

McGILL UNIVERSITY Faculty of Medicine School of Communication Sciences & Disorders WINTER 2020

AUTISM SPECTRUM DISORDERS (ASD) AND NEURODEVELOPMENTAL DISORDERS SCSD-669 Number of Credits: 3 Credits Course Time: Fridays 11:15 am - 1:15 pm Location: SCSD, Room 869

Instructor: Aparna Nadig, PhD Office: SCSD, Room 863; Office Phone: 514-398-4141 Office Hours: Fridays, 3 – 4:30 pm Email: please contact me via MyCourses email for things related to this course

COURSE OVERVIEW:

This course designed for SLP master's students provides an overview of assessment and intervention for (1) Autism Spectrum Disorders and (2) Dyslexia and other reading disabilities, and the range of clinical presentations observed in these two broad conditions. The course fosters reflective clinical problem solving using case-based learning and makes evidence-based practice feasible through formative experiences in the application of evidence to cases.

LEARNING OBJECTIVES:

ROLE 1: CENTRAL ROLE/CONTENT EXPERT

| Foundational Principles | |
|---|---|
| Apply specialized knowledge of typical and atypical development, diff human communication (including communication modalities, cognitive ar communication, language, literacy). | |
| Describe the two symptom categories that define ASD and apply this knowledge to a clinical case | Clinical Lab 1, ASD Quiz |
| Identify evidence-based factors that contribute to the prevalence of ASD, as well as proposed factors that are not supported by evidence | Course readings and lecture, Online discussion board |
| Summarize the diagnostic definition of dyslexia (or specific reading disability) and apply this knowledge to clinical cases | Clinical Lab 3, Dyslexia Quiz |
| Identify underlying impairments that contribute to dyslexia and rank their importance (i.e., how commonly they are observed) | Course readings and lecture, Online discussion board |
| Apply knowledge of principles of clinical practice (including diagnostic and procedures, behavioral management, social interaction management). | |
| Consider how to manage behavior and social interaction in order to complete a communication and language assessment | Clinical Labs 1, 2, 3, 4 |
| Develop assessment plan for case description | |

| Develop intervention plan for case description, given (partial) assessment results | |
|---|--------------------------|
| Use problem-solving and clinical judgment in all aspects of practice. | |
| Decide what elements to prioritize when developing assessment or intervention plans for a specific case description | Clinical Labs 1, 2, 3, 4 |

| Assessment | |
|---|---|
| Develop an assessment strategy to evaluate communication and | language |
| Identify appropriate assessment tools and strategies for ASD | Course readings and lectures, Guest presentations, guizzes |
| Identify appropriate assessment tools and strategies for dyslexia | Guest presentations, quizzes |
| Decide on an assessment plan for client with (suspected) ASD (collaboratively in clinical lab group) | Clinical Lab 1 |
| Decide on an assessment plan for client with reading difficulty (collaboratively in clinical lab group) | Clinical Lab 3 |
| Practice conducting an informal pragmatics assessment | |
| Apply a pragmatic skills checklist to video of a case | SOAP/progress note assignment |

| Intervention Planning | |
|--|--|
| Identify intervention approaches for ASD | Course readings and lectures, Guest presentations, guizzes |
| Identify intervention approaches and strategies for dyslexia | Guest presentations, quizzes |
| Develop a realistic and measurable intervention plan | Clinical Labs 2, 4 |
| Plan for indirect service delivery | Clinical Lab 4 (2 small groups assigned to indirect delivery case) |

ROLE 2: COMMUNICATOR

| Documentation | |
|---|--|
| Maintain clear, accurate client records/ Comply with regulatory or orga | anizational requirements |
| Write soap note/progress note on video of a case, grade a peer's note for SOAP format | SOAP/progress note assignment |
| Oral and Written Communication | |
| Communicate in a respectful manner | Clinical labs, rest of course |
| Listen actively | Clinical labs, Course lectures, Guest presentations |

| Present effectively in small and large group settings | Clinical labs |
|--|-------------------------------|
| Provide constructive and respectful feedback to colleagues | SOAP/progress note assignment |

