

Etiology and Characteristics of Infants and Young Children with Disabilities Fetal Alcohol Spectrum Disorders

Sample Syllabus

Course Description

This course is designed to provide students with information about Fetal Alcohol Spectrum Disorders (FASD), the leading cause of preventable intellectual disabilities in the United States. Students will learn about etiology, characteristic presentations, and individual variation within the FASD umbrella. They will gain knowledge of assessment, curriculum, instruction, and intervention strategies to support their decision-making when serving children with FASD and their families. Students will learn how to apply knowledge of normative developmental sequences and variations to guide assessment and instruction decisions. Additionally, contextual societal and family-based factors will be addressed to promote student awareness and competency for preventative public health initiatives related to prenatal alcohol exposure, especially those which require interdisciplinary collaboration.

Required Texts

- Adubato, S. A., & Cohen, D. E. (Eds.). (2011). Prenatal alcohol use and fetal alcohol spectrum disorders: Diagnosis, assessment and new directions in research and multimodal treatment. Bentham Science Publisher. http://dx.doi.org/10.2174/97816080503141110101
- Abdul-Rahman, O. A., & Petrenko, C. L. (Eds.). (2023). Fetal alcohol spectrum disorders: A multidisciplinary approach. Springer Nature.
- Center for Disabilities (2013). Fetal alcohol spectrum disorders handbook. Sanford School of Medicine, University of South Dakota University Center for Excellence in Developmental Disabilities Education. https://dhs.sd.gov/rehabservices/docs/Resource Guide-updated-Spring 2015.pdf
- Zieff, C. D., & Schwartz-Bloom, R. D. (2008). *Understanding fetal alcohol spectrum disorders* (FASD): A comprehensive guide for pre-k through 8 educators. Duke University.

Course Learning Objectives

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

1. Define why conditions related to prenatal alcohol exposure are considered "an umbrella diagnosis" and describe their etiology, characteristic presentations, and individual variation.

- Apply knowledge of normative sequences of early development and knowledge of FAS features to create plans for assessment and intervention in young children exhibiting characteristics of FASD.
- 3. Apply knowledge of biological and environmental protective and risk factors to exhibit professionalism and cultural and family sensitivity during maternal interviews and in the creation of public health material related to FASD, including preventative aspects.
- 4. Describe curriculum modifications, classroom accommodations, and supporting factors to promote the educational success of young children with FAS conditions.
- 5. Demonstrate preparedness to collaborate on interdisciplinary teams to support the health and development of individuals with FASD across their lifespan.

Readings

- Alaska FASD Strategic Plan Workgroup. (2018). Alaska fetal alcohol spectrum disorders (FASD) strategic plan 2017-2022. https://health.alaska.gov/osmap/Documents/fasd/FASD-Stategic-Plan-FY2017-2022.pdf
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- Coles C. D. (2011). Discriminating the effects of prenatal alcohol exposure from other behavioral and learning disorders. *Alcohol Research & Health: The Journal of the National Institute on Alcohol Abuse and Alcoholism*, 34(1), 42–50.
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- Gibson, S., Nagle, C., Paul, J., McCarthy, L., & Muggli, E. (2020). Influences on drinking choices among Indigenous and non-Indigenous pregnant women in Australia: A qualitative study. *PloS ONE*, *15*(4), e0224719. https://doi.org/10.1371/journal.pone.0224719
- Graefe, S. (Ed.). (1999). Parenting children affected by fetal alcohol syndrome: A guide for daily living. Ministry for Children and Families, British Columbia.

 https://fasd.typepad.com/resources/daily_guide_for_living.pdf

- Healthy Child Manitoba. (2010). What early childhood educators need to know about fetal alcohol spectrum disorder. https://edmontonfetalalcoholnetwork.org/wp-content/uploads/2014/11/fasdearly_en.pdf
- Kodituwakku P. W. (2010). A neurodevelopmental framework for the development of interventions for children with fetal alcohol spectrum disorders. *Alcohol*, *44*(7-8), 717-728. https://doi.org/10.1016/j.alcohol.2009.10.009
- Lange, S., Shield, K., Rehm, J., Anagnostou, E., & Popova, S. (2019). Fetal alcohol spectrum disorder: Neurodevelopmentally and behaviorally indistinguishable from other neurodevelopmental disorders. *BMC Psychiatry*, *19*(1), 322. https://doi.org/10.1186/s12888-019-2289-y
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- Olson, H. C. (2011). An innovative look at early intervention for children affected by prenatal alcohol exposure. In S. Adubato & D. Cohen (Eds.), *Prenatal alcohol use and FASD:*Diagnosis, assessment and new directions in research and multi-modal treatment (pp. 64-107). Bentham Science Publishers.

