PSY610-08: Autism Spectrum Disorders: From Diagnosis to Treatment
Meeting time: Tuesday/Thursday: 2:30 – 3:50 PM
Location: Psychology B-316

Instructor: Matthew D. Lerner, PhD
Office: Psychology B-354
Office Hours: by appointment
Phone: 631-632-7660
Email: matthew.lerner@stonybrook.edu

Pre-Requisites: N/A (Graduate-Only course)

Course Description & Goals
This course is designed as a discussion of current research into the causes (etiology), types (nosology), characteristics (symptomatology), and treatment of autism spectrum disorders (ASDs). ASDs are now considered to be among the most common developmental psychological disorders, with recent prevalence estimates exceeding 1 in 68 (Centers for Disease Control, 2014). They are also among the least understood, with increasingly frequent media reports and publicity efforts often focusing on folk treatments, anecdotal evidence, and other non-empirical data on ASDs. This trend warrants a focus on the rapidly-growing body of research into understanding the cause, correlates, and treatment of ASDs. The primary goal of this course is to provide an introduction to the field of contemporary empirical research on ASDs. We will begin the course by exploring the history and current status of ASDs. We will then explore the many characteristics (neurobiological, behavioral, cognitive, and social) associated with ASDs, and theories of ASD cause and course. Finally, we will explore the array of current empirically-supported treatments for ASDs, and consider future directions for intervention research. In addition, this course will emphasize the importance of engaging in critical, independent thinking and thoughtful discussion regarding contemporary research and modern news stories in this area. Relatedly, while this course is pan-theoretical and -methodological, (i.e. designed to acquaint students with a variety of theories and approaches), we will largely draw upon the fields of developmental psychopathology, social cognition, and social neuroscience to explore the many facets of ASDs.

The course goals, to be achieved through course readings, assignments, and participation, are as follows. Students will:

1. Develop a basic understanding of the history and current empirical status of ASDs.
2. Identify current controversies in the public domain related to ASDs.
    a. Become a more critical consumer of psychological science by critically evaluating these controversies in light of current research.
3. Distinguish the clinical characteristics associated with ASDs, including any presentation unique to ASDs.
    a. Appraise the interplay between characteristics and their resulting impact on daily and longitudinal functioning in individuals with ASDs.
4. Gain awareness of how psychologists and other professionals work with individuals with ASDs and their families.
    a. Begin to understand the concept of evidence-based clinical practice by appraising the empirical status of such treatments.

Weekly Questions and Participation
Each student is responsible for completing the weekly readings, and for submitting two discussion questions each week pertaining to them. The discussion questions should be sent by Monday at 5pm, prior to the relevant Tuesday class. These discussion questions should aim to facilitate thoughtful discussion and critical evaluation of the week's readings. **Each student is expected to participate in the discussion, and participation points will count for 25% of the final course grade.**

Presentations
Each 2-person student group is expected to choose **2 "presentation weeks,"** designated in the syllabus, in which to present the assigned readings via PowerPoint. The team of presenters should also present one related contemporary news story of their choice. Each presentation should provide a summary of each research article, and should *uniquely* identify strengths and weaknesses (i.e., not strengths and weaknesses that are already mentioned in the article). Each presenter should also identify potential future directions, and clinical implications of the article. Individuals are encouraged to use other media materials to give your presentation some pizzazz, but this is not required. **Presentations count for 25% of your final grade.**

Paper Proposal
Each student will write a 2-3 page proposal outlining the topic, the basic structure of the paper (e.g., which arguments you will consider), and noting why this topic is significant to the field of clinical science. This outline will be ***due at the 10/6 class meeting***. Paper proposals will be evaluated based upon the student's ability to critically evaluate the research literature and develop a novel topic for inquiry. **Paper proposals count for 15% of the final course grade.**

Final Paper: Research Proposal or Critical Review Paper
Research Proposal
Write a research proposal designed to answer three hypotheses that you are interested in investigating within the realm of ASDs. Your research proposal should focus on developing a background that is grounded in the existing literature. Hypotheses should strike a balance between being innovative and unique, yet feasible with strong empirical evidence to support them. Research Proposals should be at least 15 pages and will be evaluated based upon the strength of supporting arguments and methods and effective recruitment of evidence from the literature.

Critical Review Paper
Each student will write a paper (15 - 20 pages) on a topic of controversy pertaining to ASDs. Sample topics include but are not limited to:

- Discuss the controversy surrounding the increased prevalence of ASDs, addressing either the plausibility of the claim that there is a *true* increase, the possible causes of such an increase, or both.
- Discuss the "vaccine controversy," focusing on its relevance to broader questions (e.g. correlation = causation?) of scientific inquiry.
- Discuss the change in diagnostic criteria for autism over time, attending to the current debate and potential consequences regarding changes in criteria with the release of the DSM-V.
- Choose a popular treatment for ASDs and present its theoretical rationale, history, and empirical status, with an eye towards advancing a position on whether the treatment should or should not be practiced.

Final Papers & Research Proposals are due at the final class (12/3) and count for 35% of your final grade.

Course Grade:
Final grades will be determined on the following basis:

1. Attendance & Participation:	25%
2. Paper Proposal	15%
3. Presentations	25%
4. Final Paper/Research Proposal	35%

Required Books
Jackson, L. (2002) *Freaks, Geeks, and Asperger's Syndrome*. Philadelphia, PA: Jessica Kingsley.

Books that are good additions to your personal library (but not required):
Attwood, T. (2008) *The Complete Guide to Asperger's Syndrome*. Philadelphia, PA: Jessica Kingsley.

