College of Education and Human Development
Division of Special Education and disAbility Research

Summer 2014
EDSE 846 A01: Assessment, Evaluation, and Instrumentation in Special Education Research
CRN: 41904, 3 - Credits

Instructor: Dr. Anna Evmenova	**Meeting Dates:** 5/19/2014 - 6/27/2014
Phone: 703-993-5256	**Meeting Day(s):** MWF
E-Mail: aevmenov@gmu.edu	**Meeting Time(s):** 4:00 pm-6:40 pm
Office Hours: by appointment	**Meeting Location:** KH 102

Note: This syllabus may change according to class needs. Students will be advised of any changes immediately through George Mason e-mail and/or through Blackboard.

Course Description
Provides in-depth study, analysis and discussion of the past, present and future directions of assessment, evaluation, and instrumentation research in special education. Emphasizes reliability and validity of the research instruments, evaluating research methodology, analyzing results, synthesizing findings with respect to present assessment and evaluation policies; formulating future research questions relevant to assessment and evaluation of individuals with disabilities.

Prerequisite(s): Admission to the PhD program or permission of Instructor.

Co-requisite(s): None

Advising Contact Information
Please make sure that you are being advised on a regular basis as to your status and progress through your program. Mason M.Ed. and Certificate students should contact the Special Education Advising Office at (703) 993-3670 for assistance. All other students should refer to their faculty advisor.

Nature of Course Delivery

Learning activities include the following:

1. Class lecture and discussion
2. Relevant media presentations
3. Study and independent library research
4. Applications with relevant hardware and software, including SPSS
5. Application activities, including in class and out of class evaluation and analysis of intervention research
6. Student presentations
7. Electronic supplements and activities via Blackboard

Learner Outcomes

- Describe various methodologies used in special education assessment and evaluation research.
- Analyze the reliability and validity of research instruments.
- Determine the implementation mechanisms for various assessment and evaluation procedures in special education.
- Demonstrate how to analyze and synthesize special education assessment research.
- Describe issues surrounding special education assessment research.
- Develop and present an applied project investigating a selected topic in special education assessment and evaluation.

Required Textbooks

Scruggs, T.E., & Mastropieri, M.A. (Eds.) (2011). *Assessment and intervention: Advances in learning and behavioral disabilities* (vol. 24). Bingley, UK: Emerald.

Digital Library Option

The Pearson textbook(s) for this course **may be** available as part of the **George Mason University Division of Special Education and disAbility Research Digital Library**. Please note that not all textbooks are available through this option. Visit the links below before purchasing the digital library to ensure that your course(s) text(s) are available in this format. The division and Pearson have partnered to bring you the Digital Library; a convenient, digital solution that can save you money on your course materials. The Digital Library offers you access to a complete digital library of **all Pearson textbooks** and MyEducationLabs used across the Division of Special Education and disAbility Research curriculum at a low 1-year or 3-year subscription price. Access codes are available in the school bookstore. Please visit http://gmu.bncollege.com and search the ISBN. To register your access code or purchase the Digital Library, visit:
http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html

- 1 year subscription $200 ISBN-13: 9781269541411
- 3 years subscription $525 ISBN-13: 9781269541381
- Individual e-book(s) also available at the bookstore link above or at
  http://www.pearsoncustom.com/va/gmu/digitallibrary/education/index.html

Recommended Textbooks

APA Manual   *American Psychological Association* (2010).
Psychological Association (6 ed.). Washington, DC: Author.

Required Resources

SPSS software via GMU's Virtual Computing Lab at https://www.vcl.gmu.edu. The VCL has
SPSS, NVIVO, ArcGis, Stata and MatLab. Faculty, staff and students can login with their GMU
credentials to use this software. We will also have access to SPSS software in class using
supplied computers in the classroom. In addition, all computer labs on campus have SPSS
installed.

