

Brain Development-Psychology 450
Mondays 11:30-12:50, Thursdays 1-2:20, Biosciences Room 2109

Professor: Dr. Beth Kelley

Office: Room 351 Humphrey

Office Hours: Mondays 9:30-10:30 and Thursdays 9:30-10:30

Phone: 613-533-2491

E-mail: kelleyb@queensu.ca

Book: “Developmental Cognitive Neuroscience, Third Edition” by Mark Johnson

Course Description

This course is designed to be a relatively broad discussion of brain development, with a particular focus on issues such as the developmental course of brain development, how to most effectively measure brain development and the changes in brain functioning, how and when the brain may develop atypically, the role of plasticity and pruning in brain development, and how brain development is related to various aspects of cognitive development.

There are a lot of readings in this course (all of which are available in the book or online through [Blackboard](#)). I suggest that you at least skim each reading before coming to class that you can participate in the discussion-you can always go back and read them over in more detail when writing the final exam.

For the readings, you will need to read them in more detail. Instead of me just re-iterating what you read in the readings, I will make a real attempt to make each class more of a discussion of these readings and how they relate to broader themes in developmental cognitive neuroscience.

The latter part of the course will be taken up by group presentations on atypically-developing brains.

Course Requirements

1. *Questions on the readings-worth 20%*. Four times during the semester, you will be asked to submit discussion questions on the readings. These questions should be as substantive as possible and make a real attempt to tie the readings/lecture into other things you have learned in psychology and especially developmental psychology. Think big picture, critical thinking, theoretical type of questions. You might also try to think of other ways that the issues under discussion might be addressed, that is, what sort of experimental design might be more appropriate, but please be sure to offer up constructive criticism.

5 marks toward your overall grade. These questions are due by 9 a.m. on the day of class so that I can organize them and print them off for the whole class. For the first few classes I will provide the discussion questions to give you an idea of what I am looking for.

2. *Attendance and participation-*

3. *Oral presentation-worth 35%*. Further on in the semester, topics will be presented by small groups on atypical brain development. You will be responsible for finding articles related to this topic, synthesizing the articles and presenting them as a group. You will also be responsible for trying to answer

January 13

Textbook Ch 2-

Fox, S. E., Levitt, P., & Nelson, C. A. (2010). How the timing and quality of early experiences influence the development of brain architecture. *Child Development, 81*, 28-40.

February 6

Textbook Ch. 5

Richards, J. E., Reynolds, G. D., & Courage, M. L. (2010). The neural bases of infant attention.

Thompson-