Preliminary Syllabus
PSY 5960: Attention and Autism
Fall 2013
University of Minnesota, Twin Cities

Instructors
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Course Objectives
Are attentional deficits the root cause of autism spectrum disorders (ASD)? Several theories have proposed that early deficits in orienting and disengaging attention, a propensity to attend to local details rather than the global gist, and deficits in executive control may have cascading effects on one’s social and communicative development. Alternatively, autism may be primarily a domain-specific condition that impact social and communication skills, leaving intact nonsocial functions such as attention. This course will combine instructor-led discussions, student-led discussions, and online sources on core topics of attention and autism. We will read research articles and critically evaluate the current state of the art of autism. Students will acquire familiarity with theories, findings, and experimental paradigms of attention and autism.

Class Meetings
The course meets on Mondays, between 12:30 and 3:00 p.m., in Elliott Hall N391. It is important to attend all classes.

Textbook and Readings
There will be a course webpage at www.moodle.umn.edu. All readings for the course are available electronically on that webpage. On average, there will be 3 readings per week. Students are expected to have done the assigned readings before coming to class and, each week, will be asked to prepare specific concepts and issues to discuss in the seminar on the basis of those readings. You should bring a copy of all of the readings for a given class to class with you.

Course Requirements
Your course grade will be determined on the basis of four components: written critiques, class participation, in-class presentations, and a final research project. Specific guidelines and grading criteria for each of these four components are provided on later pages of this syllabus; due dates are stated in bold on the following pages.

The in-class presentation topics will be distributed in the second meeting of the class. The critique papers must be submitted one day before class. No extensions are allowed. Late submission will be penalized half a letter grade for each day they are late. The weekend counts as one day.

Grading: Critique papers 30% Class participation 10%
Class presentation 20% Final project & presentation 40%

90 and up is A; 85 A-; 82 B+; 78 B; 75 B-; 72 C+; 68 C; 65 C-; 62 D+; 58 D; 55 D-; Below 55 is F.
PRELIMINARY COURSE OUTLINE

Here is a preliminary outline of the materials that we’ll cover in this course. The exact timing of these lectures and the exact readings are very subject to changes. We may end up spending more time than is listed here on topics that strike you as especially interesting or difficult.

Week 1 (9/9/13; No critique paper required) Introduction I: Autism
- Introduction
  - Autism
  - Major theories, especially ones related to attention
- Course Overview
- Survey
- Readings

Week 2 (9/16/13; No critique paper required) Introduction II: Diagnosis
- Behavioral assessment
- Early flags
- Biomarkers
- Readings

Week 3 (9/23/13; Critique Paper 1) Disengagement: Evidence for
- SFARI newsletter
- Review of autism & attention
- Readings
  - Elsabbagh et al. (2013). Disengagement of visual attention in infancy is associated with emerging autism in toddlerhood. *Biological Psychiatry* [Epub ahead of print].

Week 4 (9/30/13; Critique Paper 2) Disengagement: Controversies
- SFARI newsletter
- Readings

- Summary: Sticky attention – fact or myth?
- Autism research prep, pitfalls, challenge

**Week 5 (10/7/13; Critique Paper 3) Weak Central Coherence: Theory & Evidence for**

- SFARI newsletter
- Review: Weak central coherence
- Readings

**Week 6 (10/14/13; Critique Paper 4) Weak Central Coherence: Controversies**

- SFARI newsletter
- Readings
- Summary: detail-oriented attention – fact or myth? Why is the theory attractive?
- Local and global brain connectivity

**Week 7 (10/21/13; Critique Paper 5) Executive dysfunction: Evidence for**

- SFARI newsletter
- Review
- Readings

- Theory of mind and executive function

**Week 8 (10/28/13; Critique Paper 6) Executive dysfunction: Controversies**

- SFARI newsletter
- Review
- Readings
- Summary: Executive dysfunction – where do we stand?

**Week 9 (11/4/13; Critique Paper 7) Nonsocial attentional orienting**

- SFARI newsletter
- Posner’s framework
  - The attention network test
- Readings
- Summary: Nonsocial attentional orienting – where do we stand?

