

Etiology and Characteristics of Infants and Young Children with Disabilities

Autism Spectrum Disorder

Sample Syllabus

Course Description

This course is designed to help students learn about autism spectrum disorder (ASD) in terms of potential causes, prevalence, early signs, diagnosis and eligibility, treatment/therapies, and evidence-based practices. This course will focus on autism spectrum disorder in young children, birth through five years old. Students will learn how to recognize the signs of autism to increase early identification of ASD. Family-centered practices will also be discussed in this course since families are essential in early intervention for children with autism spectrum disorder. Students will learn and practice implementing strategies for working with children and families of children with ASD.

Course Learning Objectives

As a result of active participation and successful completion of course requirements, students will be able to:

1. Define aspects of autism spectrum disorder including potential causes, prevalence, early signs, diagnosis and eligibility, treatment/therapies, and evidence-based practices.
2. Recognize the signs and practice screening for ASD.
3. Compare and contrast different therapies available for children with ASD.
4. Practice implementing and teaching others about EBPs for children with ASD.

Readings

Bradley, C. C., Boan, A. D., Cohen, A. P., Charles, J. M., & Carpenter, L. A. (2016). Reported history of developmental regression and restricted, repetitive behaviors in children with autism spectrum disorders. *Journal of Developmental and Behavioral Pediatrics*, 37(6), 451- 456. <https://doi.org/10.1097/DBP.0000000000000316>

Bradshaw, J., Koegel, L. K., & Koegel, R. L. (2017). Improving functional language and social motivation with a parent-mediated intervention for toddlers with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 47(8), 2443-2458. <https://doi.org/10.1007/s10803-017-3155-8>

Fontil, L., Sladeczek, I. E., Gittens, J., Kubishyn, N., & Habib, K. (2019). From early

- intervention to elementary school: A survey of transition support practices for children with autism spectrum disorders. *Research in Developmental Disabilities*, 88, 30-41.
<https://doi.org/10.1016/j.ridd.2019.02.006>
- Kanner, L. (1943). Autistic disturbances of affective contact. *Nervous Child* 2, 217-250.
- Maenner, M. J., Shaw, K. A., Bakian, A. V., Bilder, D. A., Durkin, M. S., Esler, A., Furnier, S. M., Hallas, L., Hall-Lande, J., Hudson, A., Hughes, M. M., Patrick, M., Pierce, K., Poynter, J. N., Salinas, A., Shenouda, J., Vehorn, A., Warren, Z., Constantino, J. N., ... Cogswell, M. E. (2021). Prevalence and characteristics of autism spectrum disorder among children aged 8 years—Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2018. *MMWR Surveillance Summaries*, 70(11); 1-16.
<http://dx.doi.org/10.15585/mmwr.ss7011a1>
- Robins, D. L., Fein, D., & Barton, M. (2009). Modified Checklist for Autism in Toddlers, Revised, with Follow-Up. (M-CHAT-R/F)[™]
https://mchatscreen.com/wp-content/uploads/2015/09/M-CHAT-R_F_Rev_Aug2018.pdf
- Sam, A., Waters, V., Dees, R., & AFIRM Team. (2022). Selecting an evidence-based practice. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, Autism Focused Intervention Modules and Resources.
<https://afirm.fpg.unc.edu/selecting-evidence-based-practice>
- Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, Ş., & Savage, M. N. (2020). *Evidence-based practices for children, youth, and young adults with autism*. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.
<https://ncaep.fpg.unc.edu/sites/ncaep.fpg.unc.edu/files/imce/documents/EBP%20Report%202020.pdf>
- Wolfberg, P., Bottema-Beutel, K., & DeWitt, M. (2012). Including children with autism in social and imaginary play with typical peers: Integrated play groups model. *American Journal of Play*, 5(1), 55-80.

Course Schedule

Week	Topic	Reading	Activities
1	What is Autism? Neurological Disorder, Genetic and Biological Basis		In-Class: Small group 1. Form small groups of 3–4 students. 2. Each group will: <ul style="list-style-type: none"> ○ Create a concept map of autism’s biological, neurological, and behavioral dimensions. ○ Identify two key tensions or gaps between biological theories and practical diagnostic/intervention approaches. ○ Propose research questions that could help bridge these gaps. 3. Groups will share their maps and questions in a brief presentation and engage in a cross-group discussion.
2	Prevalence of ASD, Environmental Influences	Maenner et al., 2021 CDC: ASD: Data & Statistics on ASD Autism Research Institute: Genetics, the Environment & Autism	Discussion prompt: What do current prevalence data (Maenner et al., 2021) suggest about the biological and environmental factors contributing to ASD?
3	Finding Reliable Information on ASD	Autism Research Institute: A Guide to Identifying and Understanding Scientific Research about Autism	Discussion Prompt: Based on the website, what are the ethical considerations when interpreting and applying research findings in clinical or educational settings?
4	Early Signs of ASD and Developmental Regression	Bradley et al., 2016	Discussion prompt: How do neurological and genetic findings align with behavioral markers such as developmental

