



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

Spring 2021

EDSE 616: Braille Reading and Writing

Section: DL1; CRN: 17841

Section: 6V1; CRN: 24087

Section: 6Y1; CRN: 24093

3 – Credits

**VI Consortium Sections**

- ODU — SPED 639 Braille Reading and Writing
- RU — EDSP 656 Braille Reading and Writing

<b>Instructor:</b> Dr. Kim Avila	<b>Meeting Dates:</b> 1/25/21 – 5/3/21
<b>Phone:</b> 703.993.5625	<b>Meeting Day(s):</b> Monday
<b>E-Mail:</b> kavila@gmu.edu	<b>Meeting Time(s):</b> 4:30 pm – 7:10 pm
<b>Office Hours:</b> Monday/Wednesday 3:30-430pm virtually or by appointment	<b>Meeting Location:</b> Online
<b>Office Location:</b> Virtual office via Ultra and Zoom; Finley 203a	<b>Other Phone:</b> N/A

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

**[Assignments](#) [Course Schedule](#)**

**Prerequisite(s):**

EDSE 311 or EDSE 511 and EDSE 412 or EDSE 512

**Co-requisite(s):**

None

**Course Description**

Provides instruction on transcription of advanced braille codes, including mathematics (Unified English Braille (UEB) and Nemeth), music, foreign language, and other

specialized codes. Introduces techniques for teaching skills in each code. Explores technology tools used to create braille and tactile materials in addition to other assistive technologies used for instruction in science, technology, engineering, and mathematics (STEM) content.

### **Course Overview**

EDSE 616 prepares candidates to transcribe advanced braille codes used in mathematics, science, technology, foreign languages, and other specialized codes. Emphasizes practices, methods, technologies, and materials used in braille transcription and instruction for students who are blind and visually impaired. Provides learning related to Braille and tactile materials in addition to other assistive technologies used for instruction in math and science.

### **Advising Contact Information**

Please make sure that you are being advised on a regular basis as to your status and progress in your program. Students in Special Education and Assistive Technology programs can contact the Special Education Advising Office at 703-993-3670 or [speced@gmu.edu](mailto:speced@gmu.edu) for assistance. All other students should refer to their assigned program advisor or the Mason Care Network (703-993-2470).

### **Advising Tip**

Did you know you can evaluate your progress in the program at any time by running a Degree Evaluation in Patriotweb? Step by step instructions are available at <http://registrar.gmu.edu/students/degree-evaluation/>.

### **Course Delivery Method**

Learning activities include the following:

1. Class lecture and discussion
2. Application activities
3. Small group activities and assignments
4. Video and other media supports
5. Research and presentation activities
6. Electronic supplements and activities via Blackboard

This course will be delivered online (76% or more) using synchronous format via the Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before [@masonlive.gmu.edu](mailto:@masonlive.gmu.edu)) and email password. The course site will be available on 1/25/2021

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: [Browser support](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support/#supported-browsers) ([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: [Tested devices and operating systems](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](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 headset microphone for use with the 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.
- The following software plug-ins for PCs and Macs, respectively, are available for free download:
  - [Adobe Acrobat Reader](https://get.adobe.com/reader/) (<https://get.adobe.com/reader/>)
  - [Windows Media Player](https://support.microsoft.com/en-us/help/14209/get-windows-media-player) (<https://support.microsoft.com/en-us/help/14209/get-windows-media-player>)
  - [Apple Quick Time Player](http://www.apple.com/quicktime/download/) ([www.apple.com/quicktime/download/](http://www.apple.com/quicktime/download/))

## Expectations

- Course Week:  
Our course week will begin on the day that our synchronous meetings take place as indicated on the Schedule of Classes.
- 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 times per week. In addition, students must log-in for all scheduled online synchronous meetings.
- 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**

Upon completion of this course, teacher candidates/students will be able to:

1. Transcribe and read mathematical materials for school-aged students using Nemeth and Unified English Braille (UEB) codes.
2. Calculate mathematical problems using the Cranmer abacus including addition, subtraction, multiplication, and division.
3. Demonstrate knowledge of materials and instructional strategies for teaching mathematics and science to students with visual disabilities.
4. Demonstrate basic knowledge of foreign language and music codes, and identify resources for obtaining information on these codes.
5. Demonstrate knowledge of basic guidelines for production of tactile graphics.
6. Identify strategies for teaching the reading of tactile graphics to students with

blindness and visual impairments.

7. Demonstrate knowledge of technology tools for creating braille materials and tactile graphics.
8. Demonstrate the use of a slate and stylus to produce accurate braille.
9. Demonstrate knowledge of materials and instructional strategies for teaching reading and writing of literary braille.

### **Professional Standards**

(Council for Exceptional Children (CEC), Interstate Teacher Assessment and Support Consortium (InTASC)). Upon completion of this course, students will have met the following professional standards: CEC Standard 1: Learner Development and Individual Learning Differences (InTASC 1, 2); CEC Standard 2: Learning Environments (InTASC 3); CEC Standard 4: Assessment (InTASC 6); CEC Standard 5: Instructional Planning and Strategies (InTASC 7, 8); CEC Standard 6: Professional Learning and Ethical Practice (InTASC 9).

### **Required Texts**

Holbrook, M. C., & D'Andrea, F. M. (2014). *Ashcroft's Programmed Instruction: Unified English Braille* (Fifth Edition). Germantown, TN: Scalars Publishing. ISBN: 978-0-9960353-0-9.

This is the same book required for Braille Code

Cleveland, J., Bean, J., Bird, M., Kelley, S., O'Brien, S., Osterhaus, S., Sewell, D., & Torrence, G., (2017). *Nemeth at a glance: A math resource, grade-level chart, and evaluation tool*. Austin, Texas: Texas School for the Blind and Visually Impaired.