**Week 10 (11/11/13; Critique Paper 8) Impaired attentional orienting to social stimuli**

- SFARI newsletter
- Readings

- Eye contact, response to name

**Week 11** (11/18/13; Critique Paper 9) **Intact attentional orienting to social stimuli**
- SFARI newsletter
- Review
- Readings
- Summary: attentional deficit, social deficit, and their interaction

**Week 12** (11/25/13; Critique Paper 10) **Superior abilities; myth/unknowns; project meeting**
- SFARI newsletter
- Readings
  o Kaldy Z et al. (2011). Toddlers with ASD are more successful at visual search than typically developing toddlers. Developmental Science, 14, 980-8.
- Course Summary
- Individual project meetings

**Weeks 13 & 14**
- Final project presentation

**Guidelines for Course work**

1. **(30%) Class participation (10%) & presentation (20%)**
   You are allowed to miss at most 2 classes during the semester. Additional misses will result in a 1% deduction for each miss. Active participation in class discussions is encouraged.

   Each student will be required to present 2 papers. The presentation should be in PowerPoint format. You should send your powerpoint slides to me (jiang166@umn.edu) no later than Sunday noon if you will be presenting during Monday’s class.

2. **(30%) Critique papers**
   * Note: Please put date, critique paper # (e.g., #2), and student ID on the critique paper. To avoid biases in grading, do not leave your name on the paper.
It is important that you carefully and critically study the readings. To encourage this, you will be asked to write a short critique paper on one of the classical articles, starting from Week 3. Choose any one of articles listed under “readings”, but avoid writing a review for a review article. The critique paper should be no longer than 1 page. It should include (1) Summary of the study in one paragraph; (2) Two things that you like about the article; (3) One thing that you didn't like and wish the authors had done better; (4) One research question to pursue in the future. You must turn in your reading homework in paper format in Dr. Jiang’s office (S251 Elliott Hall) or via email (jiang166@umn.edu) no later than Sunday at 5pm before the next week’s class. Grading guidelines and sample written summaries are described later.

If you elect to submit your critique papers via email, please copy and paste your critique in the main body of the email message. Delays due to technical problems will be treated as late submission. If your file contains a virus you will be barred from turning in assignment electronically for the rest of the semester; you must deliver a printed copy to Dr. Jiang’s office. The best solution is to cut and paste your response directly into the email body text.

Assuming that you turn in your work by the deadline, your work will be graded on a 10-point scale. Common pitfalls include: (1) too verbose: unclear if truly central points are understood when so much stuff is written; (2) too slim: not enough words are written to demonstrate good comprehension of the study; (3) too vague: “Cut and paste criterion” – Comments could be cut and pasted into future homework and would easily apply to many scientific articles (e.g., comments such as “I don’t like this study because it did not test 100 subjects; I like this study because the article is well-written.” A sample homework will be uploaded on the course webpage (https://moodle.umn.edu).

3. **(40%) Written research proposal and presentation**
Each student will prepare a research proposal (limited to 2500 words, including references, figures, tables, and appendices). This proposal must be directly related to topics that we covered. The final project should be testing an original idea rather than creating a demonstration of an existing phenomena. That is, it must not be (1) a study that has already been conducted by you or other researchers, (2) a study that you have proposed for another course or for your dissertation work. The proposal should include:

- (1) A title (not to exceed 56 characters);
- (2) Project Description (2500 words). It should include: A brief review of the relevant literature, aims and hypotheses, research design and methods, and predicted results, data from yourself, and interpretation of possible results. References should be cited where necessary.

**Presentation (15%)**: Each student should give a 15-min presentation, motivate the study, showcase the project, and present data from themselves and a brief discussion. The presentation of the final project occurs during Weeks 13 & 14.

**Written proposal (25%)**: The entire written proposal is due at 12pm on Friday, December 13th, 2013. A paper copy should be delivered to Dr. Jiang’s office in S251 Elliott Hall. Late submission will receive 0 points.
University-wide Policies

Our class abides by University-wide policies regarding Student Conduct, Use of Personal Electronic Devices in the Classroom, Scholastic Dishonesty, Makeup Work for Legitimate Absences, Appropriate Student Use of Class Notes and Course Materials, Grading and Transcripts, Sexual Harassment, Equity, Diversity, Equal Opportunity, and Affirmative Action, Disability Accommodations, Mental Health and Stress Management, and Academic Freedom and Responsibility.

A full statement on these policies can be found at:
http://www.policy.umn.edu/Policies/Education/Education/SYLLABUSREQU IREMENTS_APPA.html