

**George Mason University**  
**College of Education and Human Development**  
**Educational Psychology**

EDRS630 – DL1 – Educational Assessment  
3 Credits, Spring 2021

Wednesdays 19:20 – 22:00 (7:20pm – 10:00pm) Online when Synchronous; Otherwise, Asynchronous

**Faculty**

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**COVID 19 Procedures: Spring 2021**

Students, please be aware of and follow all policies and procedures for Mason’s Safe Return to Campus: <https://www2.gmu.edu/Safe-Return-Campus>

**Prerequisites/Corequisites:** None

**University Catalog Course Description**

Examines research theory and practice relevant to assessments. Focuses on assessment strategies for students including developing skills to select, score, and interpret educational assessments.

**Course Overview**

The purpose for the course is for students to attain a high level of professional understanding and competent use of educational assessment practices. Course content focuses on understanding learning and assessment theory, research, and practice in order to assess learning in a variety of settings, such as K-12 formal educational environments, higher education, or informal learning across the lifespan. Specific content addresses standards for educational and psychological measurement; the role of assessment in the context of current school reform initiatives; best practices in assessment development; and use of assessment data for educational decision-making for individuals, groups, educational practices, or policy.

**Course Delivery Method**

This course will be delivered online using a primarily asynchronous method, with 3 online synchronous meetings, one *optional* in-person meeting, and several opportunities for individual online meetings. Synchronous online meeting will be held via Zoom or Blackboard Collaborate.

Asynchronous assignments will be submitted via Blackboard (Bb). You will log in to the Blackboard course site using your Mason email name (everything before @masonlive.gmu.edu) and email password. The course site will be available two weeks before the course begins.

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.**

### *Technical Requirements*

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:

[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#supported-browsers](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)

To get a list of supported operation systems on different devices see:

[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#tested-devices-and-operating-systems](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems)

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students will need a working microphone for use with the Zoom or Blackboard Collaborate web conferencing tool.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.

### *Expectations*

- Course Week: Our course week will begin on Monday and finish on Sunday. On weeks that we have a synchronous meeting, our meeting will take place as indicated on Wednesdays, 19:20 – 22:00 (7:20pm – 10:00pm).
- Log-in Frequency:  
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3-4 times per week. In addition, students must log-in for all scheduled online synchronous meetings, as well as submit asynchronous assignments by the date indicated on the schedule in this syllabus.
- Participation:  
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:  
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:

Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.

- Workload:  
Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:  
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.
- Netiquette:  
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:  
Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

### **Learner Outcomes or Objectives**

This course is designed to enable students to do the following:

1. Understand and explain the cognitive bases for learning and their connections to various forms of assessments of learning.
2. Understand the nature, purposes for, and uses of different types of assessments and be able to select and administer the appropriate assessment for the intended purpose, or develop classroom-based assessments.
3. Understand the conceptual framework underlying classroom, school, or system level assessment data, and use the framework to design assessments and scoring methods that will allow stakeholders to draw valid inferences from the assessment data.
4. Understand how to administer, score, and interpret results from various types of assessment, such as classroom assessment or standards-based or norm-referenced assessments.
5. Use various types of assessment data to make valid inferences and appropriate decisions related to instructional planning, teaching, developing curriculum, educational programs, and/or school improvement.
6. Explain scores, results, data, and analysis of various types of assessments to stakeholder groups.
7. Understand concepts related to validity, reliability, fairness, ethical use, social justice and other basic principles of sound assessment and apply to practice in development and use and

also by addressing misconceptions and misapplications of the concepts when employed by others.

8. Identify critical issues, trends, and best practice derived from research related to the role of the design of assessments for accountability.
9. Explain the relationship between learning, testing, and issues of social justice.

### **Professional Standards**

Learner outcomes are consistent with the Educational Psychology Program standards:

- Educators will demonstrate an understanding of principles and theories of learning, cognition, motivation, and development as they apply to a wide variety of contemporary assessment contexts.
- Educators will use their knowledge, skills, and dispositions to apply principles and theories of learning, cognition, motivation, and development to analyze and develop instruction based on sound assessment principles.
- Educators will demonstrate an understanding of the basic concepts, principles, techniques, approaches, and ethical issues involved in educational assessment.
- Educators will use their knowledge of quantitative and qualitative research methodology to develop education assessment methods for continuing improvement of student learning.