Haddon, M. (2004). *The Curious Incident of the Dog in the Night-Time*. New York, NY: Vintage.

Volkmar, F., Paul, R. Klin, A., Cohen, D. (Eds.). (2005) *Handbook of Autism and Pervasive Developmental Disorders, Two Volume Set* (3rd Ed.). Hoboken, NJ: John Wiley & Sons.

PART I: DIAGNOSIS

WEEK 1 (8/25 & 8/27): *Definition & Introduction*

Overriding questions/Key ideas:
Why is autism a worthwhile topic to study?
What do you hope to get out of this class?
What can the research literature contribute to families, practitioners, and policymakers addressing the needs of individuals with ASDs?

Thought Questions:
What led you to take this class?
What do you already know about people with autism?

Rimland, B. (1994). The modern history of autism: A personal perspective. In J. Matson (Ed.), *Autism in children and adults: Etiology, assessment, and intervention*. (pp. 1-11). Belmont, CA US: Thomson Brooks/Cole Publishing Co.

Frith, U. (2004). Emanuel Miller lecture: confusions and controversies about Asperger syndrome. *Journal of child psychology and psychiatry, and allied disciplines*, *45*(4), 672-86. doi: 10.1111/j.1469-7610.2004.00262.x.

Fuentes, J. (2014). Autism Spectrum Disorders: Ten Tips to Support Me. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(11), 1145-1146.

Smith, T., Scahill, L., Dawson, G., Guthrie, D., Lord, C., Odom, S., et al. (2007). Designing research studies on psychosocial interventions in autism. *Journal of autism and developmental disorders*, *37*(2), 354-66. doi: 10.1007/s10803-006-0173-3.

Optional/For your reference:
Grinker, R. R. (2015). Reframing the Science and Anthropology of Autism. Culture, Medicine, and Psychiatry, 39(2), 345-350.

WEEK 2 (9/1 & 9/3)*: Diagnosis 1 – Classic Autism, Fragile X, Rett's, CDD*

Overriding questions/Key ideas:
What unique diagnostic issues arise in autism?
What are the best methods for diagnosis? What methods are sufficient?
When does autism tend to appear in other (genetic) disorders?
What can autism diagnosis tell you about diagnoses of other childhood disorders? What can't it tell you?

Thought Question: How does classic autism differ from mental retardation?

Lai, MC, Lombardo, MV, Baron-Cohen, S. (2014) Autism. *Lancet*, 383, 986-910. doi: 10.1016/S0140-6736(13)61539-1.

Volkmar, F. & Klin, A. (2005) Chapter 1: Issues in the Classification of Autism and Related Conditions. In Volkmar, F., Paul, R. Klin, A., Cohen, D., Eds.) *Handbook of Autism and Pervasive Developmental Disorders, Two Volume Set* (3rd Edition). Hoboken, NJ: John Wiley & Sons.

Moss, J., & Howlin, P. (2009). Autism spectrum disorders in genetic syndromes: Implications for diagnosis, intervention and understanding the wider autism spectrum disorder population. *Journal of Intellectual Disability Research*, *53*(10), 852-873. doi:10.1111/j.1365-2788.2009.01197.x.

Volkmar, F., Siegel, M., Woodbury-Smith, M., King, B., McCracken, J., & State, M. (2014). Practice parameter for the assessment and treatment of children and adolescents with autism spectrum disorder. Journal of the American Academy of Child & Adolescent Psychiatry, 53(2), 237-257.

Kasari, C., Brady, N., Lord, C., & Tager-Flusberg, H. (2013). Assessing the Minimally Verbal School-Aged Child With Autism Spectrum Disorder. *Autism Research*, 6(6), 479-493.

Optional/For your reference:
Lord, C. (2010). Autism Spectrum Disorders: from research to practice. *American Psychologist*, 65(8), 815 - 826.

Lord, C., Risi, S., Lambrecht, L., Cook, E.H., Jr., Leventhal, B.L., DiLavore, P.C., et al. (2000). Autism Diagnostic Observation Schedule - Generic: A standard measure of social and communication deficits

associated with the spectrum of autism. *Journal of Autism & Developmental Disorders*, 30(3), 205-223.

Lord, C., Petkova, E., Hus, V., Gan, W., Lu, F., Martin, D. M., ... & Risi, S. (2012). A multisite study of the clinical diagnosis of different autism spectrum disorders. Archives of general psychiatry, 69(3), 306-313.

Barger, B. D., Campbell, J. M., & McDonough, J. D. (2013). Prevalence and onset of regression within autism spectrum disorders: a meta-analytic review. Journal of autism and developmental disorders, 43(4), 817-828.

WEEK 3 (9/8 & 9/10)*: Diagnosis 2 – High Functioning Autism, Asperger's Syndrome, & Differential Diagnosis*

*********************NO CLASS ON 9/8***********************

Overriding questions/Key ideas:
Is Asperger's Syndrome diagnostically unique?
Do you agree with the high/low functioning distinctions? When? When not?
Are there other disorders you would consider as part of the autism spectrum? Why?
Can one be "cured" or "grow" out of autism? Is the answer to this question different than for other disorders? Why or why not?

Thought Question: How similar do you think HFA/AS are to classic autism? To each other?

9/10: GUEST SPEAKER Zonya Mitchell, PhD

Jackson, L. (2002) *Freaks, Geeks, and Asperger's Syndrome*. (pp. 19 – 30). Philadelphia, PA: Jessica Kingsley.

Baggs, A. (2007) *In My Language*. http://www.youtube.com/watch?v=JnylM1hI2jc.

