Psychology 852

Cognitive and Neuropsychological Assessment

Spring 2021

Wednesday, 9:10-12:00

**PROFESSOR INFORMATION**

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**COURSE OVERVIEW**

PSY 852 is a critical foundational course for the practice of clinical psychology. Its primary focus is on providing you with the academic and practical background needed to begin the supervised practice of ethical, technically competent, culturally competent, and empirically supported cognitive and neuropsychological assessment. This course will be separated into 3 main parts, which are outlined below. In addition, we will consider issues of ethics and diversity throughout the course. In particular, we will discuss the, largely anti-Black racist roots of test development and use and current systemic underlying inequities with regard to testing. You will learn how to be sensitive to these issues as clinical neuropsychologists. This course will be delivered in an online format, via Zoom.

Part 1: History and theoretical background

We will start by reviewing the history of cognitive and neuropsychological development and considering the different contemporary approaches to the assessment of cognitive functioning and academic achievement. We will visit the racist roots of cognitive testing. Finally, we will address psychometric concepts that are necessary for appropriately choosing and interpreting test results.

Part 2: Understanding and assessing different domains of academic, cognitive, and emotional functioning and delivering feedback.

We will go through each of the major testing domains and define what these concepts are and how functioning in these domains develops over the lifespan. Then we will discuss tests available to measure functioning in each of these domains and learn how to administer, score, and interpret the most commonly used of these tests in a way that is fair and mitigates biases. We will also discuss how to conduct an intake interview, how to integrate background information, clinical observations, and test scores, and how to write an assessment report. Finally, you will learn how to convey the results of an assessment and discuss them with a client in a culturally-sensitive manner during a feedback session.

Part 3: Syndromes, disorders, and diseases

We will discuss developmental, acquired, and neurological syndromes, disorders, and diseases that are associated with cognitive and/or academic difficulties. For each of these diagnoses, we will discuss diagnostic criteria, cognitive and developmental profiles, differential diagnoses, and clinical recommendations.

**COURSE OBJECTIVES**

After successfully completing this course, you will be able to:

1. Administer the following tests, following all standardization procedures and criteria identified for competent administration:
   1. Wechsler Intelligence Scale for Children-5th edition
   2. Wechsler Adult Intelligence Scale-4th edition
   3. Wechsler Individual Achievement Test-4th edition
   4. Delis Kaplan Tests of Executive Functions
   5. Wide Range Achievement Test-5th edition
   6. Wide Range Assessment of Memory and Learning-2nd edition
2. Apply your understanding of the science and practice of assessment to administer, score, interpret, and critique other measures of cognitive functioning, including:
   1. CPT-II
   2. CVLT-II
   3. Rey-Osterrieth Compex Figure Task
   4. Rating Scales: Conners 3, Beck Depression and Anxiety Inventories
   5. Personality measures: MMPI, PAI
3. Summarize behavioral observations from test administrations and integrate these with test findings.
4. Describe important considerations for best practices in conducting intellectual and neuropsychological assessments, including consideration of developmental, social, ethical, and legal issues, and diversity (from ability, ethnic/racial, cultural, and socioeconomic backgrounds).
5. Understand the historical roots of intellectual and neuropsychological testing and their role in the profession of clinical psychology.
6. Understand test terminology, psychometric properties, development and standardization of tests, and appropriate use of cognitive ability measures.
7. Develop recommendations and interventions based on assessment findings.
8. Demonstrate effective communication in report writing.
9. Conduct an intake interview and feedback session using a patient-centered, culturally-responsive approach, enlisting clients as active collaborators in the process

###### Core APA competencies addressed in this course

1. Professional values and attitudes: as evidenced in behavior and comportment that reflect the values and attitudes of psychology
2. Individual and cultural diversity
3. Ethical legal standards and policy – especially as relevant to the psychological assessment process
4. Assessment: Assessment and diagnosis of problems, capabilities, and issues associated with individuals, groups, and organizations (competencies A- F)

**MATERIALS**

Equipment

Clipboard

Stopwatch (preferably with no sound)

Required Texts

Readings from the following book will be covered in this course. It will be an important part of your own reference library, so I recommend you purchase it. A copy of this textbook has also been reserved at the MSU Main Library and will be available on a first-come first-serve basis. During COVID, all reserve books are being checked out for 3 days.  When they are returned they are in quarantine for 5 days before they can be checked out again. All remaining books are optional purchases.

1. Sattler, J.M. (2018). *Assessment of Children: Cognitive Foundations (6th edition).* La Mesa, CA. Jerome M. Sattler, Publisher, Inc.