 https://doi.org/10.2174/978160805031411101010064
- Pan American Health Organization. (2020). *Assessment of fetal alcohol spectrum disorders: A training workbook.* https://iris.paho.org/handle/10665.2/52216
- Petrenko, C. L., & Alto, M. E. (2017). Interventions in fetal alcohol spectrum disorders: An international perspective. *European Journal of Medical Genetics*, 60(1), 79–91. https://doi.org/10.1016/j.ejmg.2016.10.005
- Petrenko, C. L., Tahir, N., Mahoney, E. C., & Chin, N. P. (2014). Prevention of secondary conditions in fetal alcohol spectrum disorders: Identification of systems-level barriers. *Maternal and Child Health Journal*, *18*(6), 1496–1505. https://doi.org/10.1007/s10995-013-1390-y
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- Shafer, P. R., Borsky, A., Ngo-Metzger, Q., Miller, T., & Meyers, D. (2019). The practice gap: National estimates of screening and counseling for alcohol, tobacco, and obesity. *Annals of Family Medicine*, *17*(2), 161–163. https://doi.org/10.1370/afm.2363
- Sood, B., Delaney-Black, V., Covington, C., Nordstrom-Klee, B., Ager, J., Templin, T., Janisse, J., Martier, S., & Sokol, R. J. (2001). Prenatal alcohol exposure and childhood behavior at age 6 to 7 years: I. dose-response effect. *Pediatrics*, *108*(2), e34. https://doi.org/10.1542/peds.108.2.e34
- Szlemko, W. J., Wood, J. W., & Thurman, P. J. (2006). Native Americans and alcohol: Past, present, and future. *The Journal of General Psychology*, 133(4), 435–451. https://doi.org/10.3200/GENP.133.4.435-451
- Tenkku Lepper, L., King, D., Doll, J., Gonzalez, S., Mitchell, A., & Hartje, J. (2019). Partnering with the health professions to promote prevention of an alcohol-exposed pregnancy: Lessons learned from an academic-organizational collaborative. *International Journal of Environmental Research and Public Health*, 16(10), 1702. https://doi.org/10.3390/ijerph16101702
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Course Schedule

Week	Topic	Readings	Activities
1	History, incidence, and prevalence of FASD Maternal screening programs	Abdul-Rahman & Petrenko, 2023, Ch 1-2 Center for Disabilities, 2013, pp. 1-9 ("FASD FAQs" and "Historical Overview of Fetal Alcohol Spectrum Disorders") Chapter 3: Clinical vignettes from SAMHSA's "Treatment	In groups of three, choose one of the clinical vignettes in SAMHSA's TIP and use it as a script to role-play a clinician guiding a conversation about substance use. A third member of the group should serve as a culture and sensitivity coach, providing feedback about the clinician's' delivery. As a group, discuss this exercise using the Plus/Minus/Delta format:
		Improvement Protocol: Addressing Fetal Alcohol Spectrum Disorders (FASD)"	 What elements of the activity supported your learning? What took away from your learning? What would you change (about the role-played interaction, or about the assignment)?
2	Prenatal development and teratogens	Abdul-Rahman & Petrenko, 2023, Ch 3-4 O'Neil, Erica, "Developmental Timeline of	St. Louis Children's: Medical Animation: Fetal Alcohol Syndrome
	Diagnosis of FAS	Alcohol-Induced Birth Defects". Embryo Project Encyclopedia (2011-04-24). ISSN: 1940-5030 Zieff & Schwartz-Bloom, 2008, Read Chs. 2 & 3 "Pattern of Prenatal Alcohol Exposure Determines the FASD Phenotype", "Effects of Prenatal Exposure to	After watching the Fetal Development animation and in response to this week's readings, work together in a small group to discuss the following questions: • How does FASD manifest? • Why does FASD manifest with variable symptoms across individuals? • What kinds of assessment will provide meaningful information about a young child with FASD?

