G4486. Development and Affective Neuroscience (seminar).
4 pts. N. Tottenham. Wednesdays 10:10AM-12:00PM
Office Hours: Wednesdays 8:30AM-9:30AM (355D Schermerhorn)
Prerequisites: Courses in developmental psychology, and either research methods or affective neuroscience, and the instructor's permission.

Why do I feel the way I do? The reason usually involves an understanding of one's developmental history. This course uses a developmental approach to address emotional brain-behavior relationships. We will discuss theoretical papers and empirical work that covers typical and atypical behavior and the neurobiology that supports behavioral change across age. A translational approach is taken that uses animal models and human examples to illustrate these developmental trajectories. We will cover experimental approaches during discussion of each topic.

The reading list and weekly syllabus (Subject to change)
Students are encouraged to incorporate additional readings (particularly from empirical papers) if they feel that they would enhance discussion.

Week:
1) (1/17) Overview & organization
2) (1/24) Background (History, Theory)
3) (1/31) Foundations in Developmental Neuroanatomy & Methods
4) (2/7) Stress Physiology & Temperament


5) (2/14) Neurobiology of Fear and Anxiety across development


6) (2/21) Emotion regulation across Development


7) (2/28) Caregiver Influences


8) (3/7) Adverse Caregiving (B. Callaghan)


9) (3/21) Sensitive periods & plasticity


10) (3/28) Social Perception

11) (4/4) – Socio-Economic Influences (K. Noble)

12) (4/11) Paper Presentations on individual topics
13) (4/18) Reward Processes in Development

14) (4/25) Peer Influences in Development

V. Course requirements and grading
1. Learning and Discussion Questions (LDQ Responses): This course will not require students to post questions/comments to the Discussion board (Courseworks) prior to our class meeting. However, students are expected to thoroughly read all the assigned articles prior to class. ~ 3-4 students (selected by Prof Tottenham) will be called on to answer the LDQs posed by the presenting team. Each student will receive one “free pass” (the option to answer an LDQ a different day) Students are also expected to actively participate in class discussion.
2. Team Presentations: Students choose a topic/week on the first day of class. You will be required to read the assigned articles carefully and then facilitate classroom discussion on the topic. This should be accomplished in the following ways:
   a) Choose 3–6 themes that emerge from the reading. These themes should drive the conversation in class.
   b) If in a group, each member of the group will be graded separately.
   c) Grading will be based on
      1. Evidence of group work (if applicable) (work should not be divvied up by readings, but instead on themes)
      2. Ability to keep the class conversation on track
      3. Quality of questions/themes raised.
      4. Timeliness in getting materials to course instructors and classmates. These presentation outlines should be emailed to the instructors by 4PM Monday before your presentation. You must post the final presentation on Courseworks by 5PM TUESDAY before class.

3. Thought paper & Paper presentations/bibliography: Students will write a paper that is due on or before 4/28/2017. The 8-10 page paper should take the form of a critical review paper that addresses a specific question related to the topics of the seminar. The topic must be approved by 2/17/2015. Throughout the semester, students will meet independently with the instructor & will be required to submit a list of references to facilitate the writing process (4/11/2017) Also on 4/11/2011, students will present the thesis of their paper orally to the class (approximately 5 minutes). The paper may be an expansion of the presentation from class, but if the student chooses this option, it must truly expand on the presentation. Otherwise, students may choose to do a brief review/critique of any issue or area pertinent to developmental affective neuroscience. Students are free to take their main interest area as a starting point and then to bring what we know from the biological area to bear. In many cases, we will know very little (i.e., what is the bio-behavioral developmental trajectory of self-esteem?), so the student will be attempting to take a literature that seems related (e.g., reward systems, EEG asymmetry) and making bridges to their interest area. This is the “thought” component. When little is known, talking about what is known, what needs to be studied, and (in general terms), how might we go about studying the linkages between behavior and biology with regard to the student’s interest area is what is desired. This paper should follow APA format. Grading will be based on creativity of the ideas, quality of writing, and strength of the argument based on existing scientific literature.

Class Meeting Format
10:10-10:50: Team Presentations
10:50-11:10: LDQs
11:10-11:20: Break
11:20-12:00: Professor Lecture

Grading:
LDQ: 10%
General participation/Attendance 20%
Team Presentations 30%
Paper Presentations/Bibliography 10%
Thought paper 30%

VI. Class and University policies
Attendance
The lecture/discussion format of this class makes attendance and participation necessary. We understand that there are some circumstances in which you may need to miss a class, e.g. conference attendance. If you need to miss a class, you must inform the instructors in advance. After one excused absence, extra assignments will be considered to compensate for missed time.

Accommodations for students with disabilities. If you have a disability that may necessitate an academic accommodation or the use of auxiliary aids and services in a class, please let me know within the first two weeks of class. You should also visit the Office of Disability Services (ODS) on the 7th floor of Lerner Hall as soon as possible. ODS determines the specific needs of students with disabilities, and develops and
implements programs and policies to meet those needs. The procedures for registering with ODS can be found at http://health.columbia.edu/services/ods or by calling ODS Phone (212) 854-2388 (Voice/TTY).

**Academic Integrity.** Academic honesty in writing assignments, examinations, clicker participation, and communication with me is expected of all students in this class. Academic dishonesty is one of the most serious offenses a student can commit at Columbia University. It not only violates Columbia standards, it also severely inhibits your opportunity to develop academically, professionally, and socially. You are expected to do your own work on all tests and assignments for this class and to act in accordance with the Faculty Statement on Academic Integrity (below) and the student Honor Code.

*Faculty Statement on Academic Integrity*

*The intellectual venture in which we are all engaged requires of faculty and students alike the highest level of personal and academic integrity. As members of an academic community, each one of us bears the responsibility to participate in scholarly discourse and research in a manner characterized by intellectual honesty and scholarly integrity.*

Scholarship, by its very nature, is an iterative process, with ideas and insights building one upon the other. Collaborative scholarship requires the study of other scholars’ work, the free discussion of such work, and the explicit acknowledgement of those ideas in any work that inform our own. This exchange of ideas relies upon a mutual trust that sources, opinions, facts, and insights will be properly noted and carefully credited.

*In practical terms, this means that, as students, you must be responsible for the full citations of others’ ideas in all of your research papers and projects; you must be scrupulously honest when taking your examinations; you must always submit your own work and not that of another student, scholar, or internet agent.*

*Any breach of this intellectual responsibility is a breach of faith with the rest of our academic community. It undermines our shared intellectual culture, and it cannot be tolerated. Students failing to meet these responsibilities should anticipate being asked to leave Columbia.*

Because any academic integrity violation undermines our intellectual community, if you are found to have cheated, plagiarized, or committed any other act of academic dishonesty you will likely receive a zero for the work in question and may fail the class. You will also be referred to the Dean's Disciplinary Process, described here: www.college.columbia.edu/academics/disciplinaryprocess:

It is your responsibility to ensure that your work maintains expected standards. This requires that you understand what constitutes academic dishonesty on this campus and in this class. Should you have any questions or concerns regarding my expectations of you, please me for clarification, and refer to the Columbia University Undergraduate Guide to Academic Integrity: www.college.columbia.edu/academics/academicintegrity