**The textbook below can be accessed via Mason's Online library (No purchase necessary, use your Mason credentials to access).**

Swenson, A. (2016). *Beginning with braille: Firsthand experiences with a balanced approach to literacy* (2<sup>nd</sup> edition). New York: American Foundation for the Blind.

### **Required Materials:**

- Manual Braille writer (Perkins)
- Slate & Stylus: 28 cell standard, direct slate
- Braille paper: both sizes
- Cranmer abacus
- The APH Student Starter Pack includes a slate & stylus, abacus, and paper

### **Recommended Texts**

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7th ed.). <https://doi.org/10.1037/0000165-000>

RNIB (2015). *Using UEB for Mathematics*. Royal National Institute for the Blind, England.

This book is available in print and braille. You do not need to buy both, just the one in your preferred format.

Nemeth Code Reference Sheet from the American Printing House for the Blind

Available in either print or embossed braille

Roberts, H., Krebs, B.M., & Taffet, B.(1978). *An introduction to braille mathematics*. Washington, D.C: Library of Congress. Call 1-800-223-1839 to order or download online. Please note: this publication does not include code switch information

Rex, E. J., Koenig, A. J., Wormsley, D. P., & Baker, R. L. (1994). *Foundations of braille literacy*. New York: American Foundation for the Blind.

Wormsley, D. B. (2004). *Braille literacy: A functional approach*. New York: AFB Press.

Wormsley, D. B. (2016). *I-M-ABLE: Individualized Meaning-Centered Approach to Braille Literacy Education*. New York: AFB Press.

**Required Resources listed below are free and may be downloaded/accessed online.**

- Nemeth Code Tutor: Free online program for Nemeth Code practice
- UEB Math Tutorial: Free online program for UEB technical practice
- Perky Duck or other manual input electronic brailier (may not be a transcription program)

UEB Guidelines for Technical Material (GTM) in PDF print format

- UEB Guidelines for Technical format in BRF (for candidates who use electronic and/or embossed braille)
- [GTM 3. Signs of Operation and Comparison \(PDF\)](#) - recommended for print readers
- [GTM 3. Signs of Operation and Comparison \(BRF\)](#) - recommended for use with a refreshable braille display

UEB Rulebook (2013)

- Available in BRF

Walton, L. B. & Taffet, B. (2017, provisional). *An introduction to braille mathematics: Using UEB and the Nemeth Code*. Washington, D.C: Library of Congress. National Library Service: Mathematics Transcribing in Nemeth

The Nemeth Braille Code for Mathematics and Science Notation (1972) Please note: this publication does not include the code switch information

Guidance for Transcription Using the Nemeth Code within UEB Contexts

Provisional Guidance for Transcribing Foreign Language Material in UEB

Music Braille Code, 2015

Braille Formats: Principles of Print-to-Braille Transcription, 2016

[Project Math Access \(TSBVI\)](#)

[Project Inspire](#)

### **Additional Readings**

Additional *required* readings are found on Blackboard and on Mason's electronic library. Articles include, but are not limited to the articles below:

Braille Authority of North America. (n.d.). The evolution of braille: Can the past help plan the future? Braille Authority of North America, Part 3

Barclay, L., Herlich, S.A., & Sacks, S.Z. (2010). Effective teaching Strategies: Case Studies from the Alphabetic Braille and Contracted Braille Study. *Journal of Visual Impairment and Blindness*, 104(12), 573-64.

Beal, C. R., & Rosenblum, L. P. (2018). Evaluation of the effectiveness of a tablet computer application (App) in helping students with visual impairments solve mathematics Problems. *Journal of Visual Impairment & Blindness*, 112, 5-19.

Bickford, J., & Falco, R. (2012). Technology for Early Braille Literacy: Comparison of Traditional Braille Instruction and Instruction with an Electronic Notetaker. *Journal of Visual Impairment & Blindness*, 106(10), 679–693.

Campbell, A. (2016). "Essential Experiences to Undergird the Early Development of Literacy,." *Journal of Visual Impairment & Blindness*, 110(5).

Cheng, L., & Beal, C. (2018). Teachers of Students with Visual Impairments Share Experiences and Advice for Supporting Students in Understanding Graphics. *Journal of Visual Impairment & Blindness (Online)*, 112(5).  
<https://doi.org/10.1177/0145482X1811200505>

Ferrell, K., Correa-Torres, S., Howell, J., Pearson, R., Carver, W., Groll, A., ... Dewald, A. (2017). Audible Image Description as an Accommodation in Statewide Assessments for Students with Visual and Print Disabilities. *Journal of Visual Impairment & Blindness*, 111(4), 325–339.  
<https://doi.org/10.1177/0145482X1711100403>

Gulley, A., Smith, L., Price, J., Prickett, L., & Ragland, M. (2017). Process-Driven Math: An Auditory Method of Mathematics Instruction and Assessment for Students Who Are Blind or Have Low Vision. *Journal of Visual Impairment & Blindness*, 111(5), 465–471. <https://doi.org/10.1177/0145482X1711100507>

Harris, B.A. (2011). Effects of the proximity of paraeducators on the interactions of braille readers in inclusive settings. *Journal of Visual Impairment and Blindness*, 105(8), 467-78.