McPartland, J. C., Reichow, B., & Volkmar, F. R. (2012). Sensitivity and specificity of proposed DSM-5 diagnostic criteria for autism spectrum disorder. *Journal of the American Academy of Child & Adolescent Psychiatry*, 51(4), 368-383.

Lory, R. (2014). The shift to autism spectrum disorder (ASD) terminology: Its potential to further the neurodiversity movement. *On the Spectrum, Fall 2014*.

Hartley, S. L., & Sikora, D. M. (2009). Which DSM-IV-TR criteria best differentiate high-functioning autism spectrum disorder from ADHD and anxiety disorders in older children? *Autism: the international journal of research and practice, 13*(5), 485-509. doi: 10.1177/1362361309335717.

Witwer, A. N., & Lecavalier, L. (2008). Examining the validity of autism spectrum disorder subtypes. *Journal of autism and developmental disorders, 38*(9), 1611-24. doi: 10.1007/s10803-008-0541-2.

Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. Developmental Psychology, 49(1), 59.

Optional/For your reference:

Stein, M. T., Klin, A., Miller, K., Goulden, K., Coolman, R., Coolman, D. M., et al. (2004). When Asperger's Syndrome and a Nonverbal Learning Disability Look Alike. *Journal of Developmental & Behavioral Pediatrics*, *25*(3), 190-195. doi: 10.1097/00004703-200406000-00008.

Matson, J., & Wilkins, J. (2008). Nosology and diagnosis of Asperger's syndrome. *Research in Autism Spectrum Disorders*, *2*(2), 288-300. doi:10.1016/j.rasd.2007.07.003.

PART II: A DEEPER UNDERSTANDING

WEEK 4 (9/15 & 9/17)*: Theories of Etiology – Beyond Refrigerator Mothers*

Overriding questions/Key ideas:
What can the array of theories of etiology tell us about diagnostic validity?
Where do "folk theories" of etiology fit in? Are they worth considering?
When is understanding etiology important for diagnosis and treatment?

Thought Question: Is there any validity to the refrigerator mother theory? Explain.

Scahill L, Bearss K. (2009) The rise in autism and the mercury myth. *Journal of Child & Adolescent Psychiatric Nursing*. 22(1): 51 – 3.

Mitchell, G. E., & Locke, K. D. (2014). Lay beliefs about autism spectrum disorder among the general public and childcare providers. *Autism*, 1362361314533839.

Elsabbagh, M., & Johnson, M. H. (2010). Getting answers from babies about autism. Trends in cognitive sciences, 14(2), 81-87.

Auyeung, B., Baron-Cohen, S., Ashwin, E., Knickmeyer, R., Taylor, K., & Hackett, G. (2009). Fetal testosterone and autistic traits. *British Journal of Psychology*, *100*(1), 1-22.

Brunsdon, V. E., & Happé, F. (2014). Exploring the 'fractionation'of autism at the cognitive level. *Autism*, 18(1), 17-30.

Hobson, R. P. (2013). The coherence of autism. *Autism*, 1362361313497538.

Dziobek, I., Fleck, S., Rogers, K., Wolf, O. T., & Convit, A. (2006). The 'amygdala theory of autism' revisited: linking structure to behavior. *Neuropsychologia*, *44*(10), 1891-9. doi: 10.1016/j.neuropsychologia.2006.02.005.

Ornoy, A., Weinstein-Fudim, L., & Ergaz, Z. (2015). Prenatal factors associated with Autism Spectrum

Disorder (ASD). *Reproductive Toxicology*.

Optional/For your reference:
Wakefield, A. J., Murch, S. H., Anthony, A., Linnell, J., Casson, D. M., Malik, M., et al. (1998). RETRACTED: Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 351, 637-641.

The Editors of The Lancet. (2010) Retraction--Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children. *The Lancet*, 375, 445-445.

Jain, A., Marshall, J., Buikema, A., Bancroft, T., Kelly, J. P., & Newschaffer, C. J. (2015). Autism occurrence by MMR vaccine status among US children with older siblings with and without autism. *JAMA*, 313(15), 1534-1540.

Windham, G. C., Fessel, K., & Grether, J. K. (2009). Autism spectrum disorders in relation to parental occupation in technical fields. *Autism research : official journal of the International Society for Autism Research*, *2*(4), 183-91. doi: 10.1002/aur.84.

WEEK 5* (9/22 & 9/24)*: Other Theories of Etiology & Prevalence

Overriding questions/Key ideas:
What are identified contributors to the rise in ASD diagnoses? How plausible is the notion of a "true increase?"
What is the relationship between etiology and prevalence? What can this tell you about classes of psychological diagnoses more broadly?

Thought Question: If someone asked you, "you took an autism class, why is it increasing," what would you say?

9/22: GUEST SPEAKER Becca Lory

Lundström, S., Reichenberg, A., Anckarsäter, H., Lichtenstein, P., & Gillberg, C. (2015). Autism phenotype versus registered diagnosis in Swedish children: prevalence trends over 10 years in general population samples. *BMJ*, *350*, h1961.

Wing, L., & Potter, D. (2009). The epidemiology of autism spectrum disorders: Is the prevalence rising?. *Assessment of autism spectrum disorders* (pp. 18-54). New York, NY US: Guilford Press. Retrieved from PsycINFO database.

Mandell, D., & Lecavalier, L. (2014). Should we believe the Centers for Disease Control and Prevention's autism spectrum disorder prevalence estimates?. Autism, 18(5), 482-484.

Picci, G., & Scherf, K. S. (2014). A Two-Hit Model of Autism Adolescence as the Second Hit. *Clinical Psychological Science*, 2167702614540646.