ROLE 3: COLLABORATOR

| Relationships with other professionals | |
|---|-------------------------------|
| Support positive team dynamics | Clinical Labs 1, 2, 3, 4 |
| Respect personal and professional differences | Clinical labs, rest of course |

ROLE 4: ADVOCATE

| Client advocacy | |
|---|---|
| Engage in promotion/prevention activities | Guest Lecture on intervention for reading difficulties, Clinical Lab 4 (2 small groups assigned to indirect delivery case) |

ROLE 5: SCHOLAR

| Continuous learning | |
|--|--|
| Conduct assessment of personal learning needs | Clinical Labs 1, 2, 3, 4; Final project |
| Select and apply appropriate methods for scholarly inquiry | |
| Integrate new learning into practice | Via assessment or intervention plans for clinical labs, Final project |
| Evidence-Informed Practice | |
| Appraise research critically to address client questions | Clinical Labs 1, 2, 3, 4 |
| Integrate relevant evidence into planned service provision | Via assessment or intervention plans for clinical labs, Clinical bottom lines from final project |

REQUIRED COURSE MATERIALS

You are responsible for preparing for class meetings and assignments by **completing the required readings indicated in BOLD in the class schedule**, **as well as readings and links posted for online discussion on MyCourses**. Readings are provided via the links directly in this syllabus or as pdfs on MyCourses. *Note – to access linked articles you must be connected to the McGill network via VPN*.

REFERENCE BOOK FOR CLINICAL LABS AND FINAL PROJECT (available for check out in resource room)

Dollaghan, C. (2007), The Handbook for Evidence-based Practice in Communication Disorders. Paul H. Brooks Publishing Co.: Baltimore, MD.

OPTIONAL COURSE MATERIALS

We have very limited time to cover two broad and complex communication disorders. If you are interested in working with these populations you will likely want more information than we are able to cover together. I have gathered useful websites, resources and readings which are available in the Content section of My Courses.

COURSE CONTENT

The course provides substantive knowledge of two major classes of neurodevelopmental disorders: autism spectrum disorders, and dyslexia and other reading disabilities. This understanding will be gained through readings and presentations by the professor and by guest clinicians on these populations, as well as by your active learning through the analysis of clinical cases. Class members will work together on clinical cases to generate hypotheses, research and discuss alternative solutions, and come to assessment and intervention decisions. In the process you will enhance your reflective problem-solving skills, as well as your ability to communicate and collaborate with colleagues effectively. The case analysis exercises aim to bridge your academic training in speech language pathology to the clinical practice of evidence-based decision making for communication disorders.

As this course is taken during the last semester of your program, it provides the opportunity to synthesize many skills you have learned throughout the curriculum pertaining to assessment, intervention, and critical appraisal of clinical evidence. A far-reaching goal of the course is to equip you with reflective clinical problem-solving and independent learning skills that can be applied flexibly throughout your SLP career. These skills are essential tools with which to face the challenges of an evolving knowledge base, changing contexts of practice, and the diversification of clinical populations.

INSTRUCTIONAL METHOD:

Course readings, Lectures, 4 clinical labs, guest lectures from SLPs working in different settings, informal pragmatics assessment and soap note, quizzes, peer-learning through discussions, final case-driven project.

This course depends heavily on active student participation which is 10% of your final grade.

- You are encouraged to develop discussion questions by completing the assigned readings in a
 manner where you critically evaluate what is proposed and integrate other knowledge (from other
 classes and clinical or research experience) with the information presented.
- To highlight the relevance of course materials to real life and clinical practice, **online discussion topics will be posted on MyCourses**. You are encouraged to contribute to the discussion threads whenever you have a relevant reflection or a question to bring up. *Please do this at least* once or twice over the course of the semester.

Guest Presentations

Guest speakers will present on ASD or dyslexia assessment and intervention, and issues pertaining to working as an SLP with these populations. I have carefully selected these presenters to introduce different sectors of practice as no individual instructor could. As for other class meetings, students should complete the assigned readings before the presentation and come prepared to discuss the topic and readings.