- Herzberg, T. & Rosenblum, P., (2020). Perspectives on Literacy by Four Adolescents, Their Teachers, and Family Members. *Journal of Visual Impairment & Blindness (Online)*, 114(3), 185-197.  
<http://dx.doi.org/mutex.gmu.edu/10.1177/0145482X20923441>
- Herzberg, T., Rosenblum, P., & Robbins, M. (2017). Teachers' experiences with literacy instruction for dual-media students who use print and braille. *Journal of Visual Impairment & Blindness*, 111(1), 49–59.
- Holbrook, M., & MacCuspie, P. (2010). The Unified English Braille Code: Examination by science, mathematics, and computer science technical expert braille readers. *Journal of Visual Impairment & Blindness*, 104(9), 533-541.
- Holbrook, M.C. & Koenig, A.J. (1992). Teaching braille reading to students with low vision. *Journal of Visual Impairment and Blindness*, 86(1), 44-48.
- Hong, S., Rosenblum, L., & Campbell, A. (2017). Implementation of Unified English Braille by teachers of students with visual Impairments in the United States. *Journal of Visual Impairment & Blindness*, 111(6), 543–555.
- Ivy, S., Guerra, J., & Hatton, D. (2017). Procedural adaptations for use of constant time delay to teach highly motivating words to beginning braille readers. *Journal of Visual Impairment & Blindness*, 111(1), 33–48.
- Kamei-Hannan, C., Lawson, H. (2012). Impact of a braille-note on writing: evaluating the process, quality, and attitudes of three students with visual impairments. *Journal of Special Education Technology* 27(3).
- Leendert, A., Doorman, M., Drijvers, P., Pel, J., & Steen, J. (2019). An exploratory study of reading mathematical expressions by braille readers. *Journal of Visual Impairment & Blindness*, 113, 68-80. doi:10.1177/0145482X18822024
- Martiniello, N., Wittich, W., & Jarry, A. (2018). The perception and use of technology within braille instruction: A preliminary study of braille teaching professionals. *The British Journal of Visual Impairment*, 36(3), 195–206.  
<https://doi.org/10.1177/0264619618775765>
- Nannemann, A., Bruce, S., Hussey, C., Vercollone, B., & McCarthy, M. (2017). Oral braille reading decoding strategies of middle school students who are blind or have low vision. *Journal of Visual Impairment & Blindness*, 111(3), 284–288.
- Papadimitriou, V. & Argyropoulos V. (2017) The effect of hand movements on braille reading accuracy. *International Journal of Educational Research*, 85, 43-50. doi: [10.1016/j.ijer.2017.07.004](https://doi.org/10.1016/j.ijer.2017.07.004)
- Roe, J., Rogers, S. Donaldson, M. Gordon, C. & Meager, N. (2014). Teaching literacy through braille in mainstream settings whilst promoting inclusion: Reflections on our practice. *International Journal of Disability*, 61, 165-177. doi: [10.1080/1034912X.2014.905064](https://doi.org/10.1080/1034912X.2014.905064)
- Rosenblum, L. P., Cheng, L., Zebehazy, K., Emerson, R. W., & Beal, C. R. (2020). Teachers' descriptions of mathematics graphics for students with visual impairments: A preliminary investigation. *Journal of Visual Impairment & Blindness*, 114(3), 231–236. <https://doi.org/10.1177/0145482X20923442>
- Rosenblum, L. P., & Herzberg, T. S. (2020). Perspectives on literacy by four adolescents, their teachers, and family members. *Journal of Visual Impairment & Blindness*, 114(3), 185–197. <https://doi.org/10.1177/0145482X20923441>
- Rosenblum, L., & Herzberg, T. (2011). Accuracy and techniques in the preparation of

- mathematics worksheets for tactile learners. *Journal of Visual Impairment & Blindness*, 105(7), 402-413.
- Rosenblum, L., & Smith, D. (2012). Instruction in specialized braille codes, abacus, and tactile graphics at universities in the United States and Canada. *Journal of Visual Impairment & Blindness*, 106(6), 339–350. Retrieved from <http://search.proquest.com/docview/1023133606/>
- Ryles, R., & Bell, E. (2009). Participation of parents in the early exploration of tactile graphics by children who are visually impaired. *Journal of Visual Impairment & Blindness*, 103(10), 625-634.
- Samuels, C. A. (2008). Braille makes a comeback. *Education Week*, 27(43), 27-29.
- Savaiano, M., Compton, D., Hatton, D., & Lloyd, B. (2016). Vocabulary word instruction for students who read braille. *Exceptional Children*, 82(3), 337–353. <https://doi.org/10.1177/0014402915598774>
- Siligo, W. (2005). Enriching the ensemble experience for students with visual impairments. *Music Educators Journal*, 91, 31.
- Spinczyk, D., Maćkowski, M., Kempa, W., & Rojewska, K. (2019). Factors influencing the process of learning mathematics among visually impaired and blind people. *Computers in Biology and Medicine*, 104, 1–9. <https://doi.org/10.1016/j.combiomed.2018.10.025>
- Stanfa, K., & Johnson, N. (2015). Improving braille reading fluency: The bridge to comprehension. *Journal of Blindness Innovation and Research*, 5. <https://doi.org/10.5241/5-83>
- Siu, Y. (2016). I-M-ABLE: Individualized Meaning-Centered Approach to Braille Literacy Education. *Journal of Visual Impairment & Blindness*, 110(5), 373–374.
- Tallon, E., & Herzberg, T. (2013). The Use of final-letter braille contractions: A case study. *Journal of Visual Impairment & Blindness*, 107(3), 221–225.
- Toussaint, K., & Tiger, J. (2010). Teaching early braille literacy skills within a stimulus equivalence paradigm to children with degenerative visual impairments. *Journal of Applied Behavior Analysis*, 43(2), 181–194. <https://doi.org/10.1901/jaba.2010.43-181>
- Wall Emerson, R., Holbrook, M., & D'Andrea, F. (2009). Acquisition of literacy skills by young children who are blind: Results from the ABC braille study. *Journal of Visual Impairment & Blindness*, 103(10), 610–624.