Access to Course Blackboard Site
Blackboard will be used to post important information for this course. Plan to access the
Blackboard site several times per week; announcements and resources are posted on the
Blackboard site in between class sessions. In addition, you will need to login to Blackboard to
upload assignments and to access the exam for the course.

Access Blackboard at "my mason portal site" Your login and password are the same as your
George Mason e-mail login. Once you enter, select EDSE 846 to access copies of class materials,
readings in pdf formats, and links to relevant sites. Additional sources as needed from the library.

Additional Readings

Basham, J. D., Israel, M., Graden, J., Poth, R., & Winston, M. (2010). A comprehensive
approach to RTI: Embedding universal design for learning and technology. *Learning
Disability Quarterly*, *33*, 243-255.

Bordelon, D. E., & Banbury, M. M. (2005). Pursuing the parameters: Validating the multiple
intelligences inventory for teachers. Assessment for Effective Intervention, 30, 33-51.
10.1177/073724770503000303.

Bradshaw, C. P., Mitchell, M. M., & Leaf, P. J. (2010). Examining the effects of schoolwide
positive behavioral interventions and supports on student outcomes: Results from a
randomized controlled effectiveness trial in elementary schools. *Journal of Positive
Behavior Interventions*, *12*, 133-148. doi: 10.1177/1098300709334798

Cook, B. G., & Cook, S. C. (2011). Unraveling evidence-based practices in special education.

Journal of Special Education. Published Online First Sep. 8, 2011 as DOI: 10.1177/0022466911420877

Cress, C. J., Synhorst, L., Epstein, M. H., & Allen, E. (2012). Confirmatory factor analysis of the preschool behavioral and emotional rating scale (PreBERS) with preschool children with disabilities. *Assessment for Effective Intervention*, *37*, 203-211. doi: 10.1177/1534508411433499.

Dexter, D. D., & Hughes, C. A. (2009). *Progress monitoring within a response-to-intervention model*. Retrieved April 10, 2012 from http://www.rtinetwork.org

Eaves, R. C., Rabren, K., & Hall, G. (2012). The post-school outcomes transition survey: A tool for effective decision making? Assessment for Effective Intervention, 38, 39-39. doi: 10.1177/1534508412452751.

Espin, C. A., Busch, T. W., Lembke, E. S., Hampton, D. D., Seo, K., & Zukowski, B. A. (2013). Curriculum-based measurement in science learning: Vocabulary-matching as an indicator of performance and progress. *Assessment for Effective Intervention*, *38*, 203-213. 10.1177/1534508413489724.

Fuchs, L. S., & Fuchs, D. (2008). The role of assessment within the RTI framework. In D. Fuchs, L. S. Fuchs, & S. Vaughn (Eds.), *Response to intervention: A framework for reading educators* (pp. 27–49). Newark, DE: International Reading Association.

Gresham, F. M., MacMillan, D. L., Beebe-Frankenberger, M. E., & Bocian, K. M. (2000).Treatment integrity in learning disabilities intervention research: Do we really know how treatments are implemented? *Learning Disabilities Research & Practice, 15*, 198–205. doi: 10.1207

Horner, R. H., Todd, A. W., Lewis-Palmer, T., Irvin, L. K., Sugai, G., & Boland, J. B. (2004). The School-wide Evaluation Tool (SET): A research instrument for assessing schoolwide positive behavior support. *Journal of Positive Behavior Interventions*, *6*, 3-12. doi: 10.1177/10983007040060010201

Jones, N. D., & Brownell, M. T. (2013). Examining the use of classroom observations in the evaluation of special education teachers. Assessment for Effective Intervention, 39, 112-124. doi: 10.1177/1534508413514103

Lane, K. L., Oakes, W. P., Carter, E. W., Lambert, W. E., & Jenkins, A. B. (2013). Initial evidence for the reliability and validity of the student risk screening scale for internalizing and externalizing behaviors at the middle school level. *Assessment for Effective Intervention*, *39*, 24-38. doi:10.1177/1534508413489336.