Week	Topic	Reading	Activities
			<p>regression and restricted/repetitive behaviors (Bradley et al., 2016)?</p> <p>Assignment: “Autism in Toddlers” course</p>
5	Characteristics of ASD	Kanner, 1943	
6	Screening for ASD	<p>Robins, Fein, & Barton, 2009: Modified Checklist for Autism in Toddlers, Revised, with Follow-Up (M-CHAT-R/F)TM</p>	<p>Assignment: Case Study</p> <p>In-Class Activity: MCHAT</p>
7	Assessing and Diagnosing ASD	<p>CDC: DSM-5: Diagnostic Criteria for 299.00 Autism Spectrum Disorder</p> <p>CT: CT Guidelines for A Clinical Diagnosis of Autism Spectrum Disorder</p>	<p>Discussion Prompt: How do early signs of ASD, such as developmental regression and restricted/repetitive behaviors (Bradley et al., 2016), inform screening and diagnosis practices (e.g., M-CHAT-R/F)?</p> <p>Assignment: DSM-5</p>
8	Early Intervention, Family-Centered Practice in ASD	<p>Wolfberg et al., 2012</p> <p>CDC: Act Early Modules</p> <p>Video: Play Project</p> <p>Video: ABA</p>	<p>Discussion Prompt: Discuss the common early intervention services for children with ASD. What are some similarities and differences?</p>
9	Transition and Eligibility in Preschool	Fontil et al., 2019	<p>Assignment: M-CHAT Practice Implementation</p> <p>Discussion: Find an early intervention related to transition from early intervention to early childhood special education. Here is an example: Pennsylvania</p>
10	Overview of Evidence-Based Practices	Steinbrenner et al., 2020 (pp. 8-29)	In-class: Small group practice on implementing IEPs

Week	Topic	Reading	Activities
11	Modeling and Reinforcement	AFIRM: Modeling	Learning Activity: 11: Modeling – In-class activity
12	Time Delay and Prompting	AFIRM: Time Delay	Learning Activity: 16: Prompting – In-class activity
13	PECS, Visual Supports, and Social Narratives	Vanderbilt: Website and Social Stories Achievement Centers for Children: PECS video illustration	Assignment: EBP Presentation due In-class: EBP Presentations
14	Antecedent-Based Intervention and Functional Behavior Assessment	Wayne RESA: PBIS: Tier Three Forms and Resources <ul style="list-style-type: none"> • Antecedent Behavior Consequence (ABC) log • Functional Behavioral Assessment 	In-class: EBP Presentations
15	Discrete Trial Training (DTT) and Task Analysis; Parent-Implemented Interventions	Bradshaw et al., 2017 AFIRM: Discrete Trial Training Packet	Part 1: Case Study Analysis (15 min) <ul style="list-style-type: none"> • Provide students with a brief case vignette of a toddler with ASD showing limited functional language and low social motivation. • Ask students to identify: <ul style="list-style-type: none"> ○ Target behaviors for intervention. ○ Parent strengths and challenges. ○ Environmental factors that may influence implementation. Part 2: Intervention Design (30 min) In small groups (3–4 students), students will:

Week	Topic	Reading	Activities
			<ul style="list-style-type: none"> • Use the AFIRM DTT Packet to outline a 3-step DTT plan targeting one functional language skill (e.g., requesting, labeling). • Incorporate parent-mediated strategies from Bradshaw et al. (2017), such as naturalistic reinforcement and motivation-building techniques. • Define: <ul style="list-style-type: none"> ○ Antecedent strategies. ○ Prompting hierarchy. ○ Reinforcement plan. ○ Data collection method. <p>Part 3: Peer Review & Reflection (15–20 min)</p> <ul style="list-style-type: none"> • Groups will exchange plans and provide feedback using a rubric focused on: <ul style="list-style-type: none"> ○ Feasibility for parents. ○ Alignment with evidence-based practices cited in readings. ○ Clarity and specificity of DTT steps. • Conclude with a whole-class discussion on: <ul style="list-style-type: none"> ○ Challenges in translating research into practice. ○ The role of family context in success in intervention.

Instructions for Assignments

1. Assignment: Autism in Toddlers Course

Description: Complete the course found here: <https://autismnavigator.com/>

2. Assignment: Case Study

Description: CDC Autism Case Training (Continuing Education): Screening for ASD

- Complete the CDC Case Study: [Screening for Autism Spectrum Disorder](#)

3. Assignment: DSM-5

Description: Practice looking for the two criteria for ASD diagnosis during observations.

