

Faculty of Health
Department of Psychology
PSYC 4010 6.0 Section B: SEMINAR IN DEVELOPMENTAL PSYCHOLOGY
Wednesdays 11:30am to 2:30pm
Fall 2021 & Winter 2022

This course will be delivered both synchronously and asynchronously, as outlined in the Course Schedule below. Whether a particular week is synchronous or asynchronous is noted on the schedule with the bolded terms “In Person via Zoom” (synchronous) or “E-Class” (asynchronous). “In Person via Zoom” requires students to attend class during the scheduled class time via Zoom. “E-Class” requires students to watch recorded lectures, complete activities, discussions or activities when convenient for them, noting the due dates outlined. Since attendance and participation is a component of this course, you should only remain enrolled in this course if you have no other commitments on Wednesdays from 11:30am to 2:30pm. Further, there may be unanticipated changes in the schedule so it best to keep class time free for all weeks. In addition, group meetings with the instructor are scheduled during class time even on ‘E-Class’ weeks.

Note that for the Winter 2022 term dates, the “**In Person via Zoom****” class dates may be converted to “In Person” (i.e., on York’s campus). This will be discussed near the end of the Fall term and any class dates switched to in person will be confirmed then. I will take into account the wishes of the majority of the class, comfort level of each individual student, as well as public health and York University guidelines. Please be prepared to be available in person for these starred (**) dates in Winter 2022 term.

Instructor Information

Instructor: Dr. Thanujeni (Jeni) Pathman

Office Hours: Scheduled time at end of classes, or by appointment.

Email: t.pathman@yorku.ca

Course Prerequisite(s): Course prerequisites are strictly enforced

- HH/PSYC 1010 6.00 (Introduction to Psychology), with a minimum grade of C.
- HH/PSYC 2021 3.00 (Statistical Methods I) or HH/PSYC 2020 6.00 (Statistical Methods I and II)
- HH/PSYC 2030 3.00 (Introduction to Research Methods) or substitutes
- HH/PSYC 2110 3.00 (Developmental Psychology)
- Students must be in an Honours program in Psychology and have completed at least 84 credits

Course Credit Exclusions

Please refer to [York Courses Website](#) for a listing of any course credit exclusions.

Course website: [E-Class](#) (formerly Moodle)

The course E-Class site is your central access point for all course materials, activities, and assignments. Class announcements will be made via E-Class also.

Course Description

This is a seminar-style course in which we will investigate classic and contemporary issues in Cognitive Development. We will discuss and analyze critically original works by influential developmental psychologists. There are no formal lectures; rather, presentations and group discussions will be led by the instructor or by students with guidance from the instructor.

As a seminar class, the principal activities will be the active discussion of readings. Thus, you should be prepared to do a significant amount of reading for every class and you are expected to read the material critically and carefully. This means that before coming to class, you should be able to summarize the readings, relate it to the course themes, and generate questions for discussion. If you are having trouble with any given reading, you should arrange to meet with the instructor prior to class (this does not mean right before class). It is quite possible that you will have to organize your schedule to do the readings well in advance of class so that you can ensure that you understand them appropriately.

*This class that will require either remote attendance via Zoom at the scheduled time, or participation online via E-Class. See weekly schedule.

Program Learning Outcomes

Upon completion of this course, students should be able to:

1. Demonstrate in-depth knowledge in developmental psychology.
2. Critically evaluate, synthesize and resolve conflicting results in developmental psychology.
3. Articulate trends in developmental psychology.
4. Locate research articles and show critical thinking about research findings in developmental psychology.
5. Express knowledge of developmental psychology in written form.
6. Engage in evidence-based dialogue with course director and peers.

Specific Learning Objectives Students will learn about classic and cutting-edge studies in cognitive development, learn how to read and write scientific papers, present and discuss research in a group setting, and provide feedback on peer writing.

Required Text

There are no textbooks. Weekly readings will be provided to students on syllabus (or via E-Class), consisting of journal articles, book chapters or online media.