Lee, Y.-S., Lembke, E., Moore, D., Ginsburg, H. P. & Pappas, S. (2012). Item-level and construct evaluation of early numeracy curriculum-based measures. *Assessment for Effective Intervention*, *37*, 107-117. doi: 10.1177/1534508411431255.

Lipsey, M. W., & Wilson, D. (2001). *Practical meta-analysis (applied social research methods)*. Thousand Oaks, CA: Sage Publications Inc. (selected chapters)

Noell, G. H., Witt, J. C., Slider, N. J., Connell, J. E., Gatti, S. L., Williams, K. L., Koenig, J. L., & Resetar, J. L. (2005). Treatment implementation following behavioral consultation in schools: A comparison of three follow-up strategies. *School Psychology Review*, *34*, 87-106.

O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of Educational Research*, *78*, 33-84. doi: 10.3102/0034654307313793

Posavec, E.J., & Carey, R.G. (2006). *Program evaluation: Methods and case studies.* (6th edition). New York: Pearson Prentice Hall. (selected chapters)

Seethaler, P. M., & Fuchs, L. S. (2011). Using curriculum-based measurement to monitor kindergarteners' mathematics development. *Assessment for Effective Intervention*, *36*, 219-229.

Semmelroth, C. L., & Johnson, E. (2013). Measuring rater reliability on a special education observation tool. *Assessment for Effective Intervention*, *39*, 131-145. doi: 10.1177/1534508413511488

Steinbrecher, T. D., Selig, J. P., Cosbey, J., & Thorstensen, B. I. (2014). Evaluating special educator effectiveness: Addressing issues inherent to value-added modeling. *Exceptional Children*, *80*, 323-336.

Ysseldyke, J. (2001). Reflections on a research career: Generalizations from 25 years of research on assessment and instructional decision making. *Exceptional Children*, *67*, 295-309.

Course Relationships to Program Goals and Professional Organizations
This course is part of the George Mason University, College of Education and Human Development (CEHD), Graduate School of Education, Special Education, CEHD PhD in Education Program. This program complies with university and program standards.

GMU POLICIES AND RESOURES FOR STUDENTS:
a. Students must adhere to the guidelines of the George Mason University Honor Code [See http://oai.gmu.edu/the-mason-honor-code/].

b. Students must follow the university policy for Responsible Use of Computing [See http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/].

c. Students are responsible for the content of university communications sent to their George Mason University 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.

d. The George Mason University Counseling and Psychological Services (CAPS) staff consists of professional counseling and clinical psychologists, social workers, and counselors who offer a wide range of services (e.g., individual and group counseling, workshops and outreach programs) to enhance students' personal experience and academic performance [See http://caps.gmu.edu/].

e. Students with disabilities who seek accommodations in a course must be registered with the George Mason University Office of Disability Services (ODS) and inform their instructor, in writing, at the beginning of the semester [See http://ods.gmu.edu/].

f. Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.

g. The George Mason University Writing Center staff provides a variety of resources and services (e.g., tutoring, workshops, writing guides, handbooks) intended to support students as they work to construct and share knowledge through writing [See http://writingcenter.gmu.edu/].

PROFESSIONAL DISPOSITIONS
Students are expected to exhibit professional behaviors and dispositions at all times.

CORE VALUES COMMITMENT
The College of Education & Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles. [See http://cehd.gmu.edu/values/]

For additional information on the College of Education and Human Development, Graduate School of Education, please visit our website [See http://gse.gmu.edu/]

Course Policies & Expectations
   Attendance.
      Students are expected to (a) attend all classes during the course, (b) arrive on time, (c) stay for the duration of the class time and (d) participate in all activities to earn the **15-points class participation grade**. Attendance, timeliness, and professionally relevant, active participation are expected and very important because many of the activities in class are planned in such a way that they cannot necessarily be recreated outside of the class session. Missing **more than one class** or **repeated** tardiness/leaving early will

result in losing your participation grade for the course. Please notify me *in advance* by phone or email if you will not be able to attend class.