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		Alcohol on Brain Development and Postnatal Function"	How would your recommendations change if FAS is suspected, but not confirmed?
		Center for Disabilities, 2013, pp. 14-17 ("Diagnostic Criteria for FASD")	
		Astley, 2011	
3	Child characteristics and early life	Abdul-Rahman & Petrenko, 2023, Ch 7	"Living with Fetal Alcohol Syndrome"
	development Developmental	Center for Disabilities, 2013, pp. 10-13 ("Characteristics of Fetal Alcohol Spectrum Disorders")	Using the resources on <u>Developmental Milestones</u> available through the CDC, work with a partner to
	milestones and	bisoracis /	create a one-page description of expected and
	individual variation	Review the CDC's <u>Developmental Milestones</u>	unexpected features of development for Natalie,
	Spectrum disorders	and view the sample videos at CDC Milestones in Action	the child featured in this video. Discuss how the features you chose relate to some of the values outlined in the Wakefield reading.
		Wakefield, 1992	outilited in the wakened reading.
		Sood et al., 2001	
4	Cognition,	Healthy Child Manitoba, 2010.	Work individually to create a list of 4-5 "Myths and
	perception, attention, and	Read the section "Understanding the Needs of Children with FASD."	Facts" about FASD based on your learning over the first four sections of the module. Be prepared to
	learning in children	Children with FASD.	share your work with the whole group.
	with	Center for Disabilities, 2013, pp. 26-29	Siles your work with the whole group.
	FAS	"Secondary Concerns"	 Which facts have you learned that have been most surprising?
		Zieff & Schwartz-Bloom,	

Week	Topic	Readings	Activities
	Comorbidities and secondary disabilities	2008, Chs. 5 & 6 "The FASD Student and Learning Issues", "The FASD Student and Behavioral Issues"	Which myths have you heard are the hardest to dispel?
5	Assessment of children with FAS	Abdul-Rahman & Petrenko, 2023, Ch 9 Coles, 2011 Ran American Health Organization, 2020	Review the sample FAS Diagnostic report available at http://depts.washington.edu/fasdpn/pdfs/4-digit-medsum-web-2006.pdf in small groups of 2-3 students.
		Pan American Health Organization, 2020, [Skim the entire workbook and read the "Neuropsychology" section, pp. 21-25]	In your small group, you will be assigned one short case study from the PAHO reading. Work with your group members to create a similar "Conclusions and Recommendations" section to the one on the sample report based on the information provided in your case study. Be sure to include reference to at least 2 developmentally expected skills based on the age of the child.
6	Curriculum planning and intervention for children with FAS based on individual characteristics and	Olson, 2011 Kodituwakku, 2010	https://do2learn.com/organizationtools/ classroom/buildaclassroom/index.htm https://do2learn.com/disabilities/FASDtoolbox/
	normative sequences The neurodevelopmental model		Work in pairs to create a classroom map for an early childhood setting, similar to the model on the Do2Learn website, which is laid out with consideration to at least two of the interventions and/or curriculum modifications discussed in this week's readings and discussion session. Be prepared
	model		to share your ideas and map with the whole group.

Week	Topic	Readings	Activities
7	Metacognition, visual supports and	Zieff & Schwartz-Bloom, 2008, Read Ch. 4 "The FASD Student and the Classroom"	A Child's View of Sensory Processing" https://www.youtube.com/watch?v=D1G5ssZlVUw
	classroom strategies Sensory	Franklin et al., 2008	"FASD and Occupational Therapy, with Joy Doll" https://www.youtube.com/watch?v=23Tkt3jjDFY&
	Accommodations and the OT	Children with Disabilities, 2013, pp. 35-53 ("Educational Strategies"- multiple sections by age, content area, and discipline)	list=PLiFZcDuldDA5GQg9a9zh1AmwHeN0KlA 0∈ dex=2
	Perspective Creating a "Whole Brain" classroom	Review some of the resources available through "Project Spectrum" and "Project Zero"	After watching these videos, work with a peer to brainstorm a list of 5-10 classroom-based accommodations that could benefit children with sensory profiles consistent with a diagnosis under the FASD umbrella. Choose one and practice advocating for its inclusion on an IEP based on your
8	Maternal Factors and FAS Risk and	May & Gossage, 2011	current knowledge and understanding of FASD. Assignment 1 due: Case study and neurodevelopmental curriculum
	protection	Children with Disabilities, 2013, pp. 32-34 ("Strategies for Home")	In assigned peer groups, discuss the three levels of
	Resources for families	Graefe, 1999 [Please read Pp. 20-47: "Parenting	risk factors identified in the May & Gossage reading and provide an example for each relating to FAS. Keeping in mind the resources you accessed about
	Parenting and	Suggestions", "Guidelines for	language and stigma, consider "scripts" to use for
	discipline	Daily Living", "Special Considerations for Infants", "Special Considerations for	how you might discuss these risk factors with families.
	Ethics and confidentiality; stigma	Adolescents", "Parents' Needs".]	Submit a one-page summary of the group discussion and highlight three key points.

