

Psychology 1053: Autism Spectrum Disorders

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Office Hours: By appointment. I am always happy to meet with you, but it is much easier for me to do so by appointment. If you would like to meet, please send me an email and we will arrange a mutually convenient time to get together.

Class Meeting Time and Place: Tuesday and Thursday 2:30-3:45pm

4127 Sennott Square

A. Course Description

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder with widely varying symptomatology that affects 1 in 68 children. Although we do not yet understand the etiology, the neural and genetic bases, or even the underlying psychological nature of ASD, we are gradually making progress in describing fundamental behavioral phenomena associated with these disorders and in drawing implications from these phenomena for effective intervention. While the effects of ASD on children and families can be devastating, with early and effective intervention, the behavioral symptoms of ASD can be ameliorated.

Our course will be devoted to a discussion of theory, research, and intervention in ASD. Topics to be covered include the early history of the study, diagnosis, and treatment of autism; current classification and diagnostic issues and techniques; epidemiological and etiological issues; major neurological and psychological theories of ASD; current approaches to intervention; and research on sensory atypicalities and stereotyped and repetitive motor behaviors, early social and communicative skills, and affective, cognitive, symbolic, and social factors in ASD.

B. Learning Objectives

Our course has three major goals:

- Introduce you to the major areas of and contributors to theory and research in ASD and familiarize you with recurring themes and issues that have characterized the field since its inception. This goal will be achieved over the course of the semester through material covered in lectures and assigned reading in the ASD research literature.
- Enhance your skill at reading journal articles in psychology. We will achieve this goal through two Article Abstract & Critique (AAC) assignments to be completed prior to the first test (see Assignments below).
- Develop your ability to be critical of the research literature, to evaluate methodology, to draw your own conclusions from relevant data, and to design research studies. This goal will be

achieved through three Blog Post & Research Group (BP&RG) assignments to be completed after the first test (see Assignments below).

C. Required Readings & PowerPoint Slides

There is no general textbook for this course. Assigned readings and PowerPoint slides will be made available on CourseWeb (CW). PowerPoint slides will be available in two formats: a) as a .pptx file that you can view using PowerPoint; and b) as a .pdf file that you can print with 3 slides to a page. These files are identical as to content, differing only in format. Please note that the *PowerPoint slides present only an outline of material* to be covered in class. **Much of what we will discuss in detail in class is NOT on the slides, and reading the slides is not an adequate substitute for class attendance.**

D. Course Requirements

Readings: Readings are required for almost every class. Required readings should be completed *prior to* class on the dates given in the Reading List below. This list may be revised as the semester proceeds.

Article Abstracts & Critiques (AACs): AACs are highly structured summaries and critiques of published research. They are designed to help you improve your effectiveness in reading the primary literature in psychology. To be effective as you read a research article, you must be able to see the forest for the trees (i.e., to become sensitive to the difference between critical and non-critical information), to summarize critical information *accurately and succinctly* (ignoring non-critical information), and to know how to look for methodological and presentational weaknesses that may lead to alternative interpretations of the presented results. This assignment will consist of two 2-3-page AACs due one each during the third and fifth weeks of the semester. Articles to be abstracted will be selected from the assigned course readings. Detailed instructions on how to prepare an AAC, *with a fully worked-out example*, together with grading criteria are available on CW.

AACs will be read (with comments) by me and returned with a grade of v+ (outstanding), v (complete but not outstanding), or v- (inadequate; see Grading below) prior to the due date for the subsequent AAC. In addition, we will discuss the first AAC in class when they are returned so that you gain a feeling for the sort of abstracting and critiquing issues that arise.

Blog Posts (BPs) & Research Groups (RGs): This set of assignments will begin after the first exam. By this point it is expected that you will have become more familiar with general issues in the field of ASD research and, through your AACs, more comfortable in reading and critiquing the primary research literature. The assignments consist of three components requiring you to: a) do the assigned reading; b) react to the reading by posting to a blog (BPs) and responding to one another's BPs; and c) participate *in class* in one of a number of small research group discussions (RGs) that follow from the communal wisdom generated during the BPs.

In general, this is how it will work: On three Thursdays (October 2, October 23, November 6), I will identify a methodologically flawed article from the assigned readings or a problem area that will serve as the focus for BP/RG discussion. As soon as possible (see Grading below) but no later than 12AM on the following Monday, you should post your thoughts regarding the relevant topic online — to a blog created so that you and a small number of your classmates can interact electronically around the issues. After you post, you should read the posts of others and react to them by posting again yourself.

