SYLLABUS – PSY 493-005 Issues in Psychology (W)

**NEUROSCIENCE OF CHILD DEVELOPMENT**

Mon & Weds, 10:20-11:40, Berkey Hall 219

**Instructor**

Dr Melissa Johnson

mjallman@msu.edu (preferred mode of contact) \*note the different surname

**Office hours by appointment – please feel free to email me to arrange. Just because I don’t have posted office hours, doesn’t mean I don’t want to see you – I do, it’s just easier to arrange on a case-by-case basis.**

**Course overview**

This writing (W) course will examine brain and mind development during the first five years of a child’s life, including in-utero. It will focus primarily on prenatal influences on brain development, and postnatal brain development as it corresponds to sensory and mental function. For ease of organization and class discussion of topics, it is organized into four modules – Nature and Nurture (Life in the womb); The senses (Pre- and post-natal development); Cognitive functions (The magic of age 4); When development gets disordered.

Topics we will cover include: development of each of the senses and perception, learning and memory; temporal, numerical and spatial processing; emotion; theory of mind; language; attention; motor programs; and developmental disabilities.

In addition acquiring knowledge on child brain development, I hope you learn about effective writing also during this course, and **the majority of your grade will be based on your writing**. Given the advent of generative A.I. writing technology (e.g., ChatGPT == no AI allowed in course, see later in syllabus) the art of writing (and by implication, thinking) is a precious skill to have and to work on, and to cherish. We will have several tutorials on effective science writing (across each module), and you will have homework to target specific skills. You will be assessed by three different writing formats:

The writing part of your assignment is a recruitment tool used by employers of science writers - You will be tasked with writing to both a parent reader, and an academic reader during this course (you get to choose for each module). Being able to write to your reader is key. In the real-world, recruiters may ask you to write on the same topic in both styles, but for the purposes of mastering the course content, you will write on different topics for each style of writing (from different course modules).

An unconventional conventional essay - during the exam (which will take two classes) you will choose one previously unseen exam question and will be graded on your essay plan and planning, as well as your essay (both written by hand in each exam class, respectively).

Quizzes for each of the three modules, and your class engagement (attendance, completion of tasks on D2L), also contribute toward your final grade.

**Recommended course text**

**Eliot, L. “What’s going on in there: How the Brain and Mind develop in the first five years of life” (2000) Bantam Books, ISBN: 0553-37825-2**

This book is written by a behavioral neuroscientist who is also a parent - it is not a textbook but rather a parenting/popular psychology text. It is written in a style for a parent, however it has great value (and is scientifically sound) and provides an easily digestible discussion on complex developmental brain science from a neuroscientist’s perspective. I hope you will learn much about good writing from reading this book. The topics of lectures (see course schedule) corresponds to chapters in this text, and the lecture material will focus (and expand) upon information contained in the book.

**Additional readings**

For each lecture, there may be additional readings (empirical papers) that will be on the D2L site for the course. The number of additional readings will vary per lecture, but should be between 1-4 (depending on their length/level of complexity, etc.). **You are expected to read these papers.** Given they are on topics based on a scientist’s topic of study (i.e., written by experts in their respective fields) they go into a level of detail often beyond that covered in class. Please don’t be intimidated by this—you don’t need to try and understand or memorize all of it (try and get the gist). The readings are designed to further support and expand your understanding of lecture (and the course book) material. You are not expected to memorize chunks of the additional reading, but rather to get the general gist and to build on what we have covered in class. You are also encouraged to go beyond the additional readings sent to you, and to independently find other relevant articles (particularly on topics that interest you, or that you choose to write an essay on – see exam format). One way to do this is to do a literature search (i.e., on PubMed, Web of Science, Google) and/or to read other papers in the reference section of the papers you have been given (or other papers cited in the recommended course book ‘What’s going on in there’ by Lise Eliot. We will have tutorials with group discussion about papers you’ve been tasked to read, and find, on developmental neuroscience, and about how to write well.

**Class schedule**

To make course organization easier, class materials (lecture handouts, reading, videos, dropboxes for homework, etc.) will appear in designated module folders on D2L (see blue boxes below).

8/26 Introductions

8/28 Tutorial 1 – How to read a paper – tutorial 1 homework nature/nurture, sex/gender paper search.

See Module 1 folder on D2L for class materials

9/2 *no class – Labor day*

9/4 ‘Three Identical Strangers’ video watch – *homework set*.