Chevallier, C., Kohls, G., Troiani, V., Brodkin, E. S., & Schultz, R. T. (2012). The social motivation theory of autism. Trends in cognitive sciences, 16(4), 231-239.

Sinha, P., Kjelgaard, M. M., Gandhi, T. K., Tsourides, K., Cardinaux, A. L., Pantazis, D., ... & Held, R. M. (2014). Autism as a disorder of prediction. *Proceedings of the National Academy of Sciences*, 111(42), 15220-15225.

Optional/For your reference:

Stavropoulos, K. K., & Carver, L. J. (2013). Research review: social motivation and oxytocin in autism–implications for joint attention development and intervention. *Journal of Child Psychology and Psychiatry*, 54(6), 603-618.

Hertz-Picciotto, I., & Delwiche, L. (2009). The rise in autism and the role of age at diagnosis. *Epidemiology (Cambridge, Mass.)*, *20*(1), 84-90. doi: 10.1097/EDE.0b013e3181902d15.

Grethner, J., Rosen, N., Smith, K., Croen, L. (2010) Investigation of shifts in autism reporting in the California Department of Developmental Services. *Journal of Autism and Developmental Disorders*.

Mattila, M., Kielinen, M., Jussila, K., Linna, S., Bloigu, R., Ebeling, H., et al. (2007). An epidemiological and diagnostic study of Asperger syndrome according to four sets of diagnostic criteria. *Journal of the American Academy of Child and Adolescent Psychiatry*, *46*(5), 636-46. doi: 10.1097/chi.0b013e318033ff42.

Waterhouse, L. (2008). Autism overflows: Increasing prevalence and proliferating theories. *Neuropsychology Review*, *18*(4), 273-286. doi:10.1007/s11065-008-9074-x.

WEEK 6 (9/29 & 10/1)*: Neurobiology of Autism*

Overriding questions/Key ideas:
Why is it important to understand the neural underpinnings of ASDs?
What does structural MRI tell us that fMRI cannot? What does ERP tell us that MRI cannot?
Can we identify ASDs by neuroimagining methods? If so, should we? If not, should we try?
What are ethical implications of this?

Thought Question:
What is the value of studying the neurobiological underpinnings of autism?

10/1: GUEST SPEAKER Allison Jack, PhD

McPartland, J. C., & Pelphrey, K. A. (2012). The implications of social neuroscience for social disability. *Journal of autism and developmental disorders*, 42(6), 1256-1262.

Thomas, M. S., Davis, R., Karmiloff-Smith, A., Knowland, V. C., & Charman, T. (2015). The over-pruning hypothesis of autism. *Developmental science*.

Courchesne, E., & Pierce, K. (2005). Why the frontal cortex in autism might be talking only to itself: local over-connectivity but long-distance disconnection. *Current opinion in neurobiology*, *15*(2), 225-30. doi: 10.1016/j.conb.2005.03.001.

Kleinhans, N. M., Johnson, L. C., Richards, T., Mahurin, R., Greenson, J., Dawson, G., et al. (2009). Reduced neural habituation in the amygdala and social impairments in autism spectrum disorders. *The American journal of psychiatry*, *166*(4), 467-75. doi: 10.1176/appi.ajp.2008.07101681.

Redcay, E., & Courchesne, E. (2005). When is the brain enlarged in autism? A meta-analysis of all brain size reports. *Biological psychiatry*, *58*(1), 1-9. doi: 10.1016/j.biopsych.2005.03.026.

Raznahan, A., Wallace, G. L., Antezana, L., Greenstein, D., Lenroot, R., Thurm, A., ... & Giedd, J. N. (2013). Compared to what? Early brain overgrowth in autism and the perils of population norms. Biological Psychiatry, 74(8), 563-575.

Optional/For your reference:

Pelphrey, K. A., Shultz, S., Hudac, C. M., & Vander Wyk, B. C. (2011). Research review: constraining heterogeneity: the social brain and its development in autism spectrum disorder. *Journal of Child Psychology and Psychiatry*, 52(6), 631-644.

Pierce, K., & Redcay, E. (2008). Fusiform function in children with an autism spectrum disorder is a matter of 'who.'. *Biological Psychiatry*, *64*(7), 552-560. doi:10.1016/j.biopsych.2008.05.013.

Jeste, S.S., & Nelson, C.A. (2009). Event related potentials in the understanding of autism spectrum disorders: an analytical review. Journal of autism and developmental disorders, 39(3), 495-510. doi: 10.1007/s10803-008-0652-9.

Uhlhaas, P. J., & Singer, W. (2007). What do disturbances in neural synchrony tell us about autism? *Biological psychiatry*, *62*(3), 190-1. doi: 10.1016/j.biopsych.2007.05.023.

WEEK 7 (10/6 & 10/8)*: Social Cognitive Processes – Joint Attention & Theory of Mind*

*************PROPOSALS DUE*****************

Overriding questions/Key ideas:
How feasible is the Theory of Mind Hypothesis of autism?
How does joint attention develop into Theory of Mind? How does Theory of Mind then develop?
What does it mean that individuals with ASDs don't fail all Theory of Mind tasks?
How do Theory of Mind impairments relate to neurobiological and etiological theories?

Thought question:
Do you buy the Theory of Mind account of autism? Why or why not?

10/6: Student Presentations: Anthony M. & Rolando

10/8: GUEST SPEAKER, Pamela Block, PhD

Jackson, L. (2002) *Freaks, Geeks, and Asperger's Syndrome*. (pp. 99 – 113). Philadelphia, PA: Jessica Kingsley.

