The Developing Brain: From Infancy to Adolescence

Semester Year: FA16
Location: Stockholm
Academic Program: Psychology
Credits: 3
Days: Mondays & Thursdays (tentative)
Time: 10.05-11.25 (tentative)
Faculty Member: TBA
Major Disciplines: Psychology, Neuroscience, Child Development

Course Information and Purpose

1. Course Description:

   Prerequisite: one semester of neuroscience, physiological psychology, or biological psychology at the university level.

   A cognitive behavioral neuroscience perspective will be used to explore the normal development of the child, from infancy to adolescence with regards to perception, attention language, learning, memory, executive function, emotion and social cognition. Brain structures and functions that support these processes developmentally, such as neuroplasticity and critical/sensitive periods will be considered, as will the implications of culture and the social context. Scandinavian perspectives will be addressed.

2. Objectives:

   Learning objectives for the course: (selected)
   1. To describe similarities and differences between development of cognitive functions in childhood and adolescence.
   2. To apply mechanisms of brain development to cognitive, emotional, behavioral cultural contexts in child/adolescent development.
   3. To integrate theory and research with cultural applications in childhood and adolescence.

Course Components

1. Required Textbook (available at DIS library):

   Selected chapters from texts such as:
2. Articles and Other Media on Blackboard:
   Learning objectives for the course: (selected)

3. Approach to Teaching: A variety of teaching methods will be used, including lectures, class discussions, group presentations, interactive classroom activities and multi-media to facilitate the understanding of theory, research and their cultural implications. Psychological applications will be explored using case examples.

4. Field Studies:
   Institutions and organizations addressing research and/or clinical activities within developmental neuroscience will be visited in the Stockholm area. This could include clinics that conduct assessment and treatment of developmental disorders such as ADHD or Autism Spectrum Disorders where students will be exposed to diagnostic and therapy best practice and challenges.

5. Class Representatives:
   Each semester DIS looks for class representatives to become an official spokesperson for their class group, addressing any concerns that may arise (in academic or related matters), suggesting improvements and coming up with new ideas. Class representatives are a great way for DIS faculty to ensure better and timelier feedback on their courses, assessments and teaching styles, and as such perform an invaluable role in connecting student needs with faculty instruction during term time. Class Representatives will be elected in class at the beginning of the semester.

6. Guest Lecturer:
   Possible topics include:
   - Talks by representatives of the Swedish Education/ Healthcare system in relation to the needs and intervention with children and adolescent.
   - Researchers discussing findings and challenges pertaining to neurocognitive development
Assignments and Evaluation

Detailed assignment descriptions and/or rubrics will be made available on Blackboard and/or in class.

<table>
<thead>
<tr>
<th>Methods of Evaluation</th>
<th>How evaluated (individual or group)</th>
<th>Due Date</th>
<th>Percentage of grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaged Participation</td>
<td>Individual</td>
<td>Ongoing</td>
<td>15%</td>
</tr>
<tr>
<td>Group Presentation (Key Topic: The Dynamic Brain)</td>
<td>Group</td>
<td>Throughout semester</td>
<td>20%</td>
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<tr>
<td>Midterm Exam</td>
<td>Individual</td>
<td>TBD</td>
<td>20%</td>
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<tr>
<td>Case Studies</td>
<td>Group</td>
<td>Throughout semester</td>
<td>20%</td>
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<tr>
<td>Final Research Paper</td>
<td>Individual</td>
<td>TBD</td>
<td>25%</td>
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<tr>
<td><strong>Total</strong></td>
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<td><strong>100%</strong></td>
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**Evaluation:** A number of diverse tasks will be given throughout the semester to address learning objectives. Emphasis will be on engaged participation, and may include individual and/or group based written/oral tasks. Projects may be given that will explore topics experientially.

**Engaged Participation (15%):**
This class is based on interactive discussion, requiring individual participation. Participation is included to mean: (1) Answering discussion questions posted on Blackboard in preparation and subsequent to class topics (or 2) participating in classroom discussion based on information integrated with the required reading for the day.

**Group Presentation (20%):**
The Dynamic Brain: In groups, students will be required to present brain anatomy and function as this pertains to the key areas addressed in class regarding the developing brain. Emphasis should be on interactive, media based approaches.

**Midterm Exam (20%):**
The midterm is intended to insure that the key concepts and constructs of the course have been understood. The midterm will consist of short answer questions, brain diagrams that will require labelling of structures and explanation of function.
Case Studies (20%):
Each group will be given a case study where they will be required to plan the key issues to be discussed in class. The group has to demonstrate knowledge of these key areas based on class readings and additional sources (documented for the class as regards pertinent information, findings etc.). Unanswered questions should be raised and potential for future intervention/research considered.

Final Research Paper (25%):
This paper should demonstrate an integration of course material and the latest research findings within the topic of your choice. The focus will be on exploring the topic from the perspective of challenges and evidence based findings. The topic must be approved by the instructor. The paper should be 7 page in length (excluding cover page and Reference List) and be conducted using APA style. The references should include class readings and independent sources. All independent sources should be from academic sources/ peer reviewed journals.

To be eligible for a passing grade in this class you must complete all of the assigned work.

Disability and Resource Statement:
Any student who has a need for accommodation based on the impact of a disability should contact Sean Green (sgr@dis.dk) to coordinate this. In order to receive accommodations, students should inform the instructor of approved DIS accommodations within the first two weeks of classes.

Policies

Attendance:
You are expected to attend all DIS classes when scheduled. If you miss a class for any reason please contact the faculty no later than the day of the missed class. If you miss multiple classes, the Office of Academic Support and the Director of Student Affairs will be notified and they will follow-up with you to make sure that all is well. Absences will jeopardize your grade and your standing at DIS. Allowances will be made in cases of illness, but in the case of multiple absences you will need to provide a doctor’s note.

Academic Honesty, Plagiarism, and Violating the Rules of an Assignment:
DIS expects that students abide by the highest standards of intellectual honesty in all academic work. DIS assumes that all students do their own work and credit all work or thought taken from others. Academic dishonesty will result in a final course grade of “F” and can result in dismissal. The students’ home universities will be notified. DIS reserves the right to request that written student assignments be turned in electronic form for submission to plagiarism detection software. See the Academic Handbook for more information, or ask your instructor if you have questions.
Policy on Late Papers:
There will be a grade deduction of half a letter grade for each day the assignment is late.

Policy for Students Who Arrive Late to Class:
Participation grade will be reduced by half a grade for every 2 late arrivals.

Use of Laptops or Phones in Class:
Only permissible for class related activities.

Weekly Course Schedule

Course Schedule Topics: TBA: 23 classes of 80 min duration, twice a week, including 1-2 Field Studies