Course Requirements and Assessment:

Assessment	Date of Evaluation (if known)	Weighting
Attendance and Participation (Fall term)	Weekly (instructor feedback given end of Fall term)	10%
Research Paper Outline Assignment and Meeting	Outline due Saturday November 27th at noon. (Instructor feedback during scheduled meeting)	10%
Group Presentation #1	Varies (instructor feedback given end of Fall term)	15%
Attendance and Participation (Winter term)	Weekly (instructor feedback given end of Winter term)	10%
Peer Feedback on Paper Drafts	March (instructor feedback given end of Winter term)	5%
Group Presentation #2	Varies (instructor feedback given end of Winter term)	15%
Final Research Paper	April 10th at noon (instructor feedback given end of Winter term, end of exam period)	35%
Total		100%

Description of Assignments

1. Attendance/Quizzes and Participation:

Active participation is critical for a seminar-style course. Thus students will be graded on attendance (for *in person via Zoom* weeks), online quizzes or activities (for *E-Class* weeks) and participation (both during class and on E-Class discussion boards).

It is your responsibility to meet with me if you want feedback on your participation during the term. While some students find it very natural to be involved in class discussions, others find it very challenging (myself included). I have worked with many students in an effort to increase the quantity and quality of participation. Successful strategies include:

- (a) Writing down points of interest as you do the reading for the next class and when you listen to the presentations. Bring up these points up in class.
- (b) Relating the research findings in the videos/articles to your own observations outside of class.
- (c) If you have a point to make but the discussion isn't on that topic, feel free to jump on in and change topics. If the timing is not appropriate, I'll let you know and get back to you when it is appropriate.
- (d) A common reason for not participating is that some students believe that their ideas are not important enough. Let me assure you, this is not the case. One of my roles as the instructor is to take your idea and help you expand on it by asking follow-up probe questions. You will quickly see that all contributions to the discussion are valuable.

2. Group Presentations:

Each student will participate in two group presentations during the year. Presentations consist of summarizing a research article and leading a discussion with the class. By the third week of class, students will be divided randomly into groups, if possible, and each group will choose their preferred presentation topic. Group membership and topic may be changed at the discretion of the instructor. Additional information on the presentations and their grading will be provided in a separate document.

3. Research Paper:

Each student will turn in an APA-style research paper (a research proposal). This paper will describe a novel experiment, and will include a title page, abstract, Introduction, Method, Analytic Plan and Predicted Results, and References. Figures, tables and appendices are optional. Your paper must conform to APA guidelines. Your paper must include at least 5 references from reputable

journals and must be double-spaced in MS Word with 12 pt. Times New Roman font and 1" margins on all 4 sides. Your paper must be at least 8 pages long (this may include your title page, abstract, tables, and figures, references, etc.).

The research outline assignment, drafts and instructor/peer feedback throughout the year will help you revise and improve your paper. More information about the assignments related to the research paper and their grading will be provided in a separate document.

Class Format and Attendance Policy

Seminar-style classes with active discussion requires students to attend and contribute. Thus, attendance is expected for every *in person via Zoom* class (see schedule below), and it is expected that students join the zoom meeting on time. If you cannot regularly make it to class on time, you should withdraw from the course immediately. Any student arriving late will receive a warning the first time; however, for every instance thereafter, students who are not present when attendance is taken will be marked absent. Students who are disruptive during class will be asked to leave and counted as absent.

Students who are caregivers should feel free to talk to me about options (e.g., muting audio and/or video).

Grading as per Senate Policy

The grading scheme for the course conforms to the 9-point grading system used in undergraduate programs at York (e.g., A+ = 9, A = 8, B+ = 7, C+ = 5, etc.). Assignments and tests* will bear either a letter grade designation or a corresponding number grade (e.g. A+ = 90 to 100, A = 80 to 89, B+ = 75 to 79, etc.)

For a full description of York grading system see the York University Undergraduate Calendar – [Grading Scheme for 2021-22](#)

Missed or Late Work

For any missed required classes, meetings, presentations, quizzes/participation, and late assignments (i.e., paper related assignments), students MUST complete the following online form which will be received and reviewed in the Psychology undergraduate office.

At this time, due to COVID-19 an Attending Physician's Statement (APS) is not required, however, a reason for missing an evaluated component in the course must be provided.

[HH PSYC: Missed Tests/Exams Form](#). Failure to complete the form within 48 hours of the original deadline will result in a grade of zero for the missed component.

Missed presentations:

- Students who miss their presentation without the above form and approved reason will receive a 0 for the presentation.
- The accommodation for students who do complete the above form and have an approved reason for missing their presentation, will consist of uploading an individual presentation video (using a new research article) and posting discussion questions on E-Class. Due date for this accommodation will be discussed with the instructor.