9/9 Nature vs Nurture

9/11 Biology of Prenatal Brain Development

9/16 Prenatal influences on the brain – *blogging homework due.*

9/18 How birth affects the brain

9/23 Tutorial – Writing for your reader, my ABA essay; your blog feedback, grading student homework blogs on ‘Three Identical Strangers’ according to grading rubric; tutorial 1 homework discussion

9/25 Seminar discussion *–* Stress and development class readings

**Sunday 9/29, 11:59 pm – Graded Module 1 writing due**

9/30 Somatosensory development

10/2 Olfactory development

See Module 2 folder on D2L for class materials

10/7 Taste and food preference

10/9 Vestibular development

10/14 *Tutorial – Planning and writing an essay, grading; graded writing feedback*

10/16 Auditory and visual system development

**Sunday 9/20, 11:59 pm – Graded Module 1 rv writing due**

10/21 *no class – MSU Break day*

‘Midterm’

10/23 **EXAM 1** – **Modules 1 & 2** Questions and essay plan (in class)

10/28 **EXAM 1** – Write essay (in class)

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**course ‘halfway’

10/30 Motor development

See Module 3 folder on D2L for class materials

11/4 Time, space and number (no chapter in book)

11/6 Social-emotional development

11/11 Development of memory

11/13 Theory of mind (no chapter in book) **Tuesday 11/12, 11:59 pm – Graded Module 2 writing due**

11/18 *Tutorial – class readings on cognitive developmental neuroscience*

11/20 *Tutorial – Exam essay feedback*

11/25 Language and speech

11/27 Developmental disabilities

12/2 **EXAM 2** – **Module 3** Questions and essay plan (in class)

‘Final’

12/4 **EXAM 2** – Write essay (in class)

12/9-12/13 – MSU exam week (no exam, but **Wednesday 12/11, 11:59 pm – Graded Module 3 writing due**

**Assessment**

Your final grade on this course will be based on:

1. Three writing formats: Writing to a parent reader; writing to an academic reader; unseen exam question planning and answer. You will have a written assignment for each module:
2. For module 1, you choose your reader and write your best version. You then receive feedback and have an option to revise post-feedback your assignment. Your grade cannot go down on resubmission, but it can stay the same or go up (by a little). If you choose not to revise/resubmit, your grade for the revision will be the same as your first submission. Both first and revised submissions, count **equally** to your final grade. For Modules 2 & 3, you again need to choose to write for a parent or academic reader (you CANNOT choose the same reader for both.
3. The course is divided into two halves (pre- and post- the mid-point) so you will do exams twice. Exam 1 = Modules 1 & 2; Exam 3= Module 3.
4. Quizzes on D2L for each of the three modules.
5. Engagement: Attendance in class, completion of homework and quizzes.

For modules 2 and 3, you need to choose ONE module for a parent reader, and the OTHER module for an academic reader. You will lose an automatic 5% (a whole grade boundary) if you fail to do this and write to the same reader each time. The questions for modules 2 and 3 will be released at the same time, so you can evaluate both topics in making your decision. Remember, though they are intended for different readers, both prompts share the same required topics to include (same content as a backbone, just pitched differently). Make sure to keep your reader in mind throughout your writing (their expectations) and write to communicate the content to them.

**Graded writing to a parent:**

This demands your ability to select and include the relevant class content, and communicate it in a way that is **clear, concise, and walks your reader through the science**, without dumbing it down or lacking on depth of content (the science/detail/debates). You are required to be as thorough in your coverage of class content as for an academic essay – it should not be basic - but you need to be selective in how this is conveyed – the author of your coursebook is able to communicate complex science to non-science readers – try and do the same. **Your writing should have word count of no more than 600 words.** No reference section is necessary, although suggestions for further reading are welcomed.

**Graded writing to an academic:**

This demands your ability to select and include the relevant class content, and communicate it in a way that is **technically sound.** It should include **independent peer-reviewed studies where possible, and the ‘why, how, and what’ of a study’s findings. I am looking for content, critical thinking, structure**, etc. and you should include a references section, formatted to APA. **Your writing should have word count of no more than 1000 words.**

For both graded writing to a parent and academic, see the detailed section-by-section grading rubric on D2L. Make sure you are writing to your intended audience.