Optional Texts

You will be asked to read from the following texts. These readings will be made available to you. Although they are not required for this course, the first four will serve as great future assessment resources, depending on your area and level of interest.

1. Sattler, J.M. & Ryan, J.J. (2009). *Assessment with the WAIS-IV.* La Mesa, CA. Jerome M. Sattler, Publisher, Inc.
2. Lezak, M.D., Howieson, D.B, Bigler, E. D. & Tranel, D. (2012). *Neuropsychological assessment (5th Ed).* New York: Oxford University Press.
3. Postal, K.S. & Armstrong, K. (2013) Feedback that Sticks: The Art of Effectively Communicating Neuropsychological Assessment Results. Oxford University Press: Oxford.
4. Pennington, B.F. (2009) Diagnosing Learning Disorders, Second Edition: A neuropsychological framework. Guilford Press: NY.
5. Banich, M. (2004) *Cognitive Neuroscience and Neuropsychology (2nd Ed)*. Boston: Houghton Mifflin Company.

**ASSIGNMENTS AND EVALUATION**

Your grade for this course will be determined by your performance in the following domains: (1) performance in class discussions, which are based on assigned readings and material from previous classes; (2) practice intake interviews; (3) practice test administration; (4) interpretation of test results; and (5) report writing. A total of 300 points is possible for this course.

Attendance and Participation (70 points)

Class attendance is extremely important. Because of the applied nature of the lectures, it will be difficult to catch up on missed material. When possible, please let the instructor know in advance if you anticipate missing a class. It is expected that you come to class prepared and ready to discuss the topic for that day. This means that you should do the required readings before each class, and you should arrive with questions and ideas. You will often be provided with broad thought questions to keep in mind as you are reading that will provide the basis for class discussions. You will receive a 0 or 1 for class participation each week, depending on whether you contributed to the discussion of articles, and/or participated in class exercises. At the end of the semester, your lowest class participation grade will be replaced with a 1.

Practice intake interview (15 points)

Practice an intake interview over Zoom with a classmate and write up the background section.

Practice test administration and scoring (150 points)

You will complete several assignments designed to help you become proficient in administering and scoring several of the most frequently used cognitive and neuropsychological tests. You will sometimes videotape these evaluations for the purposes of review by and feedback from the instructor and TA. When you are serving as a volunteer for one of your classmates to practice the tests, please do not give your best performance. Rather, for the adult measures, try to respond as you imagine the average 30-year old high school graduate would respond. For the child measures, try and respond as if you are an 8-year-old typically developing child and reasonably acclimated to mainstream US culture. **Under no circumstances will the test scores be shared with classmate volunteers.**

Specific assignments are outlined below. Note that, due to COVID and limitations on in-person class activities, you will be practicing these assessments virtually. **Given the ever-changing nature of the situation, assignments listed in the syllabus may be subject to modification.** More detail regarding these assignments will be provided closer to the due date.

1. Observe a video of a previous student administering the WAIS-IV. and score by hand (25 points). Use the checklist for general test administration practices checklist in the supplemental Sattler and Ryan text (Table 1-2). Record any administration errors. Record client responses (for those subtests that you are able) and score them. Please turn in: (1) Completed checklist; (2) Administration errors; (3) scored protocol.
2. Administer the WISC-V (all subtests) to a classmate using online assessment and score by hand (25 points). Please videotape the evaluation for the purpose of review and turn in the scored protocols and video file.
3. Administer the WRAT5 to a classmate using online assessment and turn in scored protocol (25 points).
4. Administer the WIAT-4 to a classmate using online assessment and turn in scored protocol (25 points).
5. Observe a video of a previous student administering the DKEFS and score by hand (20 points). Record any administration errors. Record client responses (for those subtests that you are able) and score them. Please turn in: (1) administration errors; (3) scored protocol.
6. Administer the WRAML to a classmate over Zoom (select subtests) and turn in scored protocol (25 points).

Test interpretation, and report writing (70 points)

1. Giftedness Report Writing (30 points)

You will be provided with background information, test scores, and behavioral observations for a child assessment to determine eligibility for the MSU Gifted and Talented Education program. You will need to prepare a full report based on this information.

1. Final Report Writing (40 points)

You will be provided with background information, test scores, and behavioral observations for an adult assessment. You will need to prepare a full report based on this information (including recommendations). Extra credit will be awarded for those who turn it in earlier—this will be discussed more in class.

**GRADING**

A total of 300 points is possible for this course. You must receive a 3.0 or higher to pass the course.