Baron-Cohen, S. (2008). Theories of the autistic mind. *The Psychologist*, *21*(2), 112-116. Retrieved from PsycINFO database.

Mundy, P., Sullivan, L., & Mastergeorge, A. (2009). A parallel and distributed-processing model of joint attention, social cognition and autism. *Autism Research*, *2*(1), 2-21. doi:10.1002/aur.61.

Gernsbacher, M. A., Stevenson, J. L., Khandakar, S., & Goldsmith, H. H. (2008). Why Does Joint Attention Look Atypical in Autism? *Child Development Perspectives*, *2*(1), 38-45. doi: 10.1111/j.1750-8606.2008.00039.x.

Senju, A., Southgate, V., White, S., & Frith, U. (2009). Mindblind Eyes: An Absence of Spontaneous Theory of Mind in Asperger Syndrome. *Science (New York, N.Y.)*, *883*. doi: 10.1126/science.1176170.Lombardo (2009)

Tager-Flusberg, H. (2007). Evaluating the theory-of-mind hypothesis of autism. *Current Directions in Psychological Science*, *16*(6), 311-315. doi:10.1111/j.1467-8721.2007.00527.x.

Foti, F., De Crescenzo, F., Vivanti, G., Menghini, D., & Vicari, S. (2015). Implicit learning in individuals with autism spectrum disorders: a meta-analysis. *Psychological medicine*, 45(05), 897-910.

Optional/For your reference:

Damiano, C. R., Mazefsky, C. A., White, S. W., & Dichter, G. S. (2014). Future directions for research in autism spectrum disorders. Journal of Clinical Child & Adolescent Psychology, 43(5), 828-843.

Baron-Cohen, S. (2001). Theory of mind and autism: A review. *International review of research in mental retardation: Autism (vol. 23)* (pp. 169-184). San Diego, CA US: Academic Press.

Steele, S., Joseph, R. M., & Tager-Flusberg, H. (2003). Brief report: developmental change in theory of mind abilities in children with autism. *Journal of autism and developmental disorders*, *33*(4), 461-7. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/12959426.

PART III: OTHER FEATURES & INTERVENTIONS

WEEK 8 (10/13 & 10/15)*: Behavioral Correlates & Comorbidities*

Overriding questions/Key ideas:
Why do individuals with ASD experience behavior problems?
Do psychological comorbidities (e.g. anxiety, depression) in ASDs look the same as they do in typically-developing individuals?
Do comorbidities ever develop as a result of ASD symptoms?

Thought Question: Are the behaviors evident in autism primary symptoms, or are they an outgrowth of other characteristics? Explain your answer.

10/13: Student Presentations: Elliot, Rachel, & Rolando
10/15: GUEST SPEAKERS Drs. Rebecca Sachs & David Makowski

Volker, M. a., Lopata, C., Smerbeck, A. M., Knoll, V. a., Thomeer, M. L., Toomey, J. a., et al. (2009). BASC-2 PRS Profiles for Students with High-Functioning Autism Spectrum Disorders. *Journal of autism and developmental disorders*. doi: 10.1007/s10803-009-0849-6.

Semrud-Clikeman, M., Walkowiak, J., Wilkinson, A., & Christopher, G. (2010). Neuropsychological differences among children with Asperger syndrome, nonverbal learning disabilities, attention deficit disorder, and controls. *Developmental neuropsychology*, 35(5), 582-600.

Gotham, K., Unruh, K., & Lord, C. (2014). Depression and its measurement in verbal adolescents and adults with autism spectrum disorder. *Autism*, 1362361314536625.

Wood, J. J., & Gadow, K. D. (2010). Exploring the nature and function of anxiety in youth with autism spectrum disorders. *Clinical Psychology: Science and Practice*, 17(4), 281-292.

Optional/For your reference:

Mundy, P. C., Henderson, H. A., Inge, A. P., & Coman, D. C. (2007). The modifier model of autism and social development in higher functioning children. *Research and practice for persons with severe disabilities: the journal of TASH*, 32(2), 124.

Meyer, J.A., Mundy, P. C., Van Hecke, A. V., & Durocher, J. S. (2006). Social attribution processes and comorbid psychiatric symptoms in children with Asperger syndrome. *Autism : the international journal of research and practice*, *10*(4), 383-402. doi: 10.1177/1362361306064435.

Macintosh, K., & Dissanayake, C. (2006). Social skills and problem behaviours in school aged children with high-functioning autism and Asperger's Disorder. *Journal of autism and developmental disorders*, *36*(8), 1065-76. doi: 10.1007/s10803-006-0139-5.

WEEK 9 (10/20 & 10/22)*: Perceptual Processes & Sensory Abnormalities*

Overriding questions/Key ideas:
How do perceptual abnormalities relate to ASD diagnoses? Do they lead to diagnostic features, vice versa, or neither?
How would the perceptual abnormalities of ASDs appear in typically developing individuals?
How do perceptual abnormalities relate to social cognitive processes in ASDs?

Thought Question: What is the relationship between perceptual/sensory and behavioral issues in autism?

10/20 or 10/22: Student Presentations: Anthony B. & Anthony M.

10/22: GUEST SPEAKER Noah Britton, M.A.

Jackson, L. (2002) *Freaks, Geeks, and Asperger's Syndrome*. (pp. 60 – 77). Philadelphia, PA: Jessica Kingsley.

Happé, F., & Booth, R. (2008). The power of the positive: Revisiting weak coherence in autism spectrum disorders. *The Quarterly Journal of Experimental Psychology*, *61*(1), 50-63.