Clinical Labs

There are 4 clinical labs covering ASD assessment and intervention, and Reading disability assessment and intervention. Clinical case analyses will form the basis of these labs; they will be made available a week prior to the date of the lab activity in the course schedule. The class will be divided into six groups of 4 or 5 members; groups will be assigned to different cases meant to expose you to variability in clinical presentation. Within your small group, you will identify topics you feel you need to know more about to make sound clinical decisions, and each select one topic. In the week leading up to the clinical lab, you will do independent research (i.e. library searches, review of available tests, conversations with experts, etc.) to address your identified topic/question. You will

bring this preparatory work to the class discussion. For 1 of the 4 case analyses (your choice) you will submit this preparatory research (2- to 3- typed, double-spaced pages) for a grade at the end of the clinical lab class period.

Case-driven Final Project: The final project has three components. 1. You will develop a targeted clinical question (e.g., in PICO format) related to ASD or reading disabilities that has come up during practicum experiences, or via the cases presented in this course (*excluding cases you already worked on in your small group*), and identify high-quality research (or the best available) to address this question. 2. You will critically evaluate this research evidence, using one of the frameworks provided by Dollaghan, 2007: Critical Appraisal of Treatment/ Diagnostic/ Meta-Analysis/ or Practice Evidence (presented in Chapters 6 - 9 respectively). 3. The case application piece will vary in format (e.g., practicing an assessment tool on a classmate, completing an on-line training module, developing a lesson plan), depending on your question. You will propose something you would like to do, and I am available to help decide on a workable plan. Final papers will reflect these 3 components and be 5-8 double spaced pages long.

EVALUATION: Specifics about the format of assignments to be submitted for a grade will be covered in class and available on MyCourses.

| Assignment | % of grade | Date | Competencies Targeted | Expected Performance Level |
|--|--|--|---|--|
| Contributions in-class and on-line on MyCourses discussion board | 10% | ongoing | Oral and written communication, Collaborator, Scholar: Continuous learning | Competent |
| Informal pragmatics assessment from video, submission of SOAP note * <i>clinical hours will be given</i> | 20% (10% self, 10% peer evaluation) | Jan 24 (SOAP note and self reflections) Jan 29 (peer eval) | Assessment Documentation | Novice (assessment) Competent (SOAP Notes format) |
| ASD and Dyslexia quizzes (completed on your time via MyCourses) | 20% (10% each) | Feb 21-26 Apr 3-8 | Foundational principles, Assessment, Intervention | Competent |
| Written preparation for 1 of 4 clinical labs (your choice) | 20% | Your choice: Jan 31, Feb 14, Mar 20, or Apr 3 | Foundational principles, Assessment, Intervention, continuous learning, EBP, Oral and written communication, Advocacy | Start as Novice → become Competent by end of course |
| Case-driven final project | 30% | Final Paper: April 24 | Assessment or Intervention, Continuous Learning, EBP, written communication | Competent (EBP analysis relative to clinical question) |

SCSD 669 COURSE SCHEDULE Last updated January 15, 2020

| Date | | Topics and Readings |
|------|------------|---|
| 1. | JANUARY 10 | Overview of course format and evaluation methods |
| | | Introduction to neurodevelopmental disorders |
| | | Johnson, C. J. (2006). Getting started in evidence-based practice for childhood speech-language |