Reactions to others' ideas can be posted any time before 5PM on the day before the relevant RG discussion. I will be monitoring your BPs and may, occasionally, contribute myself. The ultimate goal of these posts is to prepare you to think critically about research methodology in ASD. During the first BP/RG, you will simply focus on identifying methodological problems with a published article and explaining *why* they are problems (i.e., how do they limit study findings and interpretation). In the second BP/RG, you will be asked to redesign a flawed study. In the third BP/RG, you will be asked to design a study from scratch to address an important question in relation to ASD. *Please note that it is NOT enough simply to post your own thoughts. This is a team effort. For it to work, you need not only to post your own thoughts but to respond to as many of the thoughts of others as you can.*

The first BP will not be graded (you will, however, receive a 0 if you do not complete it.) For BPs 2 and 3, each individual will receive a grade of v+ (outstanding), v (complete but not outstanding), v- (inadequate; see Grading below).

On RG days (October 9, November 4, November 13), the class will divide into 4 research groups of 7-8 people each. The job of each RG will be to bring the readings and posts together to create a brief presentation summarizing their views on the topic at hand. Because the first and second BP/RGs are somewhat easier, we will devote only 30 minutes of class to the RG itself. Presentations will be made during the last 45 minutes of class. RG 3 will take up an entire class and group presentations will be made during the following class period. *Attendance at these RG class meetings is mandatory, and grading will be based on overall participation and quality of commentary (i.e., if you do not participate in either the posting or the discussion phase, your grade will be penalized).* Group presentations will not be graded.

Discussion Preparation: Over the course of the semester there will be five discussions for which you will be asked to prepare notes on a set of discussion questions provided in advance. This will include the three discussions of the documentary films (August 28, September 9, September 16), a discussion of sensory and motor symptomatology (September 30), and a discussion of autism, science, and the media (November 20). A hard copy of your notes will be due in class *before* the discussion itself takes place, and notes will be graded as + (complete) or – (incomplete).

Tests: There will be three tests in this course. The first will take place on September 25 and will cover *all material (lectures and readings) up to and including September 23 (Theories Part 2)*. The second will be given on October 28 and will cover *all material (lectures and readings) from September 30 up to and including October 23 (Affective Factors/Face Processing)*. The third will take place on December 4 and will include *all material (lectures and readings) up to and including November 11 (Social Factors)*. Tests will NOT be multiple choice; they will consist of a series of word-limited, relatively short essay questions taking something like the following form: "Discuss X and identify and explain ways in which it may affect Y." Test questions will be based on topics discussed in class lectures *and* in the assigned readings (including material not covered in class). Generally speaking, they focus on important issues raised in class or in the readings (rather than asking you to list simple facts). Facts, however, will be important insofar as they support your argument regarding the issues.

I prefer an essay test because for a variety of reasons, multiple choice questions often do not adequately assess students' understanding of course material. Most importantly, they do not allow me to evaluate your ability to think about and apply the material that we cover in class. Grading guidelines will be circulated prior to exams and exams will be graded using the standard letter grade scale.

E. Overview of Course Content & Assignments

Date	Topic	Assignments/Due Dates
August 26	Introduction & Course Overview — introduction to ASD, its impact on children and families, its nature as a scientific puzzle; course overview; brief survey of the history of autism theory, research, and practice	<i>Discussion Questions for “Refrigerator Mothers” (see August 28) distributed</i>
August 28	Discussion of “Refrigerator Mothers” (a documentary on the history of autism) — Watch the film and come to class prepared to discuss your reactions. Questions circulated on August 26 will be used to help structure the discussion; but you should feel free to bring any and all ideas to the table	
September 2	Classification & Diagnosis I — presentation of major diagnostic categories and terminology in ASD as they are changing from DSM-IV to DSM-V, autism symptomatology; methods of assessment and problems of early identification	
September 4	In class showing of “Today’s Man” (a personal look at Asperger Syndrome)	<i>Discussion Questions for “Today’s Man” (see September 9) distributed</i>
September 9	Discussion of “Today’s Man” Questions circulated on September 4 will be used to help structure the discussion; but you should feel free to bring any and all ideas to the discussion	
September 11	Classification & Diagnosis II/Epidemiology & Etiology — review of the evidence for and against the existence of an “autism epidemic;” discussion of best and least supported hypotheses concerning the role of environmental and biological factors in the etiology of autism	AAC #1 due electronically prior to the beginning of class <i>Discussion Questions for “Autism is a World” (see September 16) distributed</i>

