creativity, and writing**. Do not use AI to draft sections of the paper or generate your proposed experiment. You are responsible for the accuracy of all sources and for producing work that shows your understanding.

**Bottom line:** AI can help you think, but it cannot think for you.

### *Universal Accommodations...*

*Both these assignments (proposal idea and proposal research paper) will have a three-day grace period. That is, your assignments are due on the due date posted, but will be accepted, without penalty, up to 72 hours afterwards. After the grace period, the late penalties will apply as described above.*

### *Evaluation*

In-Class Group Assignments	25%
Individual Written Assignments	25%*
Presentations	25%
Research Proposal	25%

\*Best 8 out of 10 individual assignments

### *Grading Method*

All components of this course will receive numerical percentage marks. The final grade you receive for the course will be derived by converting your numerical course average to a letter grade according to Queen's Official Grade Conversion Scale:

#### ***Queen's Official Grade Conversion Scale***

<b>Grade</b>	<b>Numerical Course Average (Range)</b>
A+	90-100
A	85-89
A-	80-84
B+	77-79
B	73-76
B-	70-72
C+	67-69
C	63-66
C-	60-62
D+	57-59
D	53-56
D-	50-52
F	49 and below

### *Academic Support*

All undergraduate students face new learning and writing challenges as they progress through university: essays and reports become more complex; effectively incorporating research into writing becomes more important; the types of assignments become more diverse; managing your time and developing the skills you need to read and think critically gets more challenging. I encourage students to contact Student Academic Success Services (SASS). SASS offers many different ways to receive support:

- Free online or in-person [appointments](#) to get personalized support on writing and academic skills from expert staff and trained peers.
- [Workshops](#) and [drop-in programs](#). SASS' [Events Calendar lists events coming soon](#).

- [Online resources](#) that provide strategies for academic skills and writing development at university.
- If English is not your first language, SASS has specific resources for [English as Additional Language students](#), including weekly programs and EAL academic skills appointments. You can meet on an ongoing basis with an EAL consultant to work on your academic writing, speaking, listening, and reading skills.

### *Name/Pronoun*

If, for whatever reason, you wish to change how your name appears in onQ and/or on class lists, please follow these steps. You may also use this process to add your pronouns to the appearance of your name.

1. Log into SOLUS.
2. Click on Personal Information tab.
3. Click on the Names tab
4. Click on the Add New Name tab
5. Choose Preferred from the Name Type drop down menu
6. Enter the name you would like to appear in onQ and/or on class lists.
7. Click Save.

Please allow 24 to 48 hours for your name to be registered within the system. If you have further questions or concerns, please contact ITS at Queen's University.

### *Academic Integrity*

Queen's University is dedicated to creating a scholarly community free to explore a range of ideas, to build and advance knowledge and to share the ideas and knowledge that emerge from a range of intellectual pursuits. Each core value of academic integrity, as defined in the [Senate Academic Integrity Policy](#), gives rise to and supports the next.

Honesty appears in presenting one's own academic work, whether in the context of an examination, written assignment, laboratory or seminar presentation. It is in researching one's own work for course assignments, acknowledging dependence on the ideas or words of another and in distinguishing one's own ideas and thoughts from other sources. It is also present in faithfully reporting laboratory results even when they do not conform to an original hypothesis. Further, honesty is present in truthfully communicating in written and/or oral exchanges with instructors, peers and other individuals (e.g. teaching assistants, proctors, university staff and/or university administrators).

Trust exists in an environment in which one's own ideas can be expressed without fear of ridicule or fear that someone else will take credit for them.

Fairness appears in the proper and full acknowledgement of the contributions of collaborators in group projects and in the full participation of partners in collaborative projects.

Respect, in a general sense, is part of an intellectual community that recognizes the participatory nature of the learning process and honours and respects a wide range of opinions and ideas. However, “respect” appears in a very particular sense when students attend class, pay attention, contribute to discussion and submit papers on time; instructors “show respect by taking students’ ideas seriously, by recognizing them as individuals, helping them develop their ideas, providing full and honest feedback on their work, and valuing their perspectives and their goals” (“[The Fundamental Values of Academic Integrity](#)”, 3rd Edition, p. 8).