Late Assignments:

- Assignments are due before the specified time on the specified due date. Printers not working, computers crashing, misreading the assignment deadlines, etc. are not acceptable reasons to hand in an assignment late. Regularly back up your work.
- If you turn in an assignment 10 min to 24 hours late, 20% will be taken off; 24 to 72 hours late, 30%; up to one week late, 40%; up to two weeks late, 60%. As soon as they are completed, please turn in the late assignment electronically (E-Class or email). I will use time stamps to discern when an assignment was submitted.
- It is your responsibility to begin working on assignments well in advance of the deadline. Non-penalized extensions related to illness or family emergencies will only be granted if the situation warrants an extension, at the sole discretion of the instructor. Such a situation must be discussed with the instructor prior to the deadline, and the delay must be documented.

Add/Drop Deadlines

For a list of all important dates please refer to: [Fall/Winter 2021-22 Important Dates](#)

	Fall (Term F)	Year (Term Y)	Winter (Term W)
Last date to add a course without permission of instructor (also see Financial Deadlines)	Sept. 21	Sept. 21	Jan. 23
Last date to add a course with permission of instructor (also see Financial Deadlines)	Oct. 5	Oct. 26	Feb. 7
Drop deadline: Last date to drop a course without receiving a grade (also see Financial Deadlines)	Nov. 12	Feb. 11	18-Mar
Course Withdrawal Period (withdraw from a course and receive a grade of "W" on transcript – see note below)	Nov. 13 - Dec. 7	Feb. 12 - April 10	March 19 - April 10

Add and Drop Deadline Information

There are deadlines for adding and dropping courses, both academic and financial. Since, for the most part, the dates are **different**, be sure to read the information carefully so that you understand the differences between the sessional dates below and the [Refund Tables](#).

You are strongly advised to pay close attention to the "Last date to enrol without permission of course instructor" deadlines. These deadlines represent the last date students have unrestricted access to the registration and enrolment system.

After that date, you must contact the professor/department offering the course to arrange permission.

You can drop courses using the registration and enrolment system up until the last date to drop a course without receiving a grade (drop deadline).

You may [withdraw from a course](#) using the registration and enrolment system after the drop deadline until the last day of class for the term associated with the course. When you withdraw from a course, the course remains on your transcript without a grade and is notated as 'W'. The withdrawal will not affect your grade point average or count towards the credits required for your degree.

Information on Plagiarism Detection

Turnitin Software will be used to detect plagiarism. Often plagiarism can also be detected by using a simple internet search.

Plagiarism and cheating are very serious offenses, and we will treat them as such in this course. The penalty will range from a '0' on the assignment, to an automatic 'F' in the course. In some cases there are further consequences. See 'Academic Integrity for Students' section below and university academic honesty policy.

Ignorance is not an excuse. “Unintentional” or “accidental” plagiarism is not an excuse. If you do not know what constitutes plagiarism or cheating, then you must read the student code of conduct. If you are unsure of any aspect of this code or how it applies to the different assignments/tests in this class, then you must ask your instructor to clarify. If you are unsure, it is your responsibility to check with your instructor about whether you have adequately paraphrased and cited another source, well in advance of when the assignment is due. Copying or inadequately paraphrasing even one sentence or part of a sentence counts as plagiarism (more details below).

Plagiarism includes, but is not limited to, the following examples:

- Plagiarism includes the literal repetition without acknowledgment of the writings of another author. All phrases, clauses, or passages taken directly from source material without quotation marks *and* acknowledgement are instances of plagiarism. However, in scientific writing, direct quotes are rarely ever appropriate; instead, students should both paraphrase the original source AND cite where the ideas/information came from.
- Plagiarism includes inadequate paraphrasing (even if source is cited)
- Plgiarism includes not citing any materials (e.g., surveys, questionnaires, etc.) created by others
- Plagiarism includes borrowing without acknowledgment another writer's general plan in the creation of one's own plan.
- Plagiarism includes borrowing another's ideas and representing them as one's own. To paraphrase the thought of another writer without acknowledgment is to plagiarize.
- Plagiarism includes allowing any other person or organization to prepare work that one then submits as his or her own work.
- Plagiarism includes recycling your own work ('self-plagiarism')

You should summarize the research in your own words, giving credit for other authors' ideas, theories, paradigms, data, and terminology. If you are unsure how to summarize, a good first step is to ask yourself, "What does this research show?"