- Review the diagnostic criteria for autism spectrum disorder.
- Watch a 30-minute video of a child playing in a natural environment.
- Write a summary of your observations and initial thoughts for each DSM-5 criterion.

4. Assignment: M-CHAT Practice Implementation

Description: Practice implementing the M-Chat screening tool with a child and family.

- Ask a parent of a child 16 months to 30 months to participate in this assignment. The parent does not have to be concerned about their child's development to participate. Before implementing the screening tool, review the M-CHAT thoroughly. Ask the parents the questions and then complete the follow-up section with them. (This concludes the parent involvement part).
- Score the M-CHAT based on the answers the parent gives. Decide whether the child should receive a referral to early intervention or diagnostic testing. Write a reflection of your experience implementing the M-CHAT and what you would say to the parent about the results.

5. Assignment: EBP Presentation

Description: Prepare a 15-minute presentation about an EBP of your choice and present it to the class using the information you gained from a module and at least two other sources.

- Choose an evidence-based practice (one that is not listed on the syllabus) that is used for young children with autism (birth through 5).
- Complete the module for your chosen practice here <https://afirm.fpg.unc.edu/afirm-modules>. (Scroll down to "Available EBP Modules").

- Find at least one **peer-reviewed** journal article (can be a practitioner article, literature review, or study) about your topic (relevant to the birth to 5 population) within the last 5 years.
- Find at least one **peer-reviewed, empirical study** about your topic (relevant to the birth to 5 population) within the last 5 years.
- Create a presentation that includes:
 - Overview of the EBP
 - Overview of the two sources chosen
 - Conclusions drawn
 - How the information can be applied in your work
 - Questions/discussion/activities for the class to apply the information
- Sign up for a date to present

Course Grading

Assignments are due by 11:59pm on the indicated date. Late assignments without previous written approval of the instructor will incur a 50% penalty for the first time and lose all points beyond. This instructor and learners are required to adhere to the University's Academic Integrity policy. Any plagiarism will not be tolerated and referred to the Academic Integrity Office. The learner will be given an "F" in the course and be recommended to the Student Conduct Office.

Learners will be evaluated based upon the assignments described below. The plus/minus grading system and scale is as follows:

Letter Grade	Grade Range
A	93 and above
A-	90-92
B+	88-89
B	83-87
B-	80-82
C+	78-79
C	73-77
C-	70-72
D	60-69
F	59 and below

Component	Weight for final grade
Professional conduct (preparation for class, in class)	20%
In-class group work/practice activities (5)	30%
DSM-5 Assignment	10%
M-CHAT Practice Assignment	20%
EBP Presentation	20%

Resources

Resources to supplement the Syllabus:

- [Association for Science in Autism Treatment](#)
- [Autism Focused Intervention Resources & Modules \(AFIRM\)](#)
- [Autism Research Institute](#)
- [Autism Speaks](#)
- [Autism Spectrum Disorder \(CDC\)](#)
- [Center on the Social and Emotional Foundations for Early Learning: Resources: Practical Strategies for Teachers/Caregivers](#)
- [Healthy Children: Autism Spectrum Disorder in Children](#)
- [Illinois Early Intervention: Autism](#)
- [Illinois Early Learning Project: Podcasts: Supporting ASD](#)
- [KidsHealth: Autism Spectrum Disorder](#)
- [National Institute of Mental Health: Autism Spectrum Disorder](#)
- [Sesame Street in Communities: Autism](#)
- [Simons Foundation Autism Research Initiative \(SFARI\)](#)
- [The Autism Project](#)
- [The Autism Navigator](#)
- [The National Professional Development Center on Autism Spectrum Disorder](#)

Journals in EI/ECSE

Below are examples of journals that publish topics about EI/ECSE. Faculty may want to explain how to use articles to support practice and to examine current research. Clarify the difference between practitioner-based journals and research-based journals.

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| • <i>Exceptional Parent Magazine</i> | • <i>Journal of Autism and Developmental Disorders</i> |
| • <i>Infants and Young Children</i> | • <i>Journal of Early Hearing Detection and Intervention</i> |
| • <i>International Journal of Early Childhood Special Education</i> | • <i>Journal of Early Intervention</i> |
| • <i>Intervention in School and Clinic</i> | |

- *Journal of Special Education Technology*
- *Rural Special Education Quarterly*
- *Teaching Exceptional Children*
- *Topics in Early Childhood Special Education*
- *Young Children*
- *Young Exceptional Children*

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