Late Work.

Students must contact the instructor prior to missing a due date and arrange a new date that is within a week. Points may be deducted (one per day) missing due dates with no prior approved excuses.

TaskStream Submission

Every student registered for any Special Education course with a required performance-based assessment is required to submit this assessment, (NO ASSESSMENT REQUIRED FOR THIS COURSE) (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in TaskStream. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete(IN). Unless the IN grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

If you have never used TaskStream before, you MUST use the login and password information that has been created for you. This information is distributed to students through GMU email, so it is very important that you set up your GMU email. For more TaskStream information, go to http://cehd.gmu.edu/api/taskstream.

Grading Scale

Evaluation will be based upon a point system. The point value for each assignment is as follows:

Classroom Participation 15
Midterm Review/Exam 20
Project Update Presentation 10
Applied Project 40
Project Presentation 15
TOTAL POINTS..100

GRADING SCALE
95-100% = A
90-94% = A-
87-89% = B+
83-86% = B
80-82% = B-
70-79% = C
< 70% = F

Assignments

 Performance-based Assessment (TaskStream submission required).
 None

 Performance-based Common Assignments (No TaskStream submission required).

Applied Project (40 points)

Option 1: Individual Research Review Paper

An integrative review paper must be completed. You may select to complete a traditional or integrative research review paper of a selected area in special education assessment and evaluation. Have your topic approved prior to beginning. You should also prepare materials based on the paper to present to the class.
 1. Select a current topic impacting assessment and evaluation in special education.
 2. Complete a literature search of Psych Info and other relevant databases to identify relevant original research articles (check for other relevant data bases).
 3. Obtain and read original research articles.
 4. Develop a coding system to organize your articles
 5. Code, organize, analyze, and synthesize the information from the articles.
 6. Write the paper using the *American Psychological Association Publication Manual* (6th edition) guidelines:
  Title Page
  Abstract
  Introduction and Purpose
  Method (literature search procedures)
  Results (this is the section that will vary according to your specific articles)
  Overall characteristics of the studies (number of articles, participant characteristics, disability areas, general descriptions of assessment/evaluation procedures, overall findings; and quality of studies)
  Discussion – Summary and Conclusions
  References
There will be numerous opportunities to discuss this project throughout the semester.

Option 2: Research Application Project

The research application project is designed to provide experience in designing, implementing, and evaluating an assessment related research application project in special education. Be sure to have your research question and design approved before beginning since the instructor can assist you with the design components and GMU and district human subjects' approval.

This applied research project may also focus on the design, development, piloting, evaluation and refinement of an assessment or assessment tool used in research. It is recommended that following format be followed:

Questions of the Research Application Project:

Sample questions:
How does on-going assessment impact teachers' instructional decision making in content areas for middle school students with SLD?

What is the reliability and validity of the Assistive Technology Attitude Scale developed for measuring teachers' attitudes toward assistive technology?

Background Literature:
Provide a brief description of the background literature that indicates a need for your question.

Design/Method of the Project:
This section will be based upon your question. There are a variety of methodologies you could select to investigate your selected question.

Participants: Use the following marker variables as guidelines to describe the participants in your applied project.(may be students, in-service teachers, pre-service teachers, etc.). Report the data on:

- Participants' overall characteristics (e.g., age, gender, ethnicity, socio-economic status, etc.)
- Participants' specific characteristics (e.g., years of teaching experience, disability category, achievement scores, etc.)
- Setting (e.g., size, location, etc.)

Materials: Carefully describe all of the materials that were used in your project. Attach copies of the precise materials used in all conditions, including any teacher materials and student materials. This also includes describing fidelity of implementation materials.