Leekam, S. R., Prior, M. R., & Uljarevic, M. (2011). Restricted and repetitive behaviors in autism spectrum disorders: a review of research in the last decade. Psychological bulletin, 137(4), 562.

Wiggins, L. D., Robins, D. L., Bakeman, R., & Adamson, L. B. (2009). Brief report: sensory abnormalities as distinguishing symptoms of autism spectrum disorders in young children. *Journal of autism and developmental disorders*, *39*(7), 1087-91. doi: 10.1007/s10803-009-0711-x.

Klin, A., Jones, W., Schultz, R., & Volkmar, F. (2003). The enactive mind, or from actions to cognition: lessons from autism. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 358(1430), 345-360.

Linkenauger, S. A., Lerner, M. D., Ramenzoni, V. C., & Proffitt, D. R. (2012). A perceptual–motor deficit predicts social and communicative impairments in individuals with autism spectrum disorders. Autism Research, 5(5), 352-362.

Stoit, A. M., van Schie, H. T., Slaats-Willemse, D. I., & Buitelaar, J. K. (2013). Grasping motor impairments in autism: not action planning but movement execution is deficient. Journal of autism and developmental disorders, 43(12), 2793-2806.

Optional/For your reference:

Haswell, C. C., Izawa, J., R Dowell, L., H Mostofsky, S., & Shadmehr, R. (2009). Representation of internal models of action in the autistic brain. *Nature neuroscience*, *12*(8), 970-2. doi: 10.1038/nn.2356.

Esbensen, A. J., Seltzer, M. M., Lam, K. S., & Bodfish, J. W. (2009). Age-related differences in restricted repetitive behaviors in autism spectrum disorders. *Journal of autism and developmental disorders*, *39*(1), 57-66. doi: 10.1007/s10803-008-0599-x.

Marsh, L., Pearson, A., Ropar, D., & Hamilton, A. (2013). Children with autism do not overimitate. *Current Biology*, 23(7), R266-R268.

Lind, S. & Bowler, D. (2010) Impaired Performance on See-Know Tasks Amongst Children with Autism: Evidence of Specific Difficulties with Theory of Mind or Domain-General Task Factors? *Journal of Autism and Developmental Disorders*.

WEEK 10 (10/27 & 10/29): *Emotion Understanding and Expression*

Overriding questions/Key ideas:
How does emotion perception relate to social cognition and basic perception in ASDs?
Is empathy really impaired in ASDs?
How does emotional understanding in ASD develop differently from typical development?

Thought question: What is the relationship between expressive and receptive emotion understanding?

10/27 or 10/29: Student Presentations: Elliot & Anthony

Lozier, L. M., Vanmeter, J. W., & Marsh, A. A. (2014). Impairments in facial affect recognition associated with autism spectrum disorders: A meta-analysis. Development and psychopathology, 26(4pt1), 933-945.

Baribeau, D. A., Doyle-Thomas, K. A., Dupuis, A., Iaboni, A., Crosbie, J., McGinn, H., ... & Anagnostou, E. (2015). Examining and Comparing Social Perception Abilities Across Childhood-Onset Neurodevelopmental Disorders. *Journal of the American Academy of Child & Adolescent Psychiatry*.

Lerner, M. D., McPartland, J. C., & Morris, J. P. (2013). Multimodal emotion processing in autism spectrum disorders: An event-related potential study. *Developmental cognitive neuroscience*, 3, 11-21.

Jones, W., & Klin, A. (2013). Attention to eyes is present but in decline in 2-6-month-old infants later diagnosed with autism. *Nature*, 504(7480), 427-431.

Mazefsky, C. A., Herrington, J., Siegel, M., Scarpa, A., Maddox, B. B., Scahill, L., & White, S. W. (2013). The role of emotion regulation in autism spectrum disorder. Journal of the American Academy of Child & Adolescent Psychiatry, 52(7), 679-688.

Cook, R., Brewer, R., Shah, P., & Bird, G. (2013). Alexithymia, not autism, predicts poor recognition of emotional facial expressions. *Psychological science*, 0956797612463582.

McPartland, J. C., Wu, J., Bailey, C. A., Mayes, L. C., Schultz, R. T., & Klin, A. (2011). Atypical neural specialization for social percepts in autism spectrum disorder. *Social neuroscience*, 6(5-6), 436-451.

Optional/For your reference:

Weiss, J. A. (2014). Transdiagnostic case conceptualization of emotional problems in youth with ASD: An emotion regulation approach. Clinical Psychology: Science and Practice, 21(4), 331-350.

Falck-Ytter, T., Fernell, E., Gillberg, C., von Hofsen, C. (2010) Face scanning distinguishes social from communication impairments in autism. *Developmental Science*, 1-12.

Klin, A., Lin, D. J., Gorrindo, P., Ramsay, G., & Jones, W. (2009). Two-year-olds with autism orient to non-social contingencies rather than biological motion. *Nature, 459*(7244), 257-261. doi: 10.1038/nature07868.

Rump, K. M., Giovannelli, J. L., Minshew, N. J., & Strauss, M. S. (2009). The development of emotion recognition in individuals with autism. *Child development, 80*(5), 1434-47. doi: 10.1111/j.1467-8624.2009.01343.x.

WEEK 11 (11/3 & 11/5)*: Social Relationships and Attachment*

Overriding questions/Key ideas:
How does emotional development in ASDs influence social development?
Can environmental (social) factors impact friendship development in ASDs?
Is attachment related to social development in ASDs differently than in typical development?

Thought Questions: Why is it hard for people with autism to make friends?