Direct quotations are usually not appropriate in scientific writing. Thus, avoid using direct quotes. You should summarize the research from other scientists, giving them credit for their work, but using your own words to describe their methodology and findings. Do not copy sentence structure, paragraph structure, or paper structure. "Writing" *your* paper means reading, understanding, and relaying back what you have learned in your own words.

It is not the responsibility of your instructor to detect plagiarism during the reading of draft versions of your paper. Again, if you are not sure if you paraphrased adequately, ask your instructor before the assignment is due.

***To prevent self-plagiarism, you will not be allowed to choose a paper topic that you have used in another class. It is your responsibility to see me if you have questions about this policy.

Electronic Device Policy

This course will be delivered in an online format and therefore electronic devices (e.g., tablets, laptops) are permitted during class time for course-related purposes. It is expected that you are paying attention and contributing during class meetings, discussions etc. So please do not allow distractions by keeping email and other browser windows closed.

Academic Integrity for Students

York University takes academic integrity very seriously; please familiarize yourself with [Information about the Senate Policy on Academic Honesty](#).

It is recommended that you review Academic Integrity by completing the [Academic Integrity Tutorial](#) and [Academic Honesty Quiz](#).

Test Banks

The offering for sale of, buying of, and attempting to sell or buy test banks (banks of test questions and/or answers), or any course specific test questions/answers is not permitted in the Faculty of Health. Any student found to be doing this may be considered to have breached the Senate Policy on Academic Honesty. In particular, buying and attempting to sell banks of test questions and/or answers may be considered as “Cheating in an attempt to gain an improper advantage in an academic evaluation” (article 2.1.1 from the Senate Policy) and/or “encouraging, enabling or causing others” (article 2.1.10 from the Senate Policy) to cheat.

Academic Accommodation for Students with Disabilities

While all individuals are expected to satisfy the requirements of their program of study and to aspire to do so at a level of excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to do so. The university encourages students with disabilities to register with ***Student Accessibility Services (SAS)*** to discuss their accommodation needs as early as possible in the term to establish the recommended academic accommodations that will be communicated to Course Directors as necessary. **Please let me know as early as possible in the term if you anticipate requiring academic accommodation so that we can discuss how to consider your accommodation needs within the context of this course.**

<https://accessibility.students.yorku.ca/>

Excerpt from Senate Policy on Academic Accommodation for Students with Disabilities:

1. Pursuant to its commitment to sustaining an inclusive, equitable community in which all members are treated with respect and dignity, and consistent with applicable accessibility legislation, York University shall make reasonable and appropriate accommodations in order to promote the ability of students with disabilities to fulfill the academic requirements of their programs. This policy aims to eliminate systemic barriers to participation in academic activities by students with disabilities.

All students are expected to satisfy the essential learning outcomes of courses. Accommodations shall be consistent with, support and preserve the academic integrity of the curriculum and the academic standards of courses and programs. For further information please refer to: [York University Academic Accommodation for Students with Disabilities Policy](#).

Course Materials Copyright Information

These course materials are designed for use as part of the Psy 4010 course at York University and are the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law.

Copying this material for distribution (e.g. uploading material to a commercial third-party website) may lead to a violation of Copyright law. [Intellectual Property Rights Statement](#).

Class Announcements

Announcements can be made **during class, on E-Class, or by e-mail**. You are responsible for all three types of announcements, and the onus is upon you to ensure that you receive them.

E-mail Etiquette Policy

You are encouraged to e-mail me at any time, however please ensure that you: (a) Check the syllabus and E-Class *first* to see if your question can be answered there. If you ask a question that has already been answered, you will receive an automated reply telling you to look up the answer yourself. (b) In the subject line of the email type the course name (PSYC 4010), otherwise your email may end up in my spam folder. (c) Use appropriate etiquette when you e-mail and I will do the same in return: (i) begin with a greeting; (ii) state who you are and which class you are in; (iii) end with an appropriate signature. Don't forget to use spell-check. If you fail to adhere to these guidelines, you will receive an automated reply that instructs you to consult these guidelines and to re-send your e-mail. Example of appropriate e-mail format:

Hi Dr. Pathman,

My name is [YOUR FULL NAME] and I am in your Developmental Seminar class. I have a question about...

Thanks,

[YOUR NAME]

Course Schedule

Note some weeks are asynchronous (noted as “E-Class”) and some weeks are synchronous (noted as “In Person via Zoom”). All Zoom links provided via E-Class.