Testing materials: Carefully describe all of the testing materials that were developed and/or used. Include copies of any surveys, interview protocols, observation protocols, and/or pre/posttests. Remember these measures will be used to describe whether or not your methods were "EFFECTIVE." You may want to develop and validate a criterion-referenced test of participant's knowledge (pretest/posttest), attitude measures (e.g., I incorporate technology in my classroom instruction. 1 2 3 4 5), as well as include a measure of observable data (e.g., audio or videotape participants).

Procedure: Carefully describe in a step by step fashion what you did. Use subheadings if you have multiple conditions (for example; daily assessments of students' performance to guide the instructional decision making).

Testing procedures: Describe how the measures were administered. For example, identify whether there was group versus individual implementation.

Scoring procedures: Describe how the measures were scored. For example, if tests consisted of multiple choice items, scoring is usually straight forward, however, if short answer items were used, then what was the scoring criteria? Did you have multiple raters completing an observational tool of a 1st year special education teacher in the classroom? Describe reliability of scoring and observations.

Data Sources: Provide a listing of all of the sources of data you obtained. We will use this list to help determine the appropriate data analyses procedures.

Results: Describe results all of the dependent variables. You can present individual scores (use the same ID#s used in the demographic data sheets) and then compute a column average (we will learn several statistical tests that you will be able to use for calculating reliability of your instrument and analyzing your data).

Discussion: Provide a discussion of your findings. The first few sentences can provide summary accounts of the findings. For example, method A clearly facilitates an intervention completed with high fidelity, as every teacher's student in method A received 10 points higher on the unit test. Or the instrument has proven to be a reliable and valid mechanism for measuring teachers' attitudes.

Provide some insights as to why you might have obtained the findings. Provide a summary paragraph describing what you learned from the application project and how you could implement projects like this in your teaching to determine which methods work best with your students.

Other Assignments.

Class Participation (15 points)
Because of the importance of lecture and discussion to the total learning experience, students are encouraged to both attend and participate in class regularly. Attendance, punctuality, preparation, and active contribution to small and large group efforts are essential. These elements will reflect the professional attitude implied in the course goals and will account for 15% of the course grade. Students who must miss a class must notify the instructor (preferably in advance) and are responsible for completing all assignments and readings for the next class.

Midterm Review/Exam (20 points)
A take home exam will be distributed. The exam will consist of content from the assigned readings and the discussions in class.

Project Update Presentation (10 points)
In mid-semester (week 8), students will prepare to present an overview of what has been done to date using relevant audio visual materials. Students will explain clearly what they have done so far to develop their final applied project, what questions remain, and what issues or barriers they have encountered. Information gathered from an individual with relevant information on the topic will be included (faculty member, staff member, other resource).

Schedule

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Tentative Class Topics and Due Dates

(Subject to change for any unforeseen interruptions)

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Class	Topics & Activities	Readings* & Assignments Due
Class 1 May 19	Course overview Assessment, evaluation, and accountability in special education. The role of assessment and evaluation in new initiatives: RTI, EBPs, PBSs, UDL, etc. **Exploring IES-Measurement Goal Activity**	
Class 2 May 21	Choosing assessment and instrumentation for a research study: Existing instruments vs. newly developed instruments **Guest Speaker**: **Finding Instruments Activity**	Horner et al. (2004) Lane, et al., (2013)
Class 3 May 23	Discussion of issues in current special education assessment and evaluation policies and research **Online Discussion**	Balboni & Cubelli - in Scruggs & Mastropieri (2011) Ysseldyke (2001)
No Class May 26 – Memorial Day		
Class 4 May 28	Test development in special education research: Construct validity **Guest Speaker**: **Modifying Existing Instrument Activity**	Bordelon & Bandury (2005) Lee, et al., (2012)
Class 5 May 30	Reliability and validity of the research instrument Exploratory and confirmatory factor analysis **Online Discussion** **SPSS Activity**	Swanson & Orosco - in Scruggs & Mastropieri (2011) Cress, et al. (2012) Eaves, Rabren, & Hall (2012)
Class 6 June 2	Standardized assessment and instrumentation in special education research (e.g., DIBELS) Appropriateness to diverse learners **Standardized Assessment in Your Field Activity**	VanDerHeyden - in Scruggs & Mastropieri (2011) Steinbrecher, et al., (2014) **Short Presentation**
Class 7 June 4	Response to Intervention (RTI) Curriculum-based measures in special education research **Guest Speaker** **Concept Map Activity**	Tindal & Nese - in Scruggs & Mastropieri (2011) Seethaler & Fuchs (2011) Espin et al., (2013)
Class 8 June 6	Evidence-Based Practices (EBPs) Functional and behavioral assessment for Positive Behavior Supports (PBSs) in special education research **Online Discussion**	Bradshaw, Mitchell, & Leaf (2010) Cook & Cook (2011) **Mid-term/Review Exam**
Class 9	Assessment of complex environments:	Basham, et al. (2010)