11/3 or 11/5: Student Presentations: Debi, Bianca, & Rachel

Jackson, L. (2002) *Freaks, Geeks, and Asperger's Syndrome*. (pp. 163 – 170). Philadelphia, PA: Jessica Kingsley.

Bauminger, N., Solomon, M., Rogers, S. (2010) Predicting Friendship Quality in Autism Spectrum Disorders and Typical Development. *Journal of autism and developmental disorders.*

Kasari, C., Locke, J., Gulsrud, A., & Rotheram-Fuller, E. (2011). Social networks and friendships at school: Comparing children with and without ASD. *Journal of autism and developmental disorders*, 41(5), 533-544.

Gernsbacher, M., Dissanayake, C., Goldsmith, H., Mundy, P., Rogers, S., & Sigman, M. (2005). Autism and Deficits in Attachment Behavior. *Science*, *307*(5713), doi:10.1126/science.307.5713.1201.

Kasari, C., Rotheram-Fuller, E., Locke, J., & Gulsrud, A. (2012). Making the connection: randomized controlled trial of social skills at school for children with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 53(4), 431-439.

Optional/For your reference:

Bauminger, N., Shulman, C., & Agam, G. (2004). The link between perceptions of self and of social relationships in high-functioning children with autism. *Journal of Developmental and Physical Disabilities*, *16*(2), 193-214. doi:10.1023/B:JODD.0000026616.24896.c8.

Paul, R., Orlovski, S., Marcinko, H., & Volkmar, F. (2009). Conversational behaviors in youth with high-functioning ASD and Asperger syndrome. *Journal of Autism and Developmental Disorders*, *39*(1), 115-125. doi:10.1007/s10803-008-0607-1.

Kasari, C., & Rotheram-Fuller, E. (2007). Peer Relationships of children with autism: Challenges and interventions. *Clinical manual for the treatment of autism* (pp. 235-257). Arlington, VA US: American Psychiatric Publishing, Inc. Retrieved from PsycINFO database.

WEEK 12 (11/10 & 11/12)*: Long Term Outcomes & the Long View*

***********************11/12: ABCT CONFERENCE, NO MATT, BUT OPTIONAL CLASS***************************************

Overriding questions/Key ideas:
Will changes in diagnostic criteria change long-term prospects for individuals with ASDs?
What are "optimal" long-term outcomes for individuals with ASDs?
What factors that we have previously covered influence long term outcomes for individuals with ASDs?

Thought Question: Do you know adults who might qualify for autism diagnoses? Are you sure? How?

11/10: GUEST TEACHER/SPEAKER: Lauren Moskowitz, PhD

Howlin, P. (2000). Outcome in adult life for more able individuals with autism or Asperger syndrome. *Autism*, *4*(1), 63-83. doi:10.1177/1362361300004001005.

Fein, D., Barton, M., Eigsti, I. M., Kelley, E., Naigles, L., Schultz, R. T., ... & Tyson, K. (2013). Optimal outcome in individuals with a history of autism. *Journal of Child Psychology and Psychiatry*, 54(2), 195-205.

Lerner, M.D., Haque, O.S., Northrup, E.C., Lawer, L., Bursztajn H.J. (2012) Emerging perspectives on adolescents and young adults with high functioning autism spectrum disorders, violence, and criminal law. *Journal of the American Academy of Psychiatry and the Law, 40*, 177 - 190. Corrigendum, 40, 445.

Block, P. (2015). The Emergent Landscape of Autistic Communities and Autistic Studies. *Culture, Medicine, and Psychiatry*, 39(2), 351-355.

Optional/For your reference:
Pellicano, E., Dinsmore, A., & Charman, T. (2014). Views on Researcher-Community Engagement in Autism Research in the United Kingdom: A Mixed-Methods Study. *PLoS One*.

Siegel, M., & Gabriels, R. L. (2014). Psychiatric hospital treatment of children with autism and serious behavioral disturbance. *Child and adolescent psychiatric clinics of North America*, *23*(1), 125-142.

Anderson, D. K., Liang, J. W., & Lord, C. (2014). Predicting young adult outcome among more and less cognitively able individuals with autism spectrum disorders. *Journal of Child Psychology and Psychiatry*, 55(5), 485-494.

WEEK 13 (11/17 & 11/19)*: Intervention I: Early Intervention & Behavioral Approaches*

Overriding questions/Key ideas:
Why is Early Intervention indicated for individuals with ASDs?
How do intervention practices relate to specific areas of deficits for individuals with ASDs?
What is the value of behavioral approaches to treating ASDs? What is their limitation?

Thought Question: Do you think behavioral approaches are the best way to treat all autism-related problems? Why or why not?

11/17: GUEST SPEAKER: Kerry Ann Conde, PhD & Linda Schreiber, PhD

11/17 or 11/19: Student Presentations: Debi & Bianca

Dawson, G., Rogers, S., Munson, J., Smith, M., Winter, J., Greenson, J., ... & Varley, J. (2010). Randomized, controlled trial of an intervention for toddlers with autism: the Early Start Denver Model. *Pediatrics*, 125(1), e17-e23.

Schreibman, L., Dawson, G., Stahmer, A. C., Landa, R., Rogers, S. J., McGee, G. G., ... & Halladay, A. (2015). Naturalistic Developmental Behavioral Interventions: Empirically Validated Treatments for Autism Spectrum Disorder. *Journal of autism and developmental disorders*, 1-18.

Smith, T. (2014). Behavior analysts can be interdisciplinary too: A review of Durand's Autism Spectrum Disorder. *Journal of applied behavior analysis*, 47(4), 866-879.