The student outcomes are also informed by the Standards for Teacher Competence in Educational Assessment of Students (AFT, NCME, NEA, 1990), the Standards for Competence in Student Assessment (AASA, NAESP, NASSP, NCME, 1990), the Standards for Educational and Psychological Testing (AERA, NCME, & APA, 2014), and the InTASC Model Core Teaching Standards (CCSSO, 2011).

Those standards most relevant to address the learning targets for the course are those that state that educators will have the knowledge, skills and dispositions to:

- Apply basic principles of sound assessment practices for addressing specific educational needs.
- Distinguish between the nature and uses for norm-referenced and criterion-referenced tests.
- Select assessment methods appropriate for instructional decisions.
- Develop assessment methods appropriate for instructional decisions.
- Administer, score, and interpret the results of both externally-produced and teacher produced assessment instruments.
- Use assessment results in instructional planning, teaching, developing curriculum, and school improvement.
- Communicate assessment results to varied stakeholders.
- Recognize and appropriately act against unethical, illegal, and otherwise, appropriate assessment methods and uses of assessment information.
- Recognize the implications of educational assessments for social justice in schools.
- Discern critical issues related to the role of the design of assessments for school accountability and high stakes testing.
- Gather evidence from multiple sources of data to draw valid inferences about student learning.

## **Required Texts**

American Educational Research Association (AERA), American Psychological Association, & National Council on Measurement in Education. (2014). *Standards for educational and psychological testing*. Washington, DC: AERA.

McMillan, J.H. (2018). *Classroom Assessment. Principles and Practice that Enhance Student Learning and Motivation*. (7<sup>th</sup> ed.) Pearson: NY

## **Recommended Texts**

American Psychological Association. (2010). Publication manual of the American Psychological Association. (7th ed.). Washington, DC: Author.

## **Course Performance Evaluation**

Students are expected to submit all assignments on time via Blackboard or in the manner outlined by the instructor. Late submissions will not be accepted – notify the instructor of any extenuating circumstances preferably in advance and with documentation.

- **Assignments and/or Examinations**

- **A. Class Participation (30%)**

Various in-class assignments will be included. The purpose of these assignments is to provide students with hands-on opportunities to practice course content. These assignments typically include reflections, online/paper-based practice exercises or short (one page) essays on the Standards. Homework assignments are due before the beginning of the class period. In-class assignments are due at the end of the class session or as determined by the instructor. Participation includes attendance (coming to class, on time, and notifying the instructor in the event that a student has to miss class), completing assigned readings, and engaging in small group discussions and activities.

- **B. Assessment Development Project (70%)** (See below for rubric)

This is an individual experiential project and written assignment. The purpose of this assignment is to develop an assessment of learning within a specific context or content area. For example, an assessment of linear equations for high school students, or an assessment of a complex skill (like critical-thinking or analytical skills), or competency acquired through life experience, or assessing learning in an informal environment (a workshop at a museum, for instance). Choose a context/content where there is a need for better assessing learning. The following components are part of the project:

**a. Introduction (10 point; 5%):** A one-page summary of the context/content of interest (learning construct), overview of the literature, the gap in assessment of learning in this context, and the purpose of the project.

**b. Literature Review (10 points; 5%):** This section (two – four pages) discusses the context/content that is the focus of your project, examines the learning and assessment issues, critically reviews existing assessments, and discusses the assessment methods necessary for measuring your learning construct. The review of existing assessments should address reliability and validity evidence of the measures. If validity and reliability data are available, provide a description in the literature review.

**c. Methods (20 points; 10%):** This section outlines your plan to develop, administer, and analyze your assessment. You must include the procedures, participants, how you will gather reliability and validity evidence, and a test blueprint. Follow APA guidelines to inform the draft of your methods section.

**d. Measures (40 points; 20%):** You must develop a minimum of ten selected-response items (SRIs) that are multiple choice items and answer key. You may also develop other types of SRIs (like true-false) in addition to the multiple choice tests. You must also develop one in-depth measure of performance or constructed-response item (CRI) and rubric to assess that performance. Include your initial measure in this section. You will provide a revised measure in the next section based on your pilot test data analysis.

**e. Pilot test data collection and analysis (40 points; 20%):** You will pilot test your measure (both SRI and CRI) together or separately and gather data from a group of participants. Follow ethical guidelines set by the Institutional Review Board even though an IRB approval is not required for this assignment. Conduct data analyses to gather reliability and validity evidence (guidance and resources will be provided in class). Revise your measure based on the data analysis results. Include a revised measure in this section.

**f. Discussion (20 points; 10%):** This section (two – three pages) will provide a summary of the results and a discussion about what was learned from the pilot test, uses for the test, limitations, and areas for research. Include a reflection on what you learned from doing the project. The final report will include revisions to all previous sections based on instructor feedback. Follow APA guidelines to format the final report.