Week	Topic	Readings	Activities
		Review the resources available through March of Dimes' "Beyond Labels" resource about stigma.	
9	Public health initiatives and FAS prevention Cultural factors and FAS	Popova et al., 2017 Children with Disabilities, 2013, pp. 30-31 ("Prevention") Petrenko & Alto, 2017	National Institute on Alcohol Abuse and Alcoholism. (2005). Helping Patients Who Drink Too Much: A Clinician's Guide. https://pubs.niaaa.nih.gov/publications/clinicianGui de/guide/intro/data/resources/Clinicians%20Guide. pdf?download=true
	Prenatal care and counseling	Shafer et al., 2019 National Center on Substance Abuse and Child	Mock encounter: Using the Clinician Screening tools provided (the AUDIT and flowcharts included in the NIAAA Guide), role-play an interaction between a
	Harm Reduction Alcohol labeling laws	Welfare: Infants with Prenatal Substance Exposure and their Families: Five Points of Family Intervention	primary service provider and a woman with suspected prenatal alcohol exposure. A third member of the group should serve as a culture and
		National Center on Substance Abuse and Child Welfare: <u>Understanding Substance Use</u> <u>Disorders - What Child Welfare Staff Need to</u> <u>Know</u>	sensitivity coach, providing feedback about the 'clinician's' delivery. As a group, generate three key takeaway points you gained through this exercise.
		National Center on Substance Abuse and Child Welfare: <u>Understanding Engagement of Families Affected by Substance Use Disorders</u> - Child Welfare Practice Tips	
10	Native populations	Wolfson et al., 2019	Watch the video of Morgan Fawcett sharing his
	and substance use disorder	Gibson et al., 2020	story. https://www.youtube.com/watch?v=K0VrkLQfkFg

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	Social justice and FAS	Szlemko et al., 2006	 What features of FASD does Morgan discuss in his video? How do they compare to those that have been discussed so far in this course? What accommodations and modifications have benefitted Morgan? What supports exist for him? Can you think of additional supports that may be of benefit? What cultural factors should educators be aware of when working with indigenous peoples? What features of your own cultural heritage did this video make you think about? What is a resource available to you to learn more about FAS across populations?
11	Lifespan development and expectations Substance abuse in FAS populations	Abdul-Rahman & Petrenko, 2023, Ch 10 & 11 CDC: FASDs: My Story Children with Disabilities, 2013, "Vocational Strategies" https://oursacredbreath.com/2020/11/19/how-to-create-college-programs-for-students-with-fasd/	Choose one of CDC FASDs: My Story. Create a partial mock IEP for the child for the following sections: • Accommodations (remember to consider testing accommodations). • Goals related to academic performance, extracurricular activities, social supports and/or transition planning.