4.0 92-100% 276-300 points

3.5 84-91% 252-275 points

3.0 76-83% 228-251 points

2.5 71-75% 213-227 points

2.0 66-70% 198-212 points

1.5 61-65% 183-197 points

1.0 56-60% 168-182 points

0.0 < 56% < 167 points

###### A NOTE ON WORKLOAD

You will be asked to do a considerable amount of reading and practice for this course. You will need to practice administration of the various instruments covered. You will be administering test instruments to your classmates. It is important to understand that it is your responsibility to coordinate with each other and I suggest you not wait until the last minute and that you plan ahead for assignments.

**ETHICAL ISSUES**

Confidentiality

Although the individuals you will be testing are classmates, rather than treatment-seeking clients, confidentiality is still very important. Do not record real names on any testing data. Instead, use some kind of anonymized code or pseudonym. Please do not share the results of testing with people other than your instructor and TA.

Test security

It is very important to respect test security. Releasing the specific details of psychological tests to non-professionals compromises the validity of their use.

**ADMINISTRATIVE DETAILS**

Format

This course is online format and conducted over Zoom. The invitation will be emailed to you. In addition, practice test administrations will be conducted over Zoom using paper materials or using a fully-online assessment.

Accommodation for persons with disabilities

Students with disabilities that affect their ability to participate fully in class or meeting course requirements are encouraged to bring this to my attention as soon as possible. Given documentation of your disability from the Resource Center for Persons with Disabilities (<https://www.rcpd.msu.edu/>), I will happily work with you to make appropriate accommodations. I will attempt to maintain the confidentiality of such information to the best of my ability.

Academic integrity

The Department of Psychology adheres to the policies on academic honesty as specified in General Student Regulations 1.0, *Protection of Scholarship* and Grades; the university-wide policy of *Integrity of Scholarship and Grades*; and Ordinance 17.00, *Examinations*. For more information, see *Spartan Life: Student Handbook and Resource Guide* at <http://splife.studentlife.msu.edu>. Students who violate MSU rules may receive a penalty grade including but not limited to a failing grade on the assignment or in the course. Students are encouraged to reference the website prepared by the University Ombudsman at <http://www.msu.edu/unit/ombud>, especially the section on Academic Honesty.

Observing religious holidays

Students may make up coursework missed to observe a major religious holiday only if they make arrangements in advance with the instructor.

Late assignments

10% will be deducted from your grade for late assignments, for each day (24 hour period) they are late.Assignments are due by 9am on their due date. As an example, if an assignment is due at 9am on Wednesday and it is turned in at 5pm, it will be graded with a 10% penalty. If it is turned in on Thursday at 10am, it will receive a 20% penalty (and so on, and so on). I will do my best to accommodate any requests for extensions.

**Schedule of class meetings, topics, and assignments:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Class** | **Date** | **Topic** | **Assignment due on this date** |
| 0 | 1/13/21 | Reading and reflection day (no class) | -See reading list  -Prepare brief (1 page) reflection on Meyer et al. article. In this paper, please address the following questions: What were the main points, what surprised you, what did you like, anything you objected to or additional information you would have wanted to see? |
| 1 | 1/20/21 | Syllabus review  Introduction to Cognitive and Neuropsychological Assessment  Introduction to Collaborative Therapeutic Neuropsychological Assessment  The construct of intelligence  Racism and the history of cognitive assessment | -See reading list |
| 2 | 1/27/21 | Essential Psychometrics  Arguments for and against testing intelligence in diverse individuals | -See reading list |
| 3 | 2/3/21 | The assessment process  Intake interviews  Behavioral observations  Report writing: overview, background, and behavioral observations | -See reading list |
| 4 | 2/10/21 | Administering and scoring the WAIS-IV | -See reading list  -Intake interview assignment due |
| 5 | 2/17/21 | Administering and scoring the WISC-V  General testing guidelines | -See reading list  -WAIS-IV Observation assignment due |
| 6 | 2/24/21 | Weschler interpretation  Adaptive functioning  Autism Spectrum Disorders  Intellectual disability | -See reading list |
| - | 3/1/21 | No class this week | WISC-V administration assignment due |
| 7 | 3/10/21 | Academic Achievement  WIAT-IV  WRAT-5  Giftedness | -See reading list |
| 8 | 3/17/21 | Attention, Concentration, Working memory, and Executive functions  Tests:  DKEFS  CPT-II | -See reading list  -WRAT5 administration assignment due |
| 9 | 3/24/21 | Memory and visuo-spatial abilities  Tests:  WRAML  CVLT  RCFT | -See reading list  -WIAT-4 assignment due |
| 10 | 3/31/21 | Psychological, emotional, and behavioral functioning  Report writing: Results | -See reading list  DKEFS assignment due |
| 11 | 4/7/21 | Learning disorders, ADHD, and differential diagnoses | -See reading list  -WRAML assignment due |
| 12 | 4/14/21 | Effort testing  Developing a test battery  Report writing: Summary, conclusions, recommendations | -see reading list |
| 13 | 4/21/21 | The feedback process  Culturally responsive assessment feedback  Ethical, legal and professional issues in cognitive assessment | -see reading list  -Giftedness report due |
| Finals Period | 4/29/21 | No class | Adult report due by 9am |