**Note:** Drafts for each section should be submitted for feedback from the instructor (see due dates for checkpoints in the course schedule). While these drafts will not be graded, the final report must show changes made to the initial drafts using tracked changes. The purpose of the checkpoints is to track progress, provide individualized support for your project and divide the project into manageable tasks. The instructor strongly recommends due diligence with regard to checkpoint submissions.

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Assessment Development Project Rubric

<b>CRITERIA</b>	<b>Unsatisfactory (1)</b>	<b>Minimal (2)</b>	<b>Competent (3)</b>	<b>Outstanding (4)</b>	<b>Score</b>
<b>Introduction</b>					
A one-page summary of the context/content of interest (learning construct), overview of the literature, the gap in assessment of learning in this context, and the purpose of the project.	Introduction is not included or is incomplete Only some aspects of the component are addressed;	Includes all or most parts of the component but in insufficient detail or with many inaccuracies	Includes all aspects of the component that are adequately addressed	Includes all aspects of the component that are addressed completely and exceptionally well	
<b>Literature Review</b>					
This section (two – four pages) discusses the context/content that is the focus of your project, examines the learning and assessment issues, critically reviews existing assessments, and discusses the assessment methods necessary for measuring your learning construct. The review of existing assessments should address reliability and validity evidence of the measures. If validity and reliability data are available, provide a description in the literature review.	Lit. review is not included or is incomplete	Includes all or most parts of the component but demonstrates inaccuracies that need to be addressed	Includes all aspects of the component that are adequately addressed	Includes all aspects of the component that are addressed completely and exceptionally well	
<b>Methods</b>					
This section outlines your plan to develop, administer, and analyze your assessment. You must include the procedures, participants, how you will gather reliability and validity evidence, and a test blueprint. Follow APA guidelines to inform the	Plan is not included or is incomplete	All or most parts of the component are addressed, but inaccuracies are evident	Includes all aspects of the component that are adequately addressed	Includes all aspects of the component that are addressed completely and	

draft of your methods section.		and need to be addressed		exceptionally well	
<b>Measures</b>					
Develop a minimum of ten selected-response items (SRIs) that are multiple choice items and answer key. You may also develop other types of SRIs (like true-false) in addition to the multiple choice tests. You must also develop one in-depth measure of performance or constructed-response item (CRI) and rubric to assess that performance. Include your initial measure in this section. You will provide a revised measure in the next section based on your pilot test data analysis	The measure is missing one or more components listed in the assignment	The measure includes all or most components that are not fully developed	The measure includes all components that are fully developed	Includes all aspects of the component that are addressed completely and exceptionally well	
<b>Pilot Test Implementation and Results</b>					
Pilot test your measure (both SRI and CRI) together or separately and gather data from a group of participants. Follow ethical guidelines set by the Institutional Review Board even though an IRB approval is not required for this assignment. Conduct data analyses to gather reliability and validity evidence (guidance and resources will be provided in class). Revise your measure based on the data analysis results. Include a revised measure in this section.	Pilot study is not included or is incomplete	All or most parts of the component are addressed, but inaccuracies are evident and need to be addressed	Includes all aspects of the component that are adequately addressed	Includes all aspects of the component that are addressed completely and exceptionally well	
<b>Discussion</b>					
This section (two – three pages) will provide a summary of the results and a discussion about what was learned from the pilot test, uses for the test, limitations, and areas for research. Include a reflection on what you learned from doing the project. The final report will include revisions to all previous sections based on instructor feedback. Follow APA guidelines to format the final report.	Discussion is not included or is incomplete	Discussion includes perfunctory comments on the plan and results; no critical analysis is provided	Discussion provides a critical analysis of the strengths and limitations of the plan	Discussion provides insightful critical analysis of strengths and limitations of the plan and results and makes direct connections to course content	



APA Style	Does not adhere to APA style	Minimally adheres to APA style	Most or all APA guidelines are met	Accurately follows APA style throughout	
Total					

- **Grading**

<b>Percent</b>	<b>Letter Grade</b>
98 – 100	A+
93 – 97	A
90 – 92	A-
88 – 89	B+
83 – 87	B
80 – 82	B-
70 – 79	C
Below 70	F