Ultimately, responsibility is both personal and collective and engages students, administrators, faculty and staff in creating and maintaining a learning environment supported by and supporting academic integrity.

Courage differs from the preceding values by being more a quality or capacity of character – “the capacity to act in accordance with one’s values despite fear” (“The Fundamental Values of Academic Integrity”, 3rd edition, p. 10). Courage is displayed by students who make choices and integrous decisions that are followed by action, even in the face of peer pressure to cheat, copy another’s material, provide their own work to others to facilitate cheating, or otherwise represent themselves dishonestly. Students also display courage by acknowledging prior wrongdoing and taking proactive measures to rectify any associated negative impact.

All of these values are not merely abstract but are expressed in and reinforced by the University’s policies and practices.

#### *Accommodation Statement*

Queen's University is committed to achieving full accessibility for people with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all their academic activities. The Senate Policy for Accommodations for Students with Disabilities was approved at [Senate in November 2016](#). If you are a student with a disability and think you may need academic accommodations, you are strongly encouraged to contact the **Queen's Student Accessibility Services (QSAS)** and register as early as possible. For more information, including important deadlines, please visit the [QSAS website](#).

#### *Academic Consideration for Students in Extenuating Circumstances*

Academic Consideration is a process for the University community to provide a compassionate response to assist students experiencing unforeseen, short-term extenuating circumstances that may impact or impede a student’s ability to complete their academics. This may include but is not limited to any extenuating circumstance (illness, bereavement, traumatic event, injury, family emergency, etc.) which is short-lived, begins within the term, and will not last longer than 12 weeks - see [Academic Consideration](#) webpage for details (<https://www.queensu.ca/artsci/undergraduate/student-services/academic-consideration>)

Each Faculty has developed a protocol to provide a consistent and equitable approach in dealing with requests for academic consideration for students facing extenuating

circumstances. For more information, undergraduate students in the Faculty of Arts and Sciences should consult the Faculty's webpage on [Academic Consideration in Extenuating Circumstances](#) and submit a request via the [Academic Consideration Request Portal](#). Students in other Faculties and Schools who are enrolled in this course should refer to the protocol for their home Faculty.

Students are encouraged to submit requests as soon as the need becomes apparent and to contact their instructor and/or course coordinator as soon as possible once academic consideration has been granted. Any delay in contact may limit the options available for academic consideration. While we encourage instructors to accommodate, each instructor has discretion in deciding whether or how to apply the Academic Consideration. For more information on the Academic Consideration process, what is and is not an extenuating circumstance, and to submit an Academic Consideration request, please see the Faculty of Arts and Science's [Academic Consideration website](#). ASO courses include links to information on **Academic Consideration** on your **Course Homepage** in onQ.

Please see the Teaching Team page for contact information for your instructor and TA(s), where relevant.

For more information, please see the [Senate Policy on Academic Consideration for Students in Extenuating Circumstances](#).

#### *Copyright Statement*

This material is copyrighted and is for the sole use of students registered in PSYC 423. This material shall not be distributed or disseminated to anyone other than students registered in PSYC 423. Failure to abide by these conditions is a breach of copyright, and may also constitute a breach of academic integrity under the University Senate's Academic Integrity Policy Statement. <https://www.queensu.ca/secretariat/policies/administration-and-operations/copyright-compliance-and-administration-policy>

## Course Schedule

In this course, we begin in the first part by looking at how perception, attention, and memory construct our visual experience and why they sometimes lead us astray. The second and third parts focus on vision in action, including eye movements, film editing, and designs that compete for attention. The fourth emphasizes applied contexts such as deepfakes, virtual reality, and driving and delves into how technology interacts with our cognitive strengths and limits. Throughout the term, the topics will build on one another, and so we will return to earlier ideas in new contexts, which will offer deeper insight into how people see, interpret, and sometimes misinterpret the visual world.