### **Course Performance Evaluation**

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, VIA, hard copy).

### **VIA Performance-Based Assessment Submission Requirement**

It is critical for the special education program to collect data on how our students are meeting accreditation standards. Every teacher candidate/student registered for an EDSE course with a required Performance-based Assessment (PBA) is required to upload the PBA to VIA (regardless of whether a course is an elective, a one-time course or part of an undergraduate minor). A PBA is a specific assignment, presentation, or project that best demonstrates one or more CEC, InTASC or other standard connected

to the course. A PBA is evaluated in two ways. The first is for a grade, based on the instructor's grading rubric. The second is for program accreditation purposes. Your instructor will provide directions as to how to upload the PBA to VIA.

For EDSE 616, the required PBA is Three-Week Literacy Plan and Intervention Project. Please check to verify your ability to upload items to VIA before the PBA due date.

## **Assignments and/or Examinations**

### **Performance-based Assessment (VIA submission required)**

Literacy Plan and Intervention Project: details and rubric are posted on Blackboard.

### **College Wide Common Assessment (VIA submission required)**

N/A

### **Field Experience Requirement**

A field experience is a part of this course. A field experience includes a variety of early and ongoing field-based opportunities in which candidates may observe, assist, and/or tutor. Field experiences may occur in off-campus settings, such as schools (CAEP, 2016).

Students must be able to perform the essential functions of the practicum site assigned with or without an accommodation. Contact Disability Services ([ods@gmu.edu](mailto:ods@gmu.edu)) for questions related to accommodations.

\*Please note that due to barriers with accessing field experience placements in spring 2021 as a result of COVID-19, there will be changes to the field experience process in this course. Students will be notified well in advance with changes and provided with alternative options. Check your Mason email regularly for important information regarding your field experience.

### **Other Assignments**

Complete directions and rubrics are posted on Blackboard

**Participation.** Active participation in synchronous classes, discussions, and other course related content is essential to master material and concepts. Each week, two participation points are available and may require submitting various materials, transcription samples, documents, or discussion board posts or responses to prompts in class within the web-conference platform on one or multiple occasions. In certain weeks, no material submission may be required. Candidates who arrive late, leave early or are otherwise not present for all or part of the class may lose all or some

participation points. Candidates with an unexcused absence(s) will not be permitted to make up participation points.

**Abacus Assignment.** This assignment will require candidates to explore the Cranmer abacus and to demonstrate proficiency skills related to basic and intermediate mathematical computation with the abacus. Directions and rubric are posted on Blackboard.

**Homework Assignments.** This course contains eight homework assignments that will directly relate to content and transcription work in math, literary, other special codes, abacus work, formatting, essays, surveys, group work, research, and other activities. Each homework assignment will be posted on Blackboard with specified activities and point allocation. Each homework assignment is due by the beginning of the class (4:30 pm) of the date specified on the course schedule. Transcription must be done with manual or electronic input braille programs (Perky Duck, braille writer, slate & stylus). No transcription programs may be used to produce any product in this course. Homework assignments that contain errors with less than 80% accuracy in total or on one/any section may result in not being counted for credit or returning to the student without any points awarded with the option to resubmit the assignment with up to 85% of the points possible.

**Assessments.** This course contains two assessments: a midterm and final. Each assessment evaluates unit proficiency (UEB technical, Nemeth, and UEB literary). Assessment transcription will include electronic and manual braille production (braille and slate & stylus) in addition to producing other relevant materials.

**Portfolio.** This class requires each candidate produce a transcription portfolio based on UEB literary and technical transcription. Literary and formatting concepts will also be required. The portfolio is to be produced with a manual braille and slate & stylus. These materials are to be clearly photographed and posted on Blackboard and may be required to be mailed and postmarked by the date specified, mail tracking is highly recommended.

**Graduate Student Project: STEM Teaching Tools and Technology:  
Graduate Student Assignment: complete directions and rubric are posted on  
Blackboard**

Each graduate student will select a tactile/braille device, tool, or technology for science, technology, engineering, or math (STEM) for an academic student who is a braille and tactile learner. Each candidate will create slides/a document to present on the STEM tool/technology for the class. Note: Do not purchase the tool/technology you choose. Please use online resources, tutorials, posted manuals, reviews, discussions, and published materials to create your presentation.

**Presentation slides/document are to include:**

- Tool/technology name and link
- Description: Provide a description of the purpose and function of the item in your own words.
  - List STEM content area(s) and the level this tool/technology can be used (e.g. high school chemistry; early computational mathematics)
  - Cost/subscription fee of the tool/technology, also include if the tool/technology is available on Federal Quota
  - Include picture(s) with an in-slide references for the source of the image
- Tool/technology use: provide an overview in your own words on how the item is used. Include:
  - General and brief description of how to use the item
  - Accessibility and tactile features
  - Available formats (UEB, Nemeth, etc.)
  - Any alternative uses
- TBVI perspective: briefly summarize how a TBVI would integrate use of this tool/technology. Include:
  - Is specialized training needed for the TBVI and/or student to use the tool/technology?
  - Is the tool/technology something a general education teacher, instructional assistant, or parents could integrate into instruction or support or use with the student?
  - Possible limitations, if any: identify any challenges associated with the product (e.g. cost, availability, storage, transporting fragile items, difficulty of use and implementation etc.)
- References: Provide references for any websites, articles, discussion boards, pictures, manuals you referred to for this presentation.