June 9	Evaluating technology in UDL Transition assessments	Kortering, McClannon, & Braziel (2008) Wehmeyer - in Scruggs & Mastropieri (2011) **Project Update Presentation**
Class 10 June 11	Validating observational measures Fidelity of implementation (RTI, EBPs, PBSs, UDL) Procedural reliability Social Validity **Observation Activity**	Gresham, et al. (2000) O'Donnell (2008) Jones & Brownell (2013)
Class 11 June 13	Implementation issues: RTI, EBPs, PBSs, UDL Reliability and validity of new initiatives **Online Discussion**	Fuchs & Fuchs (2008) O'Connor & Sanchez - in Scruggs & Mastropieri (2011)
Class 12 June 16	Research on evaluation methods for educational programs and curricula **Program Review Activity**	Posavec & Carey (2006) Noell et al., (2005)
Class 13 June 18	Use of technology for assessment and evaluation in special education research **Collecting Data Activity**	Agrawal, Allen-Bronaugh, & Mastropieri - in Scruggs & Mastropieri (2011) Seemelroth & Johnson (2013)
Class 14 June 20	Issues and future directions in special education assessment research **Online Discussion**	McMaster, Ritchey, & Lembke - in Scruggs & Mastropieri (2011)
Class 15 June 23	The relationship between effect sizes and evaluation methods/ instrumentation **Discussion of Final Papers**	Lipsey & Wilson (2001) - Chapters 6 & 8 **Final Papers**
Class 16 June 25	**Final Project Presentations** of **Applied Project**	**Final Presentations**

* Additional readings may be provided by the instructor for some topics.

Appendix: <u>Applied Project Rubric</u>

	Does Not Meet Expectations 1	Meets Expectations 2	Exceeds Expectations 3
Option 1: Individual Research Review	Contains one or more significant problems. Overall, acceptable but with one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, reporting of results; writing style, or review of relevant literature. Paper with substantial problems in important areas such as writing, evaluation of research, overall thoughtfulness. Paper contains little to no information of value to special education research and practice.	Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style errors may be present.	Appropriate topic; thorough and thoughtful review of previous research; good literature search procedures; good coding instrument, conventions, and coding procedures description; good description of data analysis procedures including sample output; good overall characteristics of the data set; logical interpretation of the data and results; good synthesis of the data in the discussion and summary section. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format throughout.
Paper Option 2: Research Application Project	Contains one or more significant problems. Contains some useful information, but may have substantial problems with evaluation, writing style, or implementation of project. Paper with substantial problems in important areas such as writing,	Good overall paper, lacking in one or two of the criteria for an exemplary paper. Not entirely reflective or thoughtful, or minor writing style errors may be present.	Appropriate topic, thorough and thoughtful review of previous research, appropriate and clearly described implementation procedures, careful measurement and evaluation of results, thorough and appropriate discussion of implications of

	implementation of intervention, evaluation of results, overall thoughtfulness. Contains little or no information of value to special education practice.		findings. Good writing style, free of mechanical or stylistic errors, appropriate use of APA format throughout.