**Reading List (\*\*Priority)**

Class 0

\*\*Meyer, G.J., Finn, S.E., Eyde, L.D., Kay, G.G., Moreland, K.L., Dies, R.R., Eisman, E.J., Kubiszyn, T.W., & Reed, G.M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. American Psychologist, 56, 128-165.

\*\*Gorske and Smith textbook, Chapter 2, pp. 26-30

Lezak textbook, Chapter 1

Sattler textbook, Chapters 2 (read until new section starts on p. 34)

Class 1

\*\*Nisbett, R.E., Aronson, J., Blair, C., Dickens, W., Flynn, J., Halpern, D.F., Turkheimer, E. (2012) Intelligence: New findings and theoretical developments, 67: 130-159.

\*\*Croizet, J. (2012). The racism of intelligence: How mental testing practices have constituted an institutionalized form of group domination. In L. D. Bobo, L. Croomes-Robinson, L. Darling-Hammond, H. L. Gates, G. Janes, & C. Steele (Eds.), The Oxford handbook of African American citizenship, 1865-present (pp. 769-816). Oxford: Oxford University Press.

Sattler Chapter 7, pp.223-231

Class 2

\*\*Guthrie, R.V. (2004). Psychometric Scientism. In Guthrie, R.V. Even the Rat was White (pp. 55-83). Pearson.

Sattler Textbook, Chapter 4

\*\*Sattler Textbook, Chapter 5, pp. 162 (starting with new section)-end

Sattler Textbook, Chapter 5 (skim until new section starting on p. 162)

Class 3

\*\*Sattler Textbook, Chapter 1, p. 6-23  
\*\*Sattler Textbook, Chapter 2, p. 39-end (starting with 'Variables to consider in a Multimethod Assessment'

\*\*Gorske and Smith textbook, Chapter 4  
Sattler Textbook, Chapter 6  
Lezak, Chapter 5

Class 4

\*\*Sattler and Ryan, Chapters 2-3 (skim)

Class 5

\*\*Sattler textbook, Chapters 9-10 (skim)

Class 6

Pick one of the following:   
\*Sattler and Ryan, Chapter 4 (WAIS-IV interpretation)  
\*Sattler, Chapter 11 (WISC-V interpretation)

Pennington, Chapter 10

Huerta, M., Lord, C. (2012) Diagnostic evaluation of Autism Spectrum Disorders. Pediatr Clin North Am, 59: 103-111.

Zwaigenbaum, L. et al. (2009) Clinical assessment and management of toddlers with suspected Autism Spectrum Disorder: Insights from studies of high-risk infants. Pediatrics, 123: 1383-1391.

Lai, M., Baron-Cohen, S. (2015) Identifying the lost generation of adults with autism spectrum conditions. Lancet Psychiatry, 2: 1013-27.

Vivanti, G. (2020) ‘Autism and Autism Treatment: Evolution of concepts and practices from Kanner to Contemporary Approaches’ in Vivanti, G. (ed.) Clinical Guide to Early Interventions for Children with Autism, Best Practices in Child and Adolescent Behvaioral Health Care.

Class 7

\*\*Worrell, F.C., Subotnik ,R.F., Olszewski-P., & Dixson, D.D.(2019). Gifted students. *Annual Review of Psychology, 70*, 551-576.

Class 8

Zelazo and Müller (2002) Executive Function in typical and atypical development, in Blackwell Handbook of Childhood Cognitive Development, Ch. 20, pp. 445-469.  
  
Royall, D.R., Lauterbach, E.C., Cummings, J.L., Reeve, A., Rummans, T.A., Kaufer, D.I., LaFrance, W.C., Coffey, C.E. (2002) Executive Control Function: A Review of Its Promise and Challenges for Clinical Research. J Neuropsychiatry Clin Neurosci, 14: 377-405.

Class 9

Banich Textbook Chapters 9-10

Class 10

None

Class 11

Pennington book, Chapters 6, 9

Class 12

\*Sattler Textbook, Chapter 18

Class 13

\*\*Postal and Armstrong Chapters 1-4  
\*\*Gorske and Smith textbook, Chapter 5

Sattler textbook, Chapter 3