**Presentation:** Presentation should be  $\leq 10$  minutes and provide a succinct overview of required elements. Slides should contain clear and meaningful information for others in the class to refer to as TBVIs. Slides/your document must be submitted one hour prior to presentation class to allow for upload to our web-conference platform.

## **Course Policies and Expectations**

### **Attendance/Participation**

Attendance during course meetings is mandatory. Only in the case of an emergency or other urgent situation will an absence be excused. Candidates must inform the instructor in advance of an upcoming, unavoidable absence, or as soon as possible if there is an emergency. Due to the rapid nature of this course, more than one absence may result in dismissal from this class. It is up to the discretion of the instructor to excuse the absence, which may or may not allow makeup of participation points. Attendance and participation will be checked multiple times during each synchronous course session in varied formats.

### Late Work

All work is due by the start of class on the date specified in the course schedule. All coursework must be submitted on time, as each assignment in this class builds upon previous content. A candidate who has an approved accommodation for extended time must inform the instructor in writing, in advance with documentation for this approved accommodation from the Consortium university before an assignment requiring extended time is due. In the event of an emergency, candidates must inform the instructor of the situation; it is up to the instructor to determine if a scenario may warrant a time extension. Time extensions will not be granted retroactively and in the rare event an extension is granted, it may be subjected to point reduction.

### Other Requirements

#### Assignment completion and submission policies

All assignments must be original work completed during this semester (Spring 2021). Assignments, papers, the unit plan, portfolio, homework, and other work from previous semesters or courses may not be submitted for credit in this class.

All assignments are to be posted in the designated location on Blackboard or with the specific directions provided by the instructor. Assignments that are sent via electronic mail or posted to the incorrect assignment location may not be counted as completed or submitted for credit. Please post your final products in one attempt on Blackboard (multiple submissions are permitted in one attempt). Students must confirm their assignments have submitted properly and in full. Certain assignments might require posting video(s) photo(s) and other multi-media elements. [Kaltura allows students to post video content to Blackboard, directions found on this link.](#)

Assignment	Points	Due
Participation 14x2	28	Weekly
Homework 8x10	80	Specified in course schedule
Assessments 2x65	130	UEB Assessment: March 1, 2021 Nemeth Assessment: April 19, 2021
Graduate student assignment: STEM Teaching Tools and Technology	15	March 15, 2021
Literary and technical transcription portfolio	60	March 22, 2021
Abacus assignment	20	April 5, 2021
Unit plan and presentation	50	April 26, 2021
<b>Total</b>	<b>383</b>	

### Grading Scale

Percent	Grade	Points
93-100	A	356-383
90-92	A-	344-355
88-89	B+	337-343
83-87	B	317-336
80-82	B-	306-316
70-79	C	268-305
<69	F	≤267

**\*Note:** The George Mason University Honor Code will be strictly enforced. See [Academic Integrity Site \(https://oai.gmu.edu/\)](https://oai.gmu.edu/) and [Honor Code and System \(https://catalog.gmu.edu/policies/honor-code-system/\)](https://catalog.gmu.edu/policies/honor-code-system/). Students are responsible for reading and understanding the Code. “To promote a stronger sense of mutual responsibility, respect, trust, and fairness among all members of the George Mason University community and with the desire for greater academic and personal achievement, we, the student members of the university community, have set forth this honor code: Student members of the George Mason University community pledge not to cheat, plagiarize, steal, or lie in matters related to academic work.” Work submitted must be your own new, original work for this course or with proper citations.

### Professional Dispositions

Students are expected to exhibit professional behaviors and dispositions at all times. See [Policies and Procedures \(https://cehd.gmu.edu/students/policies-procedures/\)](https://cehd.gmu.edu/students/policies-procedures/). Students are expected to exhibit professional behaviors and dispositions at all times. In the College of Education and Human Development, dispositions are formally and separately evaluated in at least two points in each student’s program – a self-evaluation at the start of their program, and a university supervisor’s evaluation during internship. In special education licensure programs, the self-evaluation is an online survey distributed via email upon program entry for graduate students and within initial courses (EDSE 241, EDSE 361, and EDSE 311) for undergraduate students. When dispositions are assessed, it is important that for areas where a positive disposition is ‘occasionally evident’ or ‘rarely evident,’ the student takes steps to grow as an educator. See <https://cehd.gmu.edu/epo/candidate-dispositions>.

### Class Schedule

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

Date	Topics	Readings and assignments
<b>Week 1</b> 1/25/2021	<ul style="list-style-type: none"> <li>Course overview</li> <li>Literary braille: EBAE to UEB transition: overview and practice of changes</li> </ul>	<u>Overview of changes from EBAE to UEB</u>  Ashcroft Ch. 3 Exercises 3.2.1, 3.2.2, 3.2.3

