SYLLABUS – PSY 493-002 Issues in Psychology (W)

**NEUROSCIENCE OF CHILD DEVELOPMENT**

Mon & Weds, 1:50-3:10, Ernst Bessey Hall, 305

**Instructor**

Dr Melissa Allman

[mjallman@msu.edu](mailto:mjallman@msu.edu) (preferred mode of contact)

**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 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. Topics 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.

**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. 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. 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 put 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. This course is a writing course (W) and so we will discuss science essay writing and you will be assessed on your essay writing (across three essays).

**Class schedule**

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

1/9 Introductions

1/11 Nature vs Nurture

See ‘PRENATAL’ folder on D2L for class materials

1/16 *no class – MLK day*

1/18 Nature vs Nurture Tutorial (Three identical strangers and sex/gender)

1/23 Biology of Prenatal Brain Development

1/25 Prenatal influences on the brain

1/30 How birth affects the brain

2/1 *Tutorial – Stress and development class readings*

2/6 *Tutorial – Essay writing*

See ‘POSTNATAL’ folder on D2L for class materials

2/13 Somatosensory development

2/15 Olfactory development

2/20 Taste and food preference

2/22 Vestibular development

2/27 *Tutorial – Essay writing*

3/3 Auditory and visual system development

***Friday 3/5 by 11:59 pm first draft of Essay A due (upload on D2L)***

*3/6-3/10 no class – Spring break*

3/13  *Tutorial – Writing and essay feedback; Essay 3 questions released*

3/15 Motor development

See ‘COGNITION’ folder on D2L for class materials

3/20 Time, space and number (no chapter in book)

3/22 Social-emotional development

***Friday 3/24 by 11:59 pm final version Essay A due (upload on D2L)***

3/27 Development of memory

3/29 Theory of mind (no chapter in book)

4/3 *Tutorial – class readings on cognitive developmental neuroscience*

4/5 Language and speech

4/10 Developmental disabilities

4/12 *Tutorial – writing* (with anonymous homework)

4/17 *Tutorial – writing* (class grading and discussion of homework)

4/19 **EXAM ESSAY 2 (in class essay) – Cognitive development in infancy and childhood**

4/24 & 4/26 *writing week on final essay*

5/1-5/5 Exam week (no class, no exam, but Essay 3 due

***ESSAY 3 IS DUE BY Monday 1st May at 11:59 (upload on D2L)***

**Assessment**

Your final grade on this course will be based on three essays:

**First essay – coursework essay WITH FEEDBACK.** You will have received one round of written feedback and a grade. You will receive a grade but no feedback on your final version. You will start this first, the first draft is due before Spring break on **Friday 5th March.** I will give you feedback, and the final draft (for a grade) is due on **Friday 24th March*. It is on prenatal and/or postnatal effects of stress. The choice of topics will be from lectures in the ‘Prenatal’ module on D2L.***

**Second essay – Exam time essay.** You will not receive the choice of questions (choose one only), and you will write your essay under exam conditions in class (on paper, without notes, etc.). The exam essay will be on **Wednesday 19th April. *The choice of topics will be from lectures in the ‘Cognition’ module on D2L.***

**Third essay – coursework essay (no feedback).** This essay will be due last, **Monday 1st May. *The choice of topics will be from lectures in the ‘Postnatal and Cognition’ folder/module on D2L.***

You have different amounts of time for each of the three essays:

The first, demands your ability to include the points of an essay (as discussed in class: content, critical thinking, structure, etc.). I am also looking at how responsive you are to feedback. Your essay should include a references section, formatted to APA.

The second essay requires your response to an unseen question, and your ability to communicate and structure your response. (There will be a choice of questions, pick ONE). You do not need to include a references section in this essay.

The third essay requires you to demonstrate what you have learned from the first essay, and will be without feedback, though you have ample time to refine it and for independent reading. It should also include a references section, formatted to APA.

**The three essays will be graded, and weighted to your final grade accordingly** (see ‘Grading’ section later in syllabus)**:**

**40% Highest scoring essay**

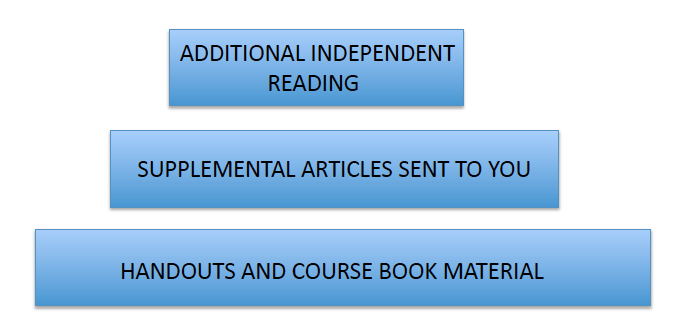
**30% Other essay**

**30% Other essay**

In the writing tutorials, I will go over how to write a good essay, and what sets a 4.0 essay apart from a 3.5, etc. What you learn about how to structure, organize and write your essay should be applicable to all three essays (I encourage and want to see essay plans in the exam time essay).