Any aspect of this schedule can change at the discretion of the Instructor.

Date	Class Topic and Activities	Readings To be Completed Before Class and Deadlines
September 8, 2021 E-Class	Course Introduction 1. Syllabus 2. Course organization 3. Preview of weekly topics 4. Themes	Syllabus & http://nobaproject.com/modules/cognitive-development-in-childhood E-Class Activities: -Watch my lecture video -Quiz (based on lecture and syllabus); due before Sept. 14 th 11pm -Participation Opportunity: post on the noba project article/resources; due before Sept. 14 th 11pm
September 15, 2021 In Person via Zoom	Review of Concepts and Plan for Success 1. Research Methods course review; Research ethics 2. Journal articles: search and structure 3. Group presentations organization	Read before class: http://nobaproject.com/modules/research-methods-in-developmental-psychology

	4. How to write a research proposal paper	
September 22, 2021 In Person via Zoom	Cognitive Development and Theories 1. Piaget, Vgotsky, others. Developmental cognitive neuroscience. 2. Class discussion. 3. Group work time.	No assigned reading, but think about this question before class, for discussion: Why are theories and models important?
September 29, 2021 In Person via Zoom	Prenatal Development and Genes 1. Prenatal development and birth 2. Hereditary Influences on Development; Gene-Environment Interactions. 3. Assigned reading discussion.	Read before class: Day, J., Savani, S., Krempley, B. D., Nguyen, M., & Kitlinska, J. B. (2016). Influence of paternal preconception exposures on their offspring: through epigenetics to phenotype. <i>American Journal of Stem Cells</i> , 5(1), 11–18. (Try to find the above article yourself through York libraries. I will also post to our E-Class site.)

	4. Group work time.	
October 6, 2021 E-Class	<p>Infants and the physical world</p> <p>1. Methods and capabilities, perception, memory</p> <p>2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).</p>	<p>Watch film, <i>Babies</i> (available via York libraries; https://www.library.yorku.ca/find/Record/3506151 - click on ‘Click here for the electronic version’)</p> <p>E-Class Activities:</p> <ul style="list-style-type: none"> -Watch my lecture video -Quiz (based on lecture) due by Oct. 19th 11pm -Participation Opportunity: post on the film, <i>Babies</i>; complete by Oct. 19th 11pm
October 13, 2021	No class Reading Week	
October 20, 2021 In Person via Zoom	<p>Infants and the physical world (cont'd)</p> <p>1. Group A Presentation and Discussion</p>	See E-Class for readings selected by groups.

	<p>2. Group B Presentation and Discussion</p> <p>3. Meetings with peers and instructor on individual research paper.</p>	
October 27, 2021 E-Class	<p>Infancy and the psychological world</p> <p>1. Early social cognition</p> <p>2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).</p>	<p>Shultz, S., Klin, A., & Jones, W. (2018). Neonatal Transitions in Social Behavior and Their Implications for Autism. <i>Trends in Cognitive Sciences</i>, 22, Issue 5, 452-469.</p> <p>E-Class Activities:</p> <ul style="list-style-type: none"> -Watch my lecture video -Quiz (based on lecture) due by Nov. 2, 11pm -Participation Opportunity: post on the Shultz et al. reading; complete by Nov. 2, 11pm
November 3, 2021 In Person via Zoom	<p>Infancy and the psychological world</p> <p>1. Group C Presentation and Discussion</p> <p>2. Group D Presentation and Discussion</p> <p>3. Meetings with peers and instructor</p>	See E-Class for readings selected by groups.

	on individual research paper.	
November 10, 2021 E-Class	Concepts and Reasoning 1. Conceptual development 2. Casual reasoning	Inagaki, K., & Hatano, G. (2006). Young children's conception of the biological world. <i>Current Directions in Psychological Science</i> , 15, 177-180. E-Class Activities: -Watch my lecture video -Quiz (based on lecture) due by Nov. 16, 11pm -Participation Opportunity: post on the Inagaki & Hatano paper; complete by Nov. 16, 11pm
November 17, 2021 E-Class	Language Development 1. Language acquisition 2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).	Watch video Human Brain Development available through York Libraries link: https://ocul-yor.primo.exlibrisgroup.com/permalink/01OCUL_YOR/q36jf8/alma991025073969705164 (Click on 'view full text') E-Class Activities: -Watch my lecture video -Quiz (based on lecture) due by Nov. 23, 11pm -Participation Opportunity: post on the Human Brain Development video; complete by Nov. 23, 11pm
November 24, 2021	Language Development (cont'd)	See E-Class for readings selected by groups.