Date	Topics	Readings and assignments
	<ul style="list-style-type: none"> <li>Introduction to UEB numeric Part I</li> </ul>	<p><u>GTM</u>: pp. 8-10 and 15-17</p> <p><u>UEB Math Tutorial</u>: Ch. 1, lessons 1.0-1.4; Ch. 2, lessons 2.0-2.1; Ch. 3, lessons 3.0-3.1</p> <p><i>Nemeth at a Glance</i>: Tactile skills necessary for math: pp. 13-26</p>
<p><b>Week 2</b> 2/1/2021</p>	<p>Math transcription: UEB Part II</p> <ul style="list-style-type: none"> <li>Spatial layout for UEB</li> <li>Groupings</li> <li>Introduction to fractions and mixed numbers</li> <li>Currency and measurement</li> <li>Square root and radicals</li> <li>Creating braille number lines</li> </ul>	<p><u>GTM</u>: pp. 12-14, 20-25, 31-33, 40</p> <p><u>UEB Math Tutorial</u>: Lesson 3.2-3.3; Ch. 4; lessons 4.0-4.3; Ch 6, lesson 6.3-6.6;</p> <p>Ashcroft Ch. 4.4: Spatial equations for addition, subtraction, and division Exercises 4.4.1, 4.4.2</p> <p>Ashcroft Ch. 5 Exercises 5.1.2, 5.2.1</p> <p>Ashcroft Ch. 6 Exercises 6.6.1, 6.6.2, 6.7.1</p> <p><u>UEB Rulebook</u>: 11.5 <u>UEB Rulebook</u>:16.2</p> <p><b>Due: Homework 1</b></p>
<p><b>Week 3</b> 2/8/2021</p>	<p>Math transcription: UEB Part III</p> <ul style="list-style-type: none"> <li>Percent, degrees, and angles</li> <li>Superscripts and subscripts</li> <li>Special symbols: lines and line segments, shape indicators</li> </ul> <p><b>Adapting math worksheets</b></p>	<p><u>GTM</u>: pp. 12-13, 50, 58</p> <p><u>UEB Math Tutorial</u>: Ch. 5; Lesson 9.0</p> <p>Ashcroft Ch. 7 Ashcroft Ch. 10 Exercises: 10.6.1, 10.6.2 Ashcroft Ch. 11 Exercises 11.6.1 <u>UEB Rulebook</u>: 11.6-7</p> <p><b>Due: Homework 2</b></p>

Date	Topics	Readings and assignments
<b>Week 4</b> 2/15/2021	<ul style="list-style-type: none"> <li>• Math transcription: UEB Part IV</li> <li>• Roman numerals and additional math symbols</li> <li>• Matrices and Vectors</li> <li>• Advanced mathematical concepts</li> </ul>	<p><u>GTM</u>: pp. 11, 69-73</p> <p><u>UEB Math Tutorial</u>: Ch. 3, Lesson 3.5; Ch. 4; Ch. 5; Ch. 7</p> <p>Ashcroft Ch. 12 Exercises 12.4.2, 12.4.3 UEB Rulebook 11.8</p> <p><b>Due: Homework 3</b></p>
<b>Week 5</b> 2/22/2021	<ul style="list-style-type: none"> <li>• UEB review</li> <li>• UEB and Chemistry</li> <li>• Introduction to the abacus</li> <li>• Tactile games and interactive braille lessons</li> </ul>	<p><u>GTM</u>: pp. 74-82</p> <p><u>UEB Math Tutorial</u>: Lesson 6.2, Chs 7-10</p> <p><u>UEB Rulebook</u>: 11.9</p> <p><b>Due: Homework 4</b></p>
<b>Week 6</b> 3/1/2021	<ul style="list-style-type: none"> <li>• Abacus cont'd</li> <li>• UEB Assessment</li> </ul>	<p><b>Due: UEB Assessment</b></p>
<b>Week 7</b> 3/8/2021	<p><b>Tactile Graphics</b></p> <ul style="list-style-type: none"> <li>• Methods to create tactile graphics</li> <li>• Techniques and tools for science and math instruction</li> <li>• Accessible calculators</li> <li>• Accessible graphing calculators</li> <li>• Transcription of electronic information (Computer notation)</li> </ul> <p><b>Formatting</b></p> <ul style="list-style-type: none"> <li>• Techniques for transcribing various materials, worksheets, tables, charts, special formatting, etc.</li> </ul>	<p><u>GTM</u>: pp. 83-87</p> <p>Ashcroft Ch. 4: Electronic addresses Ch. 8: # and other special symbols Ch. 12: dashes, backslash</p> <p><u>UEB Rulebook</u>: 11.10</p> <p><u>Braille Formats: Principles of Print-to-Braille Transcription</u></p> <p><u>BANA Graphing Calculator Guidelines (PDF) BRF</u>, and <u>BRF for downloading</u></p>
<b>Week 8</b> 3/15/2021	<p><b>Special codes:</b></p> <ul style="list-style-type: none"> <li>• World languages</li> <li>• Music braille</li> </ul>	<p><u>UEB Rulebook</u>: Section 13 and Section 14 for music braille</p> <p><u>UKAAF Braille Music</u></p>

Date	Topics	Readings and assignments
	Graduate student STEM tool and technology presentations	<p><u>Music Braille Code, 2015</u></p> <p><u>UEB Rulebook: 3.18</u></p> <p><u>Provisional Guidance for Transcribing Foreign Language Material in UEB</u></p> <p><b>Due: Graduate students only:</b> STEM Teaching Tools and Technology Presentation: please post your presentation at least one hour before the start of class to allow for uploading to our web-conference platform.</p>
<p><b>Week 9</b> 3/22/2021</p>	<p><b>Introduction to Nemeth Code</b>  <b>Code switching</b>  <b>Nemeth Code within UEB text</b></p> <ul style="list-style-type: none"> <li>• Nemeth numbers</li> <li>• Nemeth symbols: commas, decimals, signs of operation</li> </ul>	<p><u>Guidance for Transcription Using the Nemeth Code within UEB Contexts</u></p> <p><i>Nemeth at a Glance</i>: Examples of using Nemeth in UEB: pp. 105-108</p> <p><i>Nemeth at a Glance</i>: Early numeracy, pp. 27-35</p> <p><u>Nemeth Tutorial</u>: Chapters 1, 2.1, 3.1, 3.2</p> <p><u>Nemeth Code</u>: Rules I, II, XIX</p> <p><b>Due: UEB transcription portfolio (postmarked and/or posted by this date)</b></p> <p><b>Due: Homework 5</b></p>
<p><b>Week 10</b> 3/29/2021</p>	<p><b>Nemeth</b></p> <ul style="list-style-type: none"> <li>• Spatial arrangements</li> <li>• Fractions</li> <li>• Grouping</li> <li>• Algebra</li> </ul>	<p><i>Nemeth at a Glance</i>: Spatial arrangements and fractions pp. 37-43</p> <p><u>Nemeth Tutorial</u> Chapters 3.4, 3.7, and 7.1</p>