September 16	Discussion of "Autism is a World" (the exceptional case of Sue Rubin) — Questions circulated on September 11 will be used to help structure the discussion; but you should feel free to bring any and all ideas to the discussion	
September 18	Theories of ASD, Part 1: Neuroaological Theories; Psychological Theories— Mindblindness Part 1 — critical overview of theories of brain development and function in children with ASD; why psychological theories of autism are needed; overview of major cognitive theories Part 1 (mindblindness)	<i>AAC #1 returned with general discussion of the AAC assignment</i>
September 23	Theories of ASD, Part 2: Psychological Theories — Mindblindness Part 2/Executive Dysfunction/Weak Central Coherence — continued discussion of mindblindness; overview of major cognitive theories Part 2 (executive dysfunction, weak central coherence)	AAC #2 due electronically prior to the beginning of class
September 25	TEST 1	
September 30	Small Group Discussion of Sensory & Motor Symptoms in ASD — discussion of sensory and motor symptoms found in the autobiographical, documentary, and clinical literature on ASD; Short Lecture on Methods for Studying Sensory & Motor Symptoms in ASD	<i>AAC #2 returned</i>
October 2	Intervention — discussion of biomedical and psychosocial approaches to intervention in ASD	BP/RG Research Article #1 identified; initial BPs due by 12AM, Monday, October 6; reactions may be posted any time before 5PM, Wednesday, October 8
October 7	Early Social & Communicative Skill — discussion of current research on vocalization and gesture in children with ASD and in infants at heightened biological risk for ASD	

October 9	Research Group Discussion #1 - focus on identifying problems and explaining why they are problems	
October 14	NO CLASS – FALL BREAK	
October 16	Early Identification of ASD — discussion of current research on the early identification of ASD	
October 21	NO CLASS	
October 23	Affective Factors/Face Processing — discussion of current research on emotional expression, regulation, and recognition in children with ASD, including face processing	<i>BP/RG Research Article #2 identified; initial BPs due by 12AM, Monday, October 20; reactions may be posted any time before 5PM, Wednesday, October 22</i>
October 28	TEST 2	
October 30	Attentional Factors — discussion of current research on the nature of atypical attentional and perceptual processes in ASD, including local vs. global processing and enhanced perceptual performance	
November 4	Research Group Discussion #2 – focus on redesigning flawed study	
November 6	Symbolic Factors — discussion of current research on speech and language, play, and imitation in children with ASD	<i>Instructions and questions for RG #3 circulated; initial BPs due by 12AM, Monday, November 10; reactions may be posted any time before 5PM, Wednesday, November 12</i>
November 11	Social Factors — discussion of current research on social attribution, involvement, and monitoring in children and adolescents with ASD	
November 13	Research Group Discussion #3 - focus on designing a new study to address an important question about ASD	
November 18	Research Group Discussion #3: Presentations of Study Design	
November 20	Small Group Discussion: Autism, Science, and the Media	
November 25	NO CLASS - THANKSGIVING	

November 27	NO CLASS - THANKSGIVING	
December 2	<i>Small Group Presentations: Autism, Science, and the Media</i>	
December 4	TEST 3	

Note: Unforeseen circumstances may lead to adjustments in the syllabus. If any changes are necessary, I will inform you as soon as possible.

F. Reading List

Readings should be completed before class on the dates indicated.

September 4 (Classification & Diagnosis)

Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child*, 2, 217-250.

Grandin, T. & Scariano, M.M. (1986). *Emergence. Labelled Autistic*. CA: Arena Press [Read pages 12-43]

American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorders (Fourth edition, Text Revision), DSM-IV-TR*. [Read the section on "Pervasive Developmental Disorders"]

American Psychiatric Association (2013). *Diagnostic and Statistical Manual of Mental Disorders (Fifth edition), DSM-V*. [Diagnostic criteria for Social (Pragmatic) Communication Disorder 315.39 (F80/89) and Autism Spectrum Disorder (299.00) (F84.0) [as reprinted by Autism Speaks]

September 11 (Epidemiology & Etiology)

Wing, L., & Potter, D. (2002). The epidemiology of autism spectrum disorders: Is the prevalence rising? *Mental Retardation and Developmental Disabilities Research Reviews*, 8, 151-161.

Coe, C.L., & Lubach, G.R. (2008). Fetal programming. Prenatal origins of health and illness. *Current Directions in Psychological Science*, 17, 36-41.

Kinney, D.K., Miller, A.M., Crowley, D.J., Huang, E., & Gerber, E. (2008). Autism prevalence following prenatal exposure to hurricanes and tropical storms in Louisiana. *Journal of Autism & Developmental Disorders*, 38, 481-488.

September 18 (Theories of ASD, Part 1)

Courchesne, E., & Pierce, K. (2005). Brain overgrowth in autism during a critical time in development: Implications for frontal pyramidal neuron and interneuron development and connectivity. *International Journal of Developmental Neuroscience*, 23, 153-170.