Week	Day	Date	Topic	Readings & Assignments
1	Monday	05-Jan	<b>Introduction</b>	
	Online	07-Jan	<b>Introductory Video Presentation Assignment Due Thursday at 6pm</b>	
<b>Part 1: How vision builds the world</b>				
2	Monday	12-Jan	<b>Predictive Vision:</b> How the Brain Fills in the World	Intraub, H. & Richardson, M. (1989). Wide-angle memories of close-up scenes. <i>Journal of Experimental Psychology: Learning, Memory, and Cognition</i> , 15, 179-187.  Peelen, M. V., Berlot, E., & de Lange, F. P. (2024). Predictive processing of scenes and objects. <i>Nature Reviews Psychology</i> , 3(1), 13-26. (link)
	Online	14-Jan	<b>Video Presentation Assignment (Group Member 1): Presentations due Wednesday at 6pm; Responses due Friday at 6pm</b>	

3	Monday	19-Jan	<p><b>Remembering Scenes:</b> What is remembered vs reconstructed in scenes</p>	<p>Hall EH, Bainbridge WA, Baker CI. Highly similar and competing visual scenes lead to diminished object but not spatial detail in memory drawings. <i>Memory</i>. 2022 Mar;30(3):279-292.</p> <p>Kaunitz, L. N., Rowe, E. G., &amp; Tsuchiya, N. (2016). Large capacity of conscious access for incidental memories in natural scenes. <i>Psychological science</i>, 27(9), 1266-1277.</p>
	Online	21-Jan	<p><b>Video Presentation Assignment (Group Member 2):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	
4	Monday	26-Jan	<p><b>When Memory Adds What Wasn't There:</b> False visual memories and shared distortions</p>	<p>Wang, J., Otgaar, H., Howe, M. L., Lippe, F., &amp; Smeets, T. (2018). The nature and consequences of false memories for visual stimuli. <i>Journal of Memory and Language</i>, 101, 124-135.</p> <p>Prasad D, Bainbridge WA. The Visual Mandela Effect as Evidence for Shared and Specific False Memories Across People. <i>Psychol Sci</i>. 2022 Dec;33(12):1971-1988.</p>
	Online	28-Jan	<p><b>Video Presentation Assignment (Group Member 3):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	
<p><b>Part 2: What attention lets us miss</b></p>				

5	Monday	02-Feb	<p><b>Seeing vs Noticing:</b> How little we consciously register, even when looking directly at something</p>	<p>Rensink, R. A., O'Regan, J. K., &amp; Clark, J. J. (1997). To see or not to see: The need for attention to perceive changes in scenes. <i>Psychological science</i>, 8(5), 368-373.</p> <p>Barzy, M., Morgan, R., Cook, R., &amp; Gray, K. L. (2023). Are social interactions preferentially attended in real-world scenes? Evidence from change blindness. <i>Quarterly Journal of Experimental Psychology</i>, 76(10), 2293-2302.</p>
	Online	04-Feb	<p><b>Video Presentation Assignment (Group Member 4):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	
6	Monday	09-Feb	<p><b>Movies, Editing, and the Illusion of Continuity:</b> Why viewers fail to detect inconsistencies and how narrative guides attention</p>	<p>Smith T J, Lamont P, Henderson J M. (2013). Change blindness in a dynamic scene due to endogenous override of exogenous attentional cues. <i>Perception</i> 42(8) 884-886.</p> <p>Levin, D. T., Baker, L. J., Wright, A. M., Little, J. W., &amp; Jaeger, C. B. (2022). Perceiving versus scrutinizing: Viewers do not default to awareness of small spatiotemporal inconsistencies in movie edits. <i>Psychology of Aesthetics, Creativity, and the Arts</i>.</p>
	Online	11-Feb	<p><b>Video Presentation Assignment (Group Member 5):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	