**Essay format.**

Your essay 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).



A good essay 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.**A guide length for your essay is approx. 2-4 pages.

It is your responsibility to make sure the file (word or PDF only please) 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 exam essays (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.).

You should include a references cited section in your FIRST AND THIRD essay. This will help to signpost all of the additional readings/studies you are including in your essay (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).

Essays 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. When describing supplemental or additional readings, do as we have done in homework assignments; provide a summary of the study and the main research findings, and how the relate to other information in your essay (imagine you are writing an abstract for the study, about a paragraph in length). This does not mean you should expect a 4.0 if you do independent reading, but it makes it more likely than if you don’t do independent reading. Based on the quality of your essay (writing style, providing evidence for your argument, critical thinking---the main points for a good essay) you can still earn a 4.0 just with class material and required readings (or a 3.0 even with independent reading if your writing style, providing a good case for your argument, critical thinking are lacking).

**‘Exam time’ essay (Essay 2).**

You will need to answer ONE question during class time (1hr 20 mins). This will be under exam conditions and you are not allowed to bring notes or other materials to the exam. Grades will again be based on whether you are able to include information in supplemental and additional readings (although grading will be more lenient). You do not need to cite studies by author’s names in this essay (but try and make it clear you are bringing in additional readings; e.g., “in one study…” etc. if you can’t remember study authors). It’s also appropriate to add a statement “in one study I independently found…”, or “in one of the recommended readings”, etc. You will not see the questions before the exam (though I will indicate the topics), and you will have a choice of questions – you need to chose one only.

**Grading**

Grading will follow the ‘standard’ format, and each essay will be graded as a %. Your overall grade will be based on the relative weighting of each of your three essays

**The three essays will be graded, and weighted to your final grade accordingly:**

**40% Highest scoring essay**

**30% Other essay**

**30% Other essay**

When I grade, I give a percentage, which corresponds to a grade:

90-100% - 4.0

85-89% - 3.5

80-84% - 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 various forms of short writing, and/or class discussion. These will be announced in class and via D2L, and you although you may receive a grade 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 essays, both in terms of course content and writing expectations**. 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:

***Reaction papers****:*  A 1-page (double-spaced) reaction paper about the topics and readings for the week—must include demonstrated conceptual understanding of the scientific material (content), findings should be integrated and discussed with respect to their implications for our understanding---incorporate the class material into your own critical opinion/unique voice. You are encouraged to explore the MSU library online catalogue for additional peer-reviewed articles, reviews and opinions, and online popular science sources to give breath and depth to your work (it will help inform your opinion; be critical, question your sources and be flexible with your judgments). This should be written with a conventional scientific writing (essay) style.

***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.

***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 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.

Students with disabilities should contact the Resource Center for Persons with Disabilities to establish reasonable accommodations. For more information, call 884-7273 (voice), 355-1293 (TTY), or visit http://rcpd.msu.edu. If you require accommodations for exams, please notify the instructor as soon as possible. It is also your responsibility to reserve a spot for each exam at the RCPD office. Please feel comfortable in prompting me if I forget to contact you about any necessary accommodations.

**Academic Integrity**

All students (and people working in the department, including faculty) are expected to adhere to professional standards in the workplace, particularly when it comes to ownership of work. You are not permitted to have other people attend class, complete exams in your name; confer with others or reference external sources of information (e.g., phones) during exams; and you are not permitted to pass off other peoples work as your own (this applies during your whole college experience). Professors have means to look for this type of thing. If you are suspected of any of these things (defined as cheating) you may receive a score of zero for the test or course as a whole, and the instructor will follow formal administrative procedures.

You are also not allowed to put lecture handouts online, give them to other students (who are not in the same class as you) or sell (or commercialize) your notes or class materials (e.g., lecture handouts). Students who violate MSU regulations on Protection of Scholarship and Grades (See [*Spartan Life: Student Handbook and Resource Guide*](http://www.vps.msu.edu/SpLife/index.htm)and/or the MSU Web site: <http://www.msu.edu/unit/ombud/>) may receive a penalty grade, including, but not limited to, a failing grade on an exam or in the course.

"The student shares with the faculty the responsibility for maintaining the integrity of scholarship, grades, and professional standards." Article [2.3.3](http://www.vps.msu.edu/SpLife/afr2.htm#afr2.3.3) of the [*Academic Freedom Report*](http://www.vps.msu.edu/SpLife/acfree.htm)

**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.**