Week	Topic	Readings	Activities
			 Recommendations for supplementary aids and services (Remember IEPs specify who is responsible for these and you should too).
12	Partnerships and care coordination for children with FAS	Review the resources available for practitioners in different disciplines from CDC: FASDs: Online training and resources Birch et al., 2016 Tenkku et al., 2019	Assignment 2 due: Interdisciplinary Interview We will discuss your takeaways from the Interdisciplinary Interview assignment as a large group. We will use a Plus/Minus/Delta format: what elements of the activity supported your learning? What took away from your learning? What would you change (about the interview, or about the assignment)?
13	Mental health and long-term outcomes Role of psychology, social services, and pharmacotherapy	O'Connor et al., 2002	"Growing Up with FASD" https://oursacredbreath.com/ "12 Wishes for my Daughter" https://oursacredbreath.com/2020/12/23/12- wishes-for-my-daughter-and-fasd-2020-edition/ After reading through these two blog posts and one other of your choosing, write a short (300-500 word) blog post entry of your own, as either an adolescent/young adult with an FASD diagnosis or the parent of an adolescent/ young adult with an FASD diagnosis. Use a "day in the life" style to describe what your experiences and thoughts might be.
14	Avenues of current and future research	Lange et al., 2019	Using the knowledge you have gained through this course, work with a small group (1-2 others) and
	in FAS	Petrenko et al., 2014	choose one initiative discussed in Alaska's FASD

Week	Topic	Readings	Activities
	Services and supports State and national organizations and partnerships	Alaska FASD Strategic Plan Workgroup, 2018	workplan. Summarize (about one typed page) why the initiative is important and how it will contribute to the growth of knowledge about FASD. Don't forget to discuss the intended population and audience.
15	Summary and		Assignment 3 due: Fact sheet
	student reflections		Final reflection: We will discuss your takeaways from the Fact Sheet assignment and the module as a whole using a Plus/Minus/Delta format: What elements of the activity and the module supported your learning? What took away from your learning? What would you change (about the assignment, or about the module)?

Instructions for Assignments

1. Discussion Group Participation and Exercises

Complete the readings (under "Topics and Readings") in advance of each discussion session. Complete the activity prompts under "Activities" prior to the end of the session or make a plan with your instructor about a timeline for completion.

2. Case Study and Neurodevelopmental Curriculum

Access the Social-Emotional Learning competencies provided online at https://casel.org/sel-framework/

Create a case study including a single-page description of a young child in an early education or early intervention setting with a confirmed FASD diagnosis and draft a lesson plan related to a competency identified in the SEL framework that includes:

- the competency addressed.
- the age-expected developmental skills related to the competency in the general population.
- a description of the activity plan and materials needed.
- a description of modifications and accommodations that can be used to meet the individualized needed and support the identified strengths of the child you described.

3. Interdisciplinary Interview

This project is designed to support your interdisciplinary communication skills and practice asking and answering questions related to the features and public health aspects of FASD.

Choose someone who is training in a discipline different from your own and who is not enrolled in this module (suggestions: students in nursing, social work, or educational leadership programs; pre-law or pre-dentistry students).

Have a short (5-10 minute) conversation with that person about what they know, think, and believe about fetal alcohol related conditions. Discuss with them one concrete thing they believe would benefit their profession in terms of knowledge and skill acquisition regarding FASD. Consult the charts in the Tenkku Lepper et al. (2019) paper for ideas of what this could look like.

4. Fact Sheet

This project is designed to help you synthesize your learning from this module and practice using culturally competent communication skills about FASD. Submit a one-page fact sheet summarizing the content of one section of this course for a consumer audience. Make sure to have engaging, accessible, and easily understood visuals (examples below.) One page

front and back is preferred; no longer than 2 pages including all references and visuals.

https://www.gov.mb.ca/fs/fasd/pubs/fasdstrategy_en.pdf

https://www.gov.mb.ca/fs/fasd/pubs/fasd_hiddendisability.pdf

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

Component	Weight for final grade
Participation and Discussions	25%
Case Study and Neurodevelopmental Curriculum	25%
Interdisciplinary Interview	25%
Fact Sheet	25%

Resources

Resources to supplement the Syllabus:

- https://www.alberta.ca/fasd-training-and-education.aspx
- http://www.child-encyclopedia.com/fetal-alcohol-spectrum-disorders-fasd
- http://www.fldoe.org/core/fileparse.php/7690/urlt/0070099-fetalco.pdf
- https://www.gov.mb.ca/fs/fasd/resources.html
- https://www.mchlibrarv.org/databases/bibliographv.php?target=auto-search-subusepreg
- https://fasdunited.org/wp-content/uploads/2022/03/FASD-United-Resource-Directory-March-2022.pdf

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.

- Exceptional Parent Magazine
- Infants and Young Children
- International Journal of Early Childhood Special Education
- Intervention in School and Clinic
- Journal of Early Hearing Detection and Intervention
- Journal of Early Intervention

- 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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