Carter, A. S., Messinger, D. S., Stone, W. L., Celimli, S., Nahmias, A. S., & Yoder, P. (2011). A randomized controlled trial of Hanen's 'More Than Words' in toddlers with early autism symptoms. *Journal of Child Psychology and Psychiatry*, 52(7), 741-752.

Reichow, B. (2012). Overview of meta-analyses on early intensive behavioral intervention for young children with autism spectrum disorders. *Journal of autism and developmental disorders*, 42(4), 512-520.

Klintwall, L., Gillberg, C., Bölte, S., & Fernell, E. (2012). The efficacy of intensive behavioral intervention for children with autism: a matter of allegiance?. *Journal of autism and developmental disorders*, 42(1), 139-140.

Optional/For your reference:

Lilienfeld, S. O., Marshall, J., Todd, J. T., & Shane, H. C. (2014). The persistence of fad interventions in the face of negative scientific evidence: Facilitated communication for autism as a case example. Evidence-Based Communication Assessment and Intervention, 8(2), 62-101.

Callahan, K., Shukla-Mehta, S., Magee, S., & Wie, M. (2009). ABA Versus TEACCH: The Case for Defining and Validating Comprehensive Treatment Models in Autism. *Journal of autism and developmental disorders*. doi: 10.1007/s10803-009-0834-0.

Greenspan, S., & Wieder, S. (2007). The developmental individual-difference, relationship-based (DIR/Floortime) model approach to autism spectrum disorders. *Clinical manual for the treatment of autism* (pp. 179-209). Arlington, VA US: American Psychiatric Publishing, Inc. Retrieved from PsycINFO database.

Rogers, S. J., & Vismara, L. a. (2008). Evidence-based comprehensive treatments for early autism. *Journal of clinical child and adolescent psychology : the official journal for the Society of Clinical Child and Adolescent Psychology, American Psychological Association, Division 53*, *37*(1), 8-38. doi: 10.1080/15374410701817808.

Koegel, R. L., Vernon, T. W., & Koegel, L. K. (2009). Improving social initiations in young children with autism using reinforcers with embedded social interactions. *Journal of autism and developmental disorders*, *39*(9), 1240-51. doi: 10.1007/s10803-009-0732-5.

Preston, D., & Carter, M. (2009). A review of the efficacy of the picture exchange communication system intervention. *Journal of autism and developmental disorders, 39*(10), 1471-86. doi: 10.1007/s10803-009-0763-y.

Dawson, G., Jones, E. J., Merkle, K., Venema, K., Lowy, R., Faja, S., ... & Webb, S. J. (2012). Early behavioral intervention is associated with normalized brain activity in young children with autism. Journal of the American Academy of Child & Adolescent Psychiatry, 51(11), 1150-1159.

WEEK 14* (11/24, 12/1, 12/3): *Intervention II: Social Skills and Beyond

***************11/26: THANKSGIVING, NO CLASS**************

Overriding questions/Key ideas:
Why might purely behavioral approaches be insufficient for addressing social deficits in ASDs?
How are alternative methods of intervention related to the core features of ASDs?
Given all you've learned about ASDs, how would you proceed in evaluating a novel theory of ASD etiology or intervention?

Thought Question: Knowing what you know now, if you had a child with autism, what would you do?

Kasari, C., Shire, S., Factor, R., & McCracken, C. (2014). Psychosocial Treatments for Individuals with Autism Spectrum Disorder Across the Lifespan: New Developments and Underlying Mechanisms. *Current psychiatry reports*, 16(11), 1-12.

Lerner, M. D., White, S. W., & McPartland, J. C. (2012). Mechanisms of change in psychosocial interventions for autism spectrum disorders. *Dialogues in clinical neuroscience*, 14(3), 307.

Lerner, M.D., Mikami, A.Y., Levine, K. (2011) Socio-Dramatic Affective-Relational Intervention for Adolescents with Asperger Syndrome: Pilot Study. *Autism*.

Eack, S. M., Greenwald, D. P., Hogarty, S. S., Bahorik, A. L., Litschge, M. Y., Mazefsky, C. A., & Minshew, N. J. (2013). Cognitive enhancement therapy for adults with autism spectrum disorder: Results of an 18-month feasibility study. *Journal of autism and developmental disorders*, 43(12), 2866-2877.

Optional/For your reference:

Luckett, T., Bundy, A., & Roberts, J. (2007). Do behavioural approaches teach children with autism to play or are they pretending? *Autism : the international journal of research and practice, 11*(4), 365-88. doi: 10.1177/1362361307078135.

Rao, P., Beidel, D., & Murray, M. (2008). Social skills interventions for children with Asperger's syndrome or high-functioning autism: A review and recommendations. *Journal of Autism and Developmental Disorders, 38*.

Gutstein, S. E., Burgess, A. F., & Montfort, K. (2007). Evaluation of the relationship development intervention program. *Autism: the international journal of research and practice, 11*(5), 397-411. doi: 10.1177/1362361307079603.

Reichow, B., & Volkmar, F. R. (2009). Social Skills Interventions for Individuals with Autism: Evaluation for Evidence-Based Practices within a Best Evidence Synthesis Framework. *Journal of autism and developmental disorders*. doi: 10.1007/s10803-009-0842-0.

Matson, J. L., Adams, H. L., Williams, L. W., & Rieske, R. D. (2013). Why are there so many unsubstantiated treatments in autism?. *Research in Autism Spectrum Disorders*, 7(3), 466-474.

Lillienfeld, S.O. (2007) Psychological Treatments that Cause Harm. *Perspectives on Psychological Science*, 2(1), 53-70.