Baron-Cohen, S., Jolliffe, T., Mortimer, C., & Robertson, M. (1997). Another advanced test of theory of mind: Evidence from very high functioning adults with autism or Asperger syndrome. *Journal of Child Psychology and Psychiatry*, 38, 813-822.

September 23 (Theories of ASD, Part 2)

Happé, F. (1999). Autism: cognitive deficit or cognitive style. *Trends in Cognitive Sciences*, 3(6), 216-222.

Yerys, B.E., Hepburn, S.L., Pennington, B.F., & Rogers, S.J. (2007). Executive function in preschoolers with autism: Evidence consistent with a secondary deficit. *Journal of Autism & Developmental Disorders*, 37, 1068-1079.

September 30 (Sensory & Motor Symptoms)

TBA

October 2 (Intervention)

TBA

October 7 (Early Social & Communicative Skill)

Dawson, G., Toth, K., Abbott, R., Osterling, J., Munson, J., Estes, A. et al. (2004). Early social attention impairments in autism: Social orienting, joint attention, and attention to distress. *Developmental Psychology*, 40, 271-283.

Wetherby, A.M., Watt, N., & Morgan, L. (2007). Social communication profiles of children with autism spectrum disorders late in the second year of life. *Journal of Autism and Developmental Disorders*, 37, 960-975.

October 16 (Early Identification of ASD)

Bryson, S.E., Zwaigenbaum, L., Brian, J., Roberts, R., Szatmari, P., Rombough, V. et al. (2007). A prospective case series of high-risk infants who developed autism. *Journal of Autism and Developmental Disorders*, 37, 12-24.

Nadig, A.S., Ozonoff, S., Young, G.S., Rozga, A., Sigman, M., & Rogers, S.J. (2007). A prospective study of response to name in infants at risk for autism. *Archives of Pediatrics and Adolescent Medicine*, 161, 378-383.

October 23 (Affective Factors/Face Perception)

TBA

October 30 (Attentional Factors)

Landry, R., & Bryson, S. (2004). Impaired disengagement of attention in young children with autism. *Journal of Child Psychology and Psychiatry*, 45, 1115-1122.

Gernsbacher, M.A., Stevenson, J.L., Khandakar, S., & Goldsmith, H.H. (2008). Why does joint attention look atypical in autism? *Child Development Perspectives*, 2, 38-45.

November 6 (Symbolic Factors)

Gernsbacher, M.A. (2004). Language is more than speech: A case study. *Journal of Developmental and Learning Disorders*, 8, 81-98.

Williams, E., Reddy, V. & Costall, A. (2001). Taking a closer look at functional play in children with autism. *Journal of Autism and Developmental Disorders*, 38, 67-77

November 11 (Social Factors)

Klin, A. (2000). Attributing social meaning to ambiguous visual stimuli in higher-functioning autism and Asperger syndrome: The social attribution task. *Journal of Child Psychology and Psychiatry*, 41, 831-846.

G. Grades

Conversion of v+, v, v- to a Numerical Grade: AACs and BPs will be graded on a v+, v, v- scale. Satisfactory completion of all AACs and BPs will earn a B for that portion of the grade. Anything more or less than that will earn a prorated portion of an A grade according to the following table. Failure to submit an AAC and/or to participate in a BP will result in a 0 for that assignment. Receipt of a 0 automatically drops the overall assignment grade by two letter grades (e.g., suppose someone had a v+ on both AACs and the second BP and then, unaccountably, decided to blow off the third BP. The overall AAC/BP grade would be a C.)

v+	v	v-	Grade
4			A+
3	1		A-
3		1	A-
2	2		A-
2	1	1	B+
1	3		B+
2		2	B
	4		B
1	2	1	B

1	1	2	B-
	3	1	B-
1		3	B-
	2	2	C+
	1	3	C+
		4	C

Conversion of +/- to a Numerical Grade: Discussion Notes will be graded on a +/- scale. Completion of all 5 sets of Discussion Notes will earn an A for that portion of the course grade. The overall assignment grade will drop by one letter grade with each incomplete assignment (e.g., turning in 4 sets of notes will earn a B, 3 sets of notes will earn a C, and so on).

Calculating the Overall Course Grade: Grades will be calculated according to the following table of assignment weights.