| | | disorders. American Journal of Speech Language Pathology, 15(1), 20-35. |
|----|--------------------------|---|
| | | Diagnostic criteria for Autism Spectrum Disorders and Social Communication Disorder |
| | | Constantino, J. N., & Charman, T. (2015). Diagnosis of autism spectrum disorder: reconciling the syndrome, its diverse origins, and variation in expression. <i>The Lancet Neurology</i> . |
| 2. | JANUARY 17 | Assessment of communication and language in ASD – emergent and basic communicators |
| | | Paul, R. & Fanhim, D. (2014). Assessing communication in autism spectrum disorders. In F. Volkmar, R. Paul, A. Klin & D. Cohen (Eds.), <i>Handbook of Autism and Pervasive</i> Developmental Disorders, Fourth Edition (Chapter 27, pp. 673-694). Hoboken, New Jersey: John Wiley & Sons. |
| | | Introduction to informal pragmatics assessment from video and SOAP note assignment |
| 3. | JANUARY 24 | Assessment of language and pragmatics in ASD and SCD – advanced communicators |
| | | Discussion of pragmatics assessment of case |
| | | Dodd, J. L., Franke, L. K., Grzesik, J. K., & Stoskopf, J. (2014). Comprehensive Multi- Disciplinary Assessment Protocol for Autism Spectrum Disorder. |
| | | Hyter, Y. D. (2017). Pragmatic Assessment and Intervention in Children. In L. Cummings (Ed.), Research in Clinical Pragmatics (pp. 493-526). Cham, Switzerland: Springer. |
| | | |
| | | Gentile, A. Review of Assessment Measures: Social Communication in ASD. |
| | January 24 January 29 | Gentile, A. Review of Assessment Measures: Social Communication in ASD. **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note |
| | January 24 January 29 | **Deadline to review video, submit SOAP note, self-reflections |
| 4. | | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note |
| 4. | January 29 | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note Introduction of cases for Clinical Lab 1 Clinical lab 1 – assessment of communication in children with Autism |
| | January 29 JANUARY 31 | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note Introduction of cases for Clinical Lab 1 Clinical lab 1 – assessment of communication in children with Autism Spectrum Disorder |
| | January 29 JANUARY 31 | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note Introduction of cases for Clinical Lab 1 Clinical lab 1 – assessment of communication in children with Autism Spectrum Disorder Overview of continuum of evidence-based intervention approaches for ASD |
| | January 29 JANUARY 31 | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note Introduction of cases for Clinical Lab 1 Clinical lab 1 – assessment of communication in children with Autism Spectrum Disorder Overview of continuum of evidence-based intervention approaches for ASD Strategies to structure effective clinical sessions |
| | January 29 JANUARY 31 | **Deadline to review video, submit SOAP note, self-reflections **Deadline to submit peer assessment of SOAP note Introduction of cases for Clinical Lab 1 Clinical lab 1 – assessment of communication in children with Autism Spectrum Disorder Overview of continuum of evidence-based intervention approaches for ASD Strategies to structure effective clinical sessions Guest Presentation by Angela MacDonald, S-LP(C), BCBA, Doctoral Student Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., Schultz, T. R. (2015). Evidence-Based Practices for Children, Youth, and Young Adults with Autism Spectrum Disorder: A Comprehensive Review. Journal of Autism and |

| 6. | FEBRUARY 14 | Clinical lab 2 – intervention for people with autism spectrum disorder |
|---------------------|-------------|--|
| 7. | FEBRUARY 21 | In-depth presentation of select Evidence-Based Interventions for ASD |
| | | Guest Presentation by Angela MacDonald, S-LP(C), BCBA, Doctoral Student |
| | | https://autismpdc.fpg.unc.edu/evidence-based-practices |
| | | 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, 45(8), 2411-2428. Bottema-Beutel, Yoder, Woynaroski & Sandbank (2014). Targeted interventions for social |
| | | communication symptoms in preschoolers with ASD. In F. Volkmar, R. Paul, A. Klin & D. Cohen (Eds.), Handbook of Autism and Pervasive Developmental Disorders, Fourth Edition (Chapter 31, pp. 788-812). Hoboken, New Jersey: John Wiley & Sons. |
| | Feb 21-26 | Online ASD QUIZ open |
| 8. | FEBRUARY 28 | Reading disabilities and dyslexia: Diagnostic criteria and core deficits |
| | | Hulme, C., & Snowling, M. J. (2016). Reading disorders and dyslexia. Current opinion in |
| | | pediatrics, 28(6), 731. Snowling, M. J., & Melby-Lervåg, M. (2016). Oral language deficits in familial dyslexia: A |
| | | meta-analysis and review. Psychological Bulletin, 142(5), 498. |
| | | White, S., Milne, E., Rosen, S., Hansen, P., Swettenham, J., Frith, U., et al. (2006). The role of sensorimotor impairments in dyslexia: a multiple case study of dyslexic children. Developmental Science, 9(3), 237-255. |
| | | Hermann, Matyas, & Pratt (2006). Meta-analysis of the nonword reading deficit in specific reading disorder. <i>Dyslexia</i> , 12, 195-221. |
| MARCH 6 NO CLASS | | STUDY BREAK |
| 9. | MARCH 13 | Assessment and predictors of reading disability |
| | | Guest Presentation by Caroline Erdos, S-LP(C), PhD |
| | | Catts, H. W., Herrera, S., Nielsen, D. C., & Bridges, M. S. (2015). Early prediction of reading comprehension within the simple view framework. <i>Reading and Writing</i> , 28(9), <u>1407-1425.</u> |
| | | Thompson, P. A., Hulme, C., Nash, H. M., Gooch, D., Hayiou-Thomas, E., & Snowling, M. J. (2015). Developmental dyslexia: predicting individual risk. Journal of Child Psychology and Psychiatry, 56(9), 976-987. |
| | | Introduction of cases for Clinical Lab 3 |
| 10. | MARCH 20 | Clinical lab 3 – assessment of reading difficulties |
| | March 16-22 | ** submission of PICO question and references for final project via MyCourses for Aparna's approval/feedback |