**Professional Dispositions**

See <https://cehd.gmu.edu/students/polices-procedures/>

**Class Schedule (Weeks highlighted in gray are synchronous session)**

**Note:** Faculty reserves the right to alter the schedule as necessary, with notification to students.

<b>Date</b>	<b>Topic</b>	<b>What's Due?</b>
Week 1: 1/25/2021 – 1/29/2021 <b>(SYNCHRONOUS SESSION Wednesday 1/27 7:20pm)</b>	Introductions; Syllabus Review; Assessment in teaching and learning;	McMillan Chapter 1 & 2 Standards: Preface/Introduction <b>Bb Assignments Due 1/29</b>
Week 2: 2/1/2021 – 2/5/2021 (No synchronous meeting)	Relationship between Learning, Teaching, and Assessments Standards and Cognitive Learning Targets	Shepard, Penuel, & Pellegrino, 2018 Wiliam, 2018 Brookhart, 2018 Standards: Applications (12) <b>Bb Assignments Due 2/5</b>
Week 3: 2/8/2021 – 2/12/2021 (No synchronous meeting)	High Quality Assessment: Validity, Fairness, and Reliability	McMillan Chapter 3 Standards: Foundations (1, 2, 3) <b>Bb Assignments Due 2/12</b>
Week 4: 2/15/2021 – 2/19/2021 (No synchronous meeting)	Types of Assessment Purposes of Assessment Test Development Process	McMillan Chapter 4, 5, 6 Standards: Operations (4) <b>Project: Introduction Due 2/19</b> <b>Bb Assignments Due 2/19</b>
Week 5: 2/22/2021 – 2/26/2021 (No synchronous meeting)	Types of Assessment Purposes of Assessment (formative)	McMillan Chapter 7, 8, 9 <b>Bb Assignments Due 2/26</b>
Week 6: 3/1/2021 – 3/5/2021 <b>(SYNCHRONOUS SESSION Wednesday 3/3 7:20pm)</b>	Types of Assessment Purposes of Assessment (summative/research) Test Blueprint	McMillan Chapter 7, 8, 9 <b>Bb Assignments Due 3/5</b>
Week 7: 3/8/2021 – 3/12/2021 (No synchronous meeting)	Large Scale Assessments Rubric Development	McMillan Chapter 12, 13, 14 <b>Project: Lit. Review Due 3/12</b> <b>Bb Assignments Due 3/12</b>
Week 8: 3/15/2021 – 3/19/2021 (No synchronous meeting)	Assessing Complex Skills Portfolio Assessment	McMillan Chapter 14 <b>Bb Assignments Due 3/19</b>
Week 9: 3/22/2021 – 3/26/2021 (No synchronous meeting)	Assessing Non-Cognitive Dispositions	McMillan Chapter 10, 11, 15 Brookhart et al, 2015 <b>Project: Methods Due 3/26</b> <b>Bb Assignments Due 3/26</b>
Week 10: 3/29/2021 – 4/2/2021 (No synchronous meeting)	Assessing Students with Special Needs; Culturally and Linguistically Diverse Learners <b>Individual Meetings Begin</b>	
Week 11: 4/5/2021 – 4/9/2021 (No synchronous meeting)	Individual Meetings: No class	<b>Project: Measures Due 4/9</b>

Week 12: 4/12/2021 – 4/16/2021 <b>(SYNCHRONOUS SESSION Wednesday 4/14 7:20pm)</b>	Criteria for reviewing tests Grading and Reporting	<b>Project: Pilot Data – OPTIONAL SUBMISSION</b>
Week 13: 4/19/2021 – 4/23/2021 <b>(OPTIONAL In-Person Meeting on 4/21 in Thompson L018 – will split into 2 groups)</b>	Data Analysis	<b>Project: Pilot Data – OPTIONAL SUBMISSION</b>
Week 14: 4/26/2021 – 4/30/2021 (No synchronous meeting)	Data Analysis – Individual Meetings available by request	
Week 15: 5/3/2021 – 5/7/2021	No class	<b>Final Project Report Due 5/7</b>

### **Core Values Commitment**

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

### **GMU Policies and Resources for Students**

#### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/> ).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.
- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

#### *Campus Resources*

- Support for submission of assignments to Tk20 should be directed to [tk20help@gmu.edu](mailto:tk20help@gmu.edu) or <https://cehd.gmu.edu/aero/tk20>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

### **Notice of mandatory reporting of sexual assault, interpersonal violence, and stalking:**

As a faculty member, I am designated as a “Responsible Employee,” and must report all disclosures of sexual assault, interpersonal violence, and stalking to Mason’s Title IX Coordinator per

University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance from Mason's Title IX Coordinator by calling 703-993-8730, or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/>.**