7	Monday	16-Feb	<b>***Reading Week***</b>	
	Online	18-Feb		
<b>Part 3: Vision in Motion</b>				
8	Monday	23-Feb	<p><b>How the Eyes 'Guide' the Mind:</b> Basis of Gaze control, anchor objects, natural search behavior</p>	<p>Henderson, J. M. (2017). Gaze control as prediction. <i>Trends in Cognitive Sciences</i>, 21(1), 15-23.</p> <p>Helbing, J., Draschkow, D., &amp; L.-H. Vö, M. (2022). Auxiliary scene-context information provided by anchor objects guides attention and locomotion in natural search behavior. <i>Psychological Science</i>, 33(9), 1463-1476.</p>
	Online	25-Feb	<b>Video Presentation Assignment (Group Member 1):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm	
9	Monday	02-Mar	<p><b>Attention for Sale:</b> How ads and media layouts capture, redirect, or overload attention</p>	<p>Kaspar, K., Weber, S. L., &amp; Wilbers, A. K. (2019). Personally relevant online advertisements: Effects of demographic targeting on visual attention and brand evaluation. <i>PloS one</i>, 14(2), e0212419.</p> <p>Beuckels, E., Hudders, L., Cauberghe, V., Bombeke, K., Durnez, W., &amp; Morton, J. (2021). To fit in or to stand out? An eye-tracking study investigating online banner effectiveness in a media multitasking context. <i>Journal of Advertising</i>, 50(4), 461-478.</p>
	Online	04-Mar	<b>Video Presentation Assignment (Group Member 2)</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm	

Part 4: Technology and High-stakes consequences				
10	Wednesday	09-Mar	<p><b>Deepfakes and Why Seeing Isn't Believing:</b> Looking at perception of authenticity, confidence vs accuracy, and unconscious influence</p>	<p>Köbis, N. C., Doležalová, B., &amp; Soraperra, I. (2021). Fooled twice: People cannot detect deepfakes but think they can. <i>Iscience</i>, 24(11).</p> <p>Jin, X., Zhang, Z., Gao, B., Gao, S., Zhou, W., Yu, N., &amp; Wang, G. (2023). Assessing the perceived credibility of deepfakes: The impact of system-generated cues and video characteristics. <i>New Media &amp; Society</i>, 27(3), 1651-1672.</p>
	Online	11-Mar	<p><b>Video Presentation Assignment (Group Member 3):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	
11	Monday	16-Mar	<p><b>***No Class***</b></p>	
	Online	18-Mar	<p><b>***No Video Presentation Assignment***</b> <b>Research Proposal Idea Due</b> <b>Proposal Idea Summary Due</b> <b>(Friday Mar 20 at 11:59PM)</b></p>	
12	Monday	23-Mar	<p><b>Navigating Virtual Worlds:</b> How VR changes spatial updating and sense of place</p>	<p>Pastel, S., Chen, C. H., Bürger, D., Naujoks, M., Martin, L. F., Petri, K., &amp; Witte, K. (2020). Spatial orientation in virtual environment compared to real-world. <i>Journal of Motor Behavior</i>, 53(6), 693–706.</p> <p>De Back, T.T., Tinga, A.M. &amp; Louwse, M.M. Natural- and redirected walking in virtual reality: Spatial performance and user experience. <i>Multimed Tools Appl</i> (2024).</p>
	Online	25-Mar	<p><b>Video Presentation Assignment (Group Member 4):</b> <b>Presentations due Wednesday at 6pm;</b> Responses due Friday at 6pm</p>	

13	Monday	30-Mar	<p style="text-align: center;"><b>Driving and Distraction:</b></p> <p>What happens when putting attention under pressure</p>	<p>Grahn, H., &amp; Kujala, T. (2020). Impacts of Touch Screen Size, User Interface Design, and Subtask Boundaries on In-Car Task's Visual Demand and Driver Distraction. <i>International Journal of Human-Computer Studies</i>, 142, 102467.</p> <p>Wood, G and Hartley, G and Furley, P and Wilson, MR (2016) Working Memory Capacity, Visual Attention and Hazard Perception in Driving. <i>Journal of Applied Research in Memory and Cognition</i>, 5(4), 454-462.</p>
	Online	01-Apr	<p><b>Video Presentation Assignment (Group Member 5):</b></p> <p><b>Presentations due Wednesday at 6pm;</b></p> <p>Responses due Friday at 6pm</p> <p><b><i>Final Paper Due (Wednesday April 8)</i></b></p>	