| 11. MARCH 27 Change in time: 1:30 to 3:30 pm | Preventative reading intervention and the SLP's role in schools Guest presentation by Manon Daisomont, S-LP (C), Eastern Townships School Board Galuschka, K., Ise, E., Krick, K., & Schulte-Körne, G. (2014). Effectiveness of treatment approaches for children and adolescents with reading disabilities: a meta- analysis of randomized controlled trials. PloS one, 9(2), e89900. Hulme, C. and Melby-Lervåg, M. (2015) Educational interventions for children's learning difficulties, in Rutter's Child and Adolescent Psychiatry (eds A. Thapar, D. S. Pine, J. F. Leckman, S. Scott, M. J. Snowling and E. Taylor), John Wiley & Sons, Ltd, Chichester, UK. Melby-Lervåg, M., & Lervåg, A. (2014). Effects of educational interventions targeting reading |
|--|--|
| | <u>comprehension and underlying components. Child development perspectives, 8(2), 96-100.</u> Shapiro, E. S. (2014). Tiered instruction and intervention in a response-to-intervention model. <i>RTI</i> <u>Action Network, 381.</u> |
| 12. APRIL 3 | Clinical lab 4 – intervention for reading difficulties |
| April 3-8 | **Online DYSLEXIA QUIZ open |
| 13. TUESDAY | Fetal Alcohol Syndrome |
| APRIL 14 (day change | Additional topics by request of class |
| due to Easter holiday) | Individual consultations on final case-driven projects |
| | <u>Cook, J. L., Green, C. R., Lilley, C. M., Anderson, S. M., Baldwin, M. E., Chudley, A. E., & Mallon, B. F. (2016). Fetal alcohol spectrum disorder: a guideline for diagnosis across the lifespan. CMAJ, 188(3), 191-197.</u> <u>Bishop, Gahagan & Lord (2007). Re-examining the core features of autism: A comparison of autism spectrum disorder and fetal alcohol spectrum disorder. Journal of Child Psychology and Psychiatry, 48(11), 1111-1121.</u> |

McGILL POLICY STATEMENTS:

Academic Integrity

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see <u>www.mcgill.ca/students/srr/honest/</u>) for more information).

Language of Submission

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Mobile computing and communications (MC2) devices

No audio or video recording of any kind is allowed in class without the explicit permission of the instructor.

MC2 devices are not to be used for voice communication without the explicit permission of the

instructor.

Mobile computing and communications devices are permitted in class insofar as their use does not disrupt the teaching and learning process.

Copyright of Instructor-generated course materials

© Instructor-generated course materials (e.g., handouts, notes, summaries, exam questions, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.

Inclusive learning environment and support

As the instructor of this course I endeavor to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me and the Office for Students with Disabilities, 514-398-6009.

Extraordinary circumstances

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.