Assignment	% of Grade
2 AACs/2 BPs	20%
5 Sets of Discussion Notes	15%
3 Tests -- @20% each	60%
Class Participation	5%

H. Attendance

Everyone is expected to attend all class meetings and to be on-time (!). Because this is a small class, small classes depend heavily on group process, and group process in turn depends on the contributions of everyone involved, irregular attendance or chronic tardiness on the part of anyone in the group will seriously compromise our success as a group. *On-time attendance is, therefore, mandatory. Except in case of emergency (e.g., sudden illness, family crisis), in which case you must contact me by email in advance of the class meeting, you must be present at all class meetings.* Failure to attend class without contacting me in advance (i.e., by 2:00 on the day of class) and without a serious reason (being up late the night before and oversleeping is NOT a serious reason) will have a significant and adverse effect on your grade. In order for us to have adequate time for presentation and discussion, we will start at exactly 2:30. Everyone is expected to be present at 2:30. Being late to class more than once will have the same effect on the class participation grade as an unexcused absence.

I. On-time Completion of Assignments/Extensions

Everyone is expected to submit work on time. Occasionally, however, even for those who are especially well-organized, an extension may be justified (e.g., because you have 3 exams and a paper all due on the same day, because your singing group is going on a 10-day tour of Asia). As a rule, I am willing to grant extension requests when they are justifiable. However, *except in emergency circumstances (e.g., sudden illness, family crisis, extensions will ONLY be granted when the request is made at least 24 hours in advance of the deadline.* **The 24-hour rule is inviolate.** Please plan ahead. Thus, for example, AAC2 is due electronically by the beginning of class (2:30PM) on September 23. Please do not email me on the evening of September 22 asking for an extension because you have just discovered that you don't have time to finish the assignment. It will NOT be granted! If you need extra time (for a good reason,

procrastination is NOT a good reason), you must email me no later than 2:30PM on September 22 (i.e., 24 hours in advance). If a real emergency arises, the 24-hour rule does not apply; but you must email me (or if you are ill, have someone else email me) ASAP and before the deadline. In addition, you must provide supporting documentation of the fact that there was an emergency (e.g., a physician's note – no details, just the fact that you were ill and were seen by a doctor). Requests for retroactive extensions (i.e., requests made after the deadline) will not be granted, no matter the reason. Any work that is not submitted or is submitted late without an extension will receive a 0.

J. Responsible Use of Electronic and Other Resources

Laptops, tablets, and smartphones: Under NO circumstances is anyone (you or me) to use an electronic device during class for texting, checking or writing email, surfing the web, taking and uploading photographs (of me or your classmates), social networking, listening to music, or ANY NON-CLASS RELATED ACTIVITY. Our classroom is a small community. Engaging in non-class-related activity of this sort during class is socially isolating, distracting to others, and exhibits a lack of respect for our class as a community. If you feel unable to adhere to this guideline, please don't bring such a device to class.

Please check to make sure that your cell phone is OFF during class. Do not simply put it on Vibrate, since this will distract you and if you consult the phone to see who's calling or texting you, it will distract others. People can and will leave a voice mail or you can read their text message after class. The ONLY exception to this policy concerns true emergency messages (e.g., a family member is undergoing open-heart surgery at exactly the time class is being held). In the event you are expecting an emergency message, let me know before class begins and we will make appropriate arrangements.

Wikipedia, Google, web projects, and other sources (online and in the library): As scholars we all stand on the shoulders of others. It is completely appropriate to make use of published scholarly work in course assignments. There are, however, three simple rules to keep in mind in so doing. These rules will allow you to avoid even a hint of impropriety. They are:

- *Always cite your sources* and do so fully and accurately (it is perfectly appropriate to summarize the work of another, if it is relevant, and include it in your paper; but you must make it clear whose work it is and where it comes from)
- If you are using someone else's work verbatim, *ALWAYS use quotation marks* to indicate exactly where verbatim material starts and ends

K. University Policies

Email Policy: Each student is issued a University e-mail address (username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students who choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address.

Academic Integrity Policy: *Cheating/plagiarism will not be tolerated.* Students in this course will be

expected to comply with the [University of Pittsburgh's Policy on Academic Integrity](#). Any student suspected of violating this obligation for any reason during the semester will be required to participate in the procedural process, initiated at the instructor level, as outlined in the University Guidelines on Academic Integrity. This may include, but is not limited to, the confiscation of the examination of any individual suspected of violating University Policy. Furthermore, no student may bring any unauthorized materials to an exam.

Students with Disabilities: If you have a disability that requires special testing accommodations or other classroom modifications, you need to notify both the instructor and [Disability Resources and Services](#) no later than the second week of the term. You may be asked to provide documentation of your disability to determine the appropriateness of accommodations. To notify Disability Resources and Services, call (412) 648-7890 (Voice or TTD) to schedule an appointment. The Disability Resources and Services office is located in 140 William Pitt Union on the Oakland campus.

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