Date	Topics	Readings and assignments
		<p><u>Nemeth Code</u>: Rules X, XII, XXIV, Rule XVIII,  <u>Nemeth Code</u>: pp. 75</p> <p><b>Due: Homework 6</b></p>
<p><b>Week 11</b> 4/5/2021</p>	<p><b>Nemeth</b></p> <ul style="list-style-type: none"> <li>• Signs and symbols of comparison</li> <li>• Shapes</li> <li>• Super and subscripts</li> </ul> <p>Braille transcription programs  Transcription techniques for TBVIs</p> <p>Introduction to ASCII</p>	<p><i>Nemeth at a Glance</i>: pp. 53-54</p> <p><u>Nemeth Tutorial</u>: Chapters 5.1, 10</p> <p><u>Nemeth Code</u>: Rules XIII, XVI, XVIII, XXI,</p> <p><b>Due: Homework 7</b></p> <p><b>Due: Abacus overview assignment</b></p>
<p><b>Week 12</b> 4/12/2021</p>	<p><b>Nemeth</b></p> <ul style="list-style-type: none"> <li>• Modifier, radicals, formatting</li> <li>• Advanced math transcription</li> <li>• Nemeth and Chemistry</li> </ul> <p><b>Overview of MathSpeak</b></p>	<p><i>Nemeth at a Glance</i>: Modifiers, pp. 49-52; 102-104</p> <p><b><u>Nemeth Tutorial</u> Chapter 11.5-11.6</b></p> <p><u>Nemeth Code</u>: Rule XV</p> <p><u>MathSpeak</u></p> <p>Provisional Guidance for Chemistry Notation Using Nemeth in UEB Contexts  <a href="#">PDF BRF</a>, and <a href="#">BRF for downloading</a></p> <p><b>Due: Homework 8</b></p>
<p><b>Week 13</b> 4/19/2021</p>	<p><b>Nemeth Assessment</b></p>	<p><b>Due: Nemeth Assessment</b></p>
<p><b>Week 14</b> 4/26/2021</p>	<p><b>Unit plan presentations</b></p>	<p><b>Due: Unit plans</b></p>
<p><b>Week 15</b> 5/3/2021</p>	<p>Course conclusion</p>	

## 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: See [Core Values](http://cehd.gmu.edu/values/) (<http://cehd.gmu.edu/values/>).

## GMU Policies and Resources for Students

### Policies

- Students must adhere to the guidelines of the Mason Honor Code. See [Honor Code and System](https://catalog.gmu.edu/policies/honor-code-system/) (<https://catalog.gmu.edu/policies/honor-code-system/>).
- Students must follow the university policy for Responsible Use of Computing. See [Responsible Use of Computing](http://universitypolicy.gmu.edu/policies/responsible-use-of-computing/) (<http://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 [Disability Services](https://ds.gmu.edu/) (<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 either Tk20 or VIA should be directed to <https://cehd.gmu.edu/aero/assessments/>
- Questions or concerns regarding use of Blackboard should be directed to [Blackboard Instructional Technology Support for Students](https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/) (<https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>).

### 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 the [Title IX Coordinator \(titleix@gmu.edu\)](mailto:titleix@gmu.edu).

- For information on student support resources on campus, see [Student Support Resources on Campus \(https://ctfe.gmu.edu/teaching/student-support-resources-on-campus\)](https://ctfe.gmu.edu/teaching/student-support-resources-on-campus).
- For additional information on the College of Education and Human Development, please visit our website [College of Education and Human Development \(http://cehd.gmu.edu/\)](http://cehd.gmu.edu/).

## Appendix

### Assessment Rubric(s)

#### Assessment 5: EDSE 616 Literacy Plan and Intervention Project Rubric for VIA; Grading Rubric Posted Separately on Blackboard

	Does Not Meet Expectations <b>1</b>	Meets Expectations <b>2</b>	Exceeds Expectations <b>3</b>
<p>Learner Development and Individual Learning Differences</p> <p>CEC/B&amp;VI Standards 1</p> <p>The candidate will provide learner background information</p>	<p>The candidate provides partial information about learner's background omitting relevant information about student experiences and educational strategies currently being employed or information about learner characteristics.</p>	<p>The candidate provides general information about learner's background and educational experiences, highlighting individualized strategies that are currently being used to enhance language development and teach communication skills to learner with visual impairment. The candidate provides general information on learner characteristics, including visual condition and the effects of the learners' visual impairment on learning and experience. Candidate describes the perspective of cultural and linguistic differences on growth and development.</p>	<p>The candidate provides detailed information about learner's background and educational experiences, highlighting the extent to which tactile skills have been taught and individualized strategies that are currently being used to enhance language development and teach communication skills to learner with visual impairment. The candidate provides detailed information on learner characteristics, including visual condition and the effects of the learners' visual impairment on 1) learning and experience and 2) receptive and expressive literacy and communication. Candidate describes</p>