**EXAM time essay planning and writing:**

Each of the exams (so-called midterm and final; on modules relevant to the respective half of the course only) will be spread over two classes. During the first exam class, you will see the previously unseen questions and prepare at least one (or two if you aren’t sure of which essay you will end up answering) essay plans. You will be able to bring in and have access to the course book in this class (but no computer/online materials). You will turn in your essay plan at the end of the exam period – this will then be scanned by me and emailed back to you later that day. In the period between the two exam classes you are allowed to work on how you will write and source any additional scientific papers/independent reading during this time that will complement the sections you’ve planned. **I encourage you to think about your essay plan and how you will add ‘meat to the bones’ of your plan.** You will then write your essay (no class materials allowed, no coursebook) in the next class period. Any essay that substantially deviates from the original essay plan will be penalized – **you need to spend time on your essay plan in the first EXAM time, you want to make sure you think about each section/sub-topic you want to discuss, and it’s organization.** **Do not write an essay that is markedly different from your plan** (don’t majorly change or add new ‘bones’ so it takes on a different form, you should be fleshing them out). No references section is necessary. There is no word count limit or guide length for this essay (or plan). More is better than less when it comes to an essay plan.

**Your essay plan, and written essay, both contribute to your exam essay score (midterm and final). The essay plan contributes 30% and the essay itself 70% of each exam.** For the essay plan, you will be graded on depth of content, organization, structure – evidence that you understand the topic and are thinking about how best to structure your essay. This will be in draft form – if you make changes to the organization as you go through your planning that’s fine, draft, unpolished, or visual flow charts are fine (you will have paper readily available and just turn in what you produce – it’s the process of planning and getting that plan to be a considered version that is my intention/what I’m interested in. The written essay itself will be graded according to your essay structure, class content selected, discussion of topics, wider reading and independent thinking.

**QUIZZES ON D2L** – There will be two or three quizzes (~10 questions each quiz) for each module, as we progress through the module (the quizzes also help with pacing). Your first attempt score will contribute to your overall quiz score for the module, but you can retake each quiz for revision purposes (unlimited, ungraded attempts). Completing the quizzes in a timely manner (rather than your score per se) contributes to your class engagement score (also based on attendance).

**For all graded writing -.**

All your graded writing (in any of the three formats listed above) should include at a minimum the information covered in class and the recommended course book (“What’s going on in there”)/required readings. To improve your grade you should include additional readings (those sent to you to accompany the lectures) and any independent reading. These should be in the proportions below (not to scale!) – that is, much of the handout/course book material, some of the supplemental articles, and a little additional independent reading (if you want to aim for the top marks).



Good scientific writing is well written, concise but with detailed information. It is organized in a manner that “walks the reader” through the relevant points/issues, beginning with a opening paragraph that “sets the stage” or “couches the research question in a context”, has a few content paragraphs (which should be effectively linked together) and concludes with a summary paragraph to “wrap up”. **Show what you know.**

It is your responsibility to make sure the submitted file (word or PDF only please) for the parent and academic writing assignments is readable when you upload it onto D2L. Try clicking on your sent attachment and see if it opens OK. I will not accept late submissions for graded writing (although I may for homework assignments). This is not meant to be harsh, but to prepare you for the ‘real world’. For every 6 hours this is late, you will lose 10% of your grade (so it’s a harsh penalty). If there are any extenuating circumstances as to why this is late, you need to notify me BEFORE the deadline (not afterwards) with corresponding documentation (i.e., a doctors note, etc.).

For the academic writing, you should include a references cited section (APA format). This will help to signpost all of the additional readings/studies you are including in your writing (n.b., citing something on the pages of the course book and trying to pass it off as the original article will not do, unless you add some extra material (not covered in the relevant chapter) that you have gained from reading one of the included articles. I know what is covered in the book and what is not (so this is easy to spot).

Again, because it’s important, for both graded writing to a parent and academic, see the detailed section-by-section grading rubric on D2L (view doc in webpage view). This corresponds to the feedback sheet you will receive with your mock writing assignment (Three Identical Strangers, and all graded writing, with the exception of exam writing). Make sure you are writing to your intended audience, and evaluate your own writing against the grading rubric before submitting it.

The ability to write to your reader – a change in style between parent and academic, but both with thorough class content – is a challenge and **your writing style will be factored into your grade**. Show what you know and walk your reader through.

All graded work based solely on the bottom tier (i.e., handouts and course book), depending on the quality of the writing style and critical thinking, will earn a max of a 3. The addition of supplemental reading (again depending on quality of the essay) will likely increase to 3.5, and those with independent reading will be aiming for a 4.0. The ability to write to your reader – a change in style between parent and academic, but both with thorough class content – is a challenge and your writing style will be factored into your grade. Show what you know and walk your reader through. I will provide throughout the course tips and do and don’ts for effective writing, please see the tutorial folder on D2L which contains all files related to our tutorials on writing and supplemental material related to writing effectively.