In Person via Zoom	1. Group E Presentation and Discussion 2. Group F Presentation and Discussion 3. Meetings with peers and instructor on individual research proposal.	***Research Paper Outline Assignment submitted via E-Class by Saturday November 27th at noon.
December 1, 2021 In Person via Zoom (attendance not required/graded)	Individual meeting with instructor about research outline and planned paper. Individual meetings scheduled. (With instructor permission, student may have this meeting at the end of a previous class instead.)	

January 12, 2022 E-Class	Social World 1. Social cognition, mental representation, and theory of mind 2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).	Lillard, A.S. (2017). Why Do the Children (Pretend) Play? <i>Trends in Cognitive Sciences</i> , 21, 826-834. E-Class Activities: -Watch my lecture video -Quiz (based on lecture) due by Jan. 18, 11pm -Participation Opportunity: post on the Lillard article due by Jan. 18, 11pm
January 19, 2022 In Person via Zoom**	Social World (cont'd) 1. Group A Presentation and Discussion 2. Group B Presentation and Discussion 3. Meetings with peers and instructor on individual research paper.	See E-Class for readings selected by groups.
January 26, 2022 E-Class	Memory Development 1. Episodic, semantic, autobiographical	Memory http://nobaproject.com/modules/memory-encoding-storage-retrieval Eyewitness testimony and memory biases http://nobaproject.com/modules/eyewitness-testimony-and-memory-biases E-Class Activities:

	memory development. 2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).	-Watch my lecture video -Quiz (based on lecture) due by Feb. 1, 11pm -Participation Opportunity: post on one of the Noba Project articles due by Feb. 1, 11pm
February 2, 2022 In Person via Zoom**	Memory Development (cont'd) 1. Group C Presentation and Discussion 2. Group D Presentation and Discussion 3. Meetings with peers and instructor on individual research paper.	See E-Class for readings selected by groups.
Feb 9, 2022 E-Class	Metacognition and Executive Functions 1. Metacognition, metamemory 2. Executive functions	Bialystok, E. (2015). Bilingualism and the Development of Executive Function: The Role of Attention. <i>Child Development Perspectives</i> , 9, 117-121. E-Class Activities: -Watch my lecture video -Quiz (based on lecture) due by Feb. 15, 11pm -Participation Opportunity: post on the Bialystok article due by Feb. 15, 11pm

	3. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).	
February 16, 2022 In Person via Zoom**	Metacognition and Executive Functions (cont'd) 1. Group E Presentation and Discussion 2. Group F Presentation and Discussion 3. Meetings with peers and instructor on individual research paper.	See E-Class for readings selected by groups.
February 23, 2022	No Class Reading Week	
March 2, 2022 In Person via Zoom	TBA Will be used as a writing workshop or another type of class based on student feedback of	

	what will most help the class.	
March 9, 2022 E-Class	Education 1. Reading and mathematical development 2. Instructor meets with next class group presenters via Zoom during class time (11:30am & 11:45am).	Howard-Jones, P.A. (2014). Neuroscience and education: myths and messages. <i>Nature Reviews Neuroscience</i> , 15, 817-824. E-Class Activities: -Watch my lecture video -Quiz (based on lecture) due by March 15, 11pm -Participation Opportunity: post on the Howard-Jones article due by March 15, 11pm
March 16, 2022 In Person via Zoom**	Education (cont'd) 1. Group G Presentation and Discussion 2. Group H Presentation and Discussion 3. Meetings with peers and instructor on individual research paper.	See E-Class for readings selected by groups.
March 23, 2022 In Person via Zoom	Paper Feedback Instructor and Peer Meetings	***Upload electronic version of paper draft to E-Class by March 19 th at noon. Peers will use this to provide feedback on E-Class.

(attendance not required/graded)		<i>For those who also want to meet with the instructor for feedback, send a copy of paper draft before class.</i>
March 30, 2022	No Class Use class time to work on your paper.	
April 6, 2022 In Person via Zoom (attendance not required/graded)	Paper Feedback Instructor and Peer Meetings	<i>For those who also want to meet with the instructor for feedback, send a copy of paper draft before class.</i>
		<i>***Final Paper Due on E-Class by April 10th at noon</i>