**Grading**

Each graded piece of writing will be graded as a % score. The exam score will be composed of both a score for the essay plan and the essay (\*\*\*the essay plan contributes 30% to your score, and the essay 70%). The quiz score for each module will be an average (mean) of all quizzes for that module. You start off with full % points for class engagement and are at risk for losing them by not turning up to class, completing quizzes and assignments on time.

FIRST HALF OF COURSE -- SECOND HALF OF COURSE --

Module 1 (feedback provided) 10% Module 2 10%

Module 1 revised 10% Module 3 10%. \*\*\*Exam 1 15%\* \*\*\*Exam 2 15%\*

Quizzes (Mods 1 & 2) 10% Quizzes (Mod 3) 5%

Engagement 2.5% Engagement 2.5%

If you don’t resubmit your Module 1 assignment, your mod 1 rev score will be the same as before. Your revised score will not reduce, but it can stay the same, or go up by a little (there’s no penalty for not resubmitting, nor resubmitting, unless you do something spectacular, you shouldn’t expect to change your original grade by more than a couple of % points.).

Whenever I grade, I give a percentage (e.g., 88), which corresponds to a grade (i.e., 3.5):

 93-100% - 4.0

 87-92% - 3.5

 80-86% - 3.0

 75-79% - 2.5

 70-74% - 2.0

 65-69% - 1.5

 60-64% - 1.0

 <60% - fail

**Homework**

Various homework assignments will be provided to you during the course, these will be forms of short writing, readings and/or class discussion. These will be announced in class and via D2L, and you although you may receive a numerical ‘score’ for some of these homework assignments (but not others), this is for your feedback only and will NOT count to your final grade for the course. **Homework assignments are designed to prepare you for the graded writing, both in terms of course content and writing expectations, and also grading**. Feedback will be given on all homework (within a week is my aim), individually and also, occasionally in class at the group level. Type of homework assignments include:

***Blog:*** This is of a similar length to a reaction paper (can include graphics) and is an informal style of science writing (as if you were writing for a magazine, or peer audience). I will include some former blogs on D2L so you can get a better idea of the format. One aspect of my PSY101H course which my former students have enjoyed (and which has inspired this assignment) is watching and discussing ‘*Three Identical Strangers’*, a documentary about three boys separated by adoption (as a part of a secret psychological study on parenting styles, and nature vs. nurture) who unexpectedly met up while at college. The film follows their story as they form new bonds and identities as brothers. It is a ‘real-world’ embodiment of many of the topics we will cover: research ethics, nature vs. nurture, parenting style and child development, social influence, mental health (and a few more). The homework assignment is writing a blog about this story. You will then grade each others blogs according to the grading rubric (you will also receive my feedback, idea of a score).

***Literature finding:*** You may be asked to find and briefly describe (few paragraphs) empirical papers on related course topics. You should use the MSU library catalog online and you should not pay to access any articles you find. Let me know if you need help with this.

**Attendance**

You are expected to attend and pay attention in class (please mute cell phones, refrain from social networking, etc.) and not disrupt the learning environment (or face ejection from a class). You are also responsible for getting yourself ‘up to speed’ on any classes you miss. It is good professional etiquette to email me ahead of time if you know you will miss a lecture, or if it’s last minute, to email an apology after the fact. If you are ill, I would prefer you miss a lecture than jeopardize the health of your fellow students (and me). I am happy to meet with you individually to go over any lecture material you miss (but not if you make a habit of it!).

*General note to students (not just for this class, but for all your classes):* When emailing, it is good etiquette to address any professor as ‘Dear Prof x’) and to include a brief, meaningful title to your email (i.e., request to meet, request for materials, etc.).

**Students (and an Instructor!) with Special Needs**

If you are a student who requires accommodations or who has certain needs, please reach out to me so. Given **you have an instructor with such needs**, I would like to thank you for your **patience with me also, as I also may require  *some classes may be delivered virtually (via pre-recorded lectures on D2L) which may be announced short-notice (please check your email by 9 am before coming to class – if going virtual I will have emailed by 9 am)*** *– if this happens we won’t be missing class content so class is still on but available to view****; some extra time in posting material or providing feedback*** *(I will always afford my students more time in such cases that I am delayed, so they are not put out, though I understand and also feel any frustration)****, my speech may sound a little hoarse or slurry*** *(no I haven’t been drinking!)****, and I may be a little forgetful and lose my train of thought occasionally***.

. … and if you care for people like me, PLEASE FOLLOW THE PUBLIC HEALTH RULES given the current COVID situation.

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at [rcpd.msu.edu](https://www.rcpd.msu.edu/). Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (test, project, etc.). Requests received after this date may not be honored.  If you require testing accommodations (e.g., additional time.) you must contact me and present your VISA at least two weeks before the exam dateto schedule an alternative exam.

Please feel comfortable in prompting me if I forget to contact you about any necessary accommodations.

**Academic Integrity**

The Spartan Code of Honor states, "As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do." In addition, Article 2.III.B.2 of the Student Rights and Responsibilities ([SRR](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html)) states that "The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." The Psychology Department adheres to the policies on academic honesty as specified in [General Student Regulations 1.0, Protection of Scholarship and Grades](https://spartanexperiences.msu.edu/about/handbook/regulations/general-student-regulations.html); [the all-University Policy on Integrity of Scholarship and Grades](https://spartanexperiences.msu.edu/about/handbook/regulations/student-group-regs-rulings-policies-ordinances/integrity-of-scholarship-and-grades.html); and [Ordinance 17.00, Examinations](https://trustees.msu.edu/bylaws-ordinances-policies/ordinances/ordinance-17.00.html).

Therefore, unless authorized by your instructor, you are expected to complete all course assignments, including homework, lab work, quizzes, tests and exams, without assistance from any source. You are expected to develop original work for this course; therefore, you may not submit course work you completed for another course to satisfy the requirements for this course. Also, you are not authorized to use the [www.allmsu.com](http://www.allmsu.com) Web site to complete any course work in this course. Students who violate MSU academic integrity rules may receive a penalty grade, including a failing grade on the assignment or in the course. Contact your instructor if you are unsure about the appropriateness of your course work. (See also the [Academic Integrity webpage](https://ossa.msu.edu/academic-integrity).)

**Generative A.I. Statement**

**Use Prohibited:**  The use of generative AI tools (such as ChatGPT, DALL-E, etc.) is not permitted in this class; therefore, any use of AI tools for work in this class may be considered a violation of Michigan State University’s policy on academic integrity, the Spartan Code of Honor Academic Pledge and Student Rights and Responsibilities, since the work is not your own. The use of unauthorized AI tools will result in [insert the penalty here\*].

**Inclusive Environment.**

MSU is committed to creating and maintaining an inclusive community in which students, faculty, and staff can work together in an atmosphere free from all forms of discrimination. The Office of Institutional Equity (OIE) reviews concerns related to discrimination and harassment based on sex, gender, gender identity, race, national origin, religion, disability status, and any other protected categories under the University Anti-Discrimination Policy (<https://www.hr.msu.edu/policies-procedures/university-wide/ADP_policy.html>) and Policy on Relationship Violence and Sexual Misconduct (<https://civilrights.msu.edu/policies/rvsm.html>). If you experience or witness acts of bias, discrimination, or harassment, please report these to OIE: <http://oie.msu.edu/>.

**Limits to Confidentiality:**

Essays, journals, and other materials submitted for this class are generally considered confidential pursuant to the University's student record policies.  However, students should be aware that University employees, including instructors, may not be able to maintain confidentiality when it conflicts with their responsibility to report certain issues to protect the health and safety of MSU community members and others.  As the instructor, I must report the following information to other University offices (including the MSU Police Department) if you share it with me:

·        Suspected child abuse/neglect, even if this maltreatment happened when you were a child,

·        Allegations of sexual assault or sexual harassment when they involve MSU students, faculty, or staff, and

·        Credible threats of harm to oneself or to others.

These reports may trigger contact from a campus official who will want to talk with you about the incident that you have shared.  In almost all cases, it will be your decision whether you wish to speak with that individual.  If you would like to talk about these events in a more confidential setting you are encouraged to make an appointment with the [MSU Counseling Center](https://caps.msu.edu/).

**Disruptive Behavior:**

Article 2.III.B.4 of the [Student Rights and Responsibilities (SRR)](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html) for students at Michigan State University states: "The student's behavior in the classroom shall be conducive to the teaching and learning process for all concerned." Article 2.III.B.10 of the [SRR](https://spartanexperiences.msu.edu/about/handbook/student-rights-responsibilities/article-two-academic-rights-and-responsibilities.html) states that "The student and the faculty share the responsibility for maintaining professional relationships based on mutual trust and civility." [General Student Regulation 5.02](https://spartanexperiences.msu.edu/about/handbook/regulations/general-student-regulations.html) states: "No student shall . . . interfere with the functions and services of the University (for example, but not limited to, classes . . .) such that the function or service is obstructed or disrupted. Students whose conduct adversely affects the learning environment in this classroom may be subject to disciplinary action.”

**Disclaimer**

**The instructor reserves the right to make any changes to the syllabus as deemed necessary. If changes are made, they will be announced in class and/or via email.**