	<b>Does Not Meet Expectations</b> <b>1</b>	<b>Meets Expectations</b> <b>2</b>	<b>Exceeds Expectations</b> <b>3</b>
			the perspective of cultural and linguistic differences on growth and development.
<p>Learning Environments</p> <p>CEC/B&amp;VI Standard 2</p> <p>The candidate will design a learning environment description with identified supports of lesson integration is placement setting. The candidate describes the use of multisensory learning environments that encourage student participation and materials/technology needed for the learner with a visual impairment. The candidate provides for incidental learning opportunities.</p>	<p>Candidate describes the learning environment in which in the intervention took place, specifying the age, grade level, subject matter of the learner with visual impairment and the school/program in which the student is enrolled. Candidate provides cursory description of the learning environment that encourage active participation in individual and group activities</p>	<p>Candidate describes the learning environment in which in the intervention took place, specifying the age, grade level, subject matter of the learner with visual impairment and the school/program in which the student is enrolled.</p> <p>Candidate identifies supports needed for lesson integration into various program placements</p> <p>Candidate describes the use of multisensory learning environments that encourage active participation in individual and group activities</p> <p>Candidate describes the classroom organization needed to accommodate materials, equipment, and technology for student with visual impairment.</p>	<p>Candidate describes the learning environment in which in the intervention took place, specifying the age, grade level, subject matter of the learner with visual impairment and the school/program in which the student is enrolled.</p> <p>Candidate describes the extent to which the learning environment encourages active participation in individual and group activities</p> <p>Candidate describes and supports needed for lesson integration into various program placements</p> <p>Candidate designed and clearly described multi-sensory learning environments that encourage active participation in group and individual activities</p> <p>Candidate describes the classroom organization needed to accommodate materials, equipment, and technology for student with visual impairment.</p> <p>Candidate describes access to incidental learning experiences.</p>

	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
	<b>1</b>	<b>2</b>	<b>3</b>
<p>Content Area Lesson Plan</p> <p>CEC/B&amp;VI Standard 5</p> <p>The candidate will prepare lesson plans, Prepare and organize materials to implement daily lesson plans, provide strategies for teaching new concepts</p>	<p>Overarching concept of unit plan is unclear or context for unit plan is not adequately described. The scope and sequence of unit plan is incoherent or no rationale for progression of skills is described. Candidate fails to make an explicit connection between literacy and instructional concepts of unit.</p>	<p>Candidate describes the overarching concept that is being developed and the context for the unit plan (prioritized area of the general education curriculum) Candidate describes the overall purpose of the unit plan that is being designed to promote positive learning results in the general curriculum. Candidate describes the integration of literacy skill instruction for the unit plan, which may include narrative or expository materials or vocabulary and comprehension instruction to promote understanding of the content area concepts. Candidate describes strategies for teaching new concepts. Candidate provides instructional strategies considered to individualize instruction for impairment.</p>	<p>Candidate describes the overarching concept that is being developed and the context for the unit plan (prioritized area of the general education curriculum). Candidate describes the overall purpose of the unit plan that is being designed to promote positive learning results in the general curriculum. Candidate provides a rationale for the progression of skills (scope and sequence) covered in unit and the expected achievement for overall unit. Candidate describes the integration of literacy skill instruction for the unit plan, which may include narrative or expository materials or vocabulary and comprehension instruction to promote understanding of content area concepts, incorporating evidence-based literacy strategies into direct instruction. Candidate describes evidence-based instructional strategies considered to individualize instruction for learner with visual impairment.</p>

	<b>Does Not Meet Expectations</b>	<b>Meets Expectations</b>	<b>Exceeds Expectations</b>
	<b>1</b>	<b>2</b>	<b>3</b>
<p>Three Lesson Plans</p> <p>Instructional Planning &amp; Strategies CEC/B&amp;VI Standards 5</p> <p>The candidate prepares lesson plans using evidence-based practices validated for specific characteristics of learners and settings in instructional planning.</p> <p>The candidate uses communication strategies and resources to facilitate understanding of subject matter for individuals with exceptionalities whose primary language is not the dominant language.</p>	<p>Candidate prepares incomplete lesson plans for instructional unit and does not include evidence-based teaching methods and strategies appropriate to the needs of learners with visual impairment. Candidate does not prepare lessons which make a clear connection between content area literacy skills and concepts.</p>	<p>Candidate prepares comprehensive lesson plans for instructional unit. Candidate includes specific strategies to teach critical lesson content and vocabulary. The procedure includes a description of teaching strategies used to build the content area concepts with a clear connection to literacy skills. Candidate includes explicit instruction in content area literacy, which may include age appropriate narrative and expository texts in accessible format or vocabulary and reading comprehension strategies to promote understanding of text. Candidate clearly and accurately documents:</p> <ol style="list-style-type: none"> <li>1. Measurable lesson plan objective(s)</li> <li>2. Lesson plan materials.</li> <li>3. Pre-instructional set</li> <li>4. Lesson plan method/procedure (task analysis)</li> <li>5. Lesson data collection methods</li> <li>6. Closure</li> </ol> <p>Candidate lists and briefly describes 2- Evidence-based</p>	<p>Candidate prepares comprehensive lesson plans for instructional unit. Candidate includes specific evidence-based strategies to teach critical lesson content and vocabulary. The procedure includes a description of evidence-based literacy strategies used to build the content area concepts with a clear connection to literacy skills. Candidate includes explicit instruction in content area literacy, which may include age appropriate narrative and expository texts in accessible format or vocabulary and reading comprehension strategies to promote understanding of text. Candidate clearly and accurately documents:</p> <ol style="list-style-type: none"> <li>1. Measurable lesson plan objective(s)</li> <li>2. Lesson plan materials.</li> <li>3. Pre-instructional set</li> <li>4. Lesson plan method/procedure (task analysis)</li> <li>5. Lesson data collection methods</li> <li>6. Closure</li> </ol> <p>Candidate lists and briefly describes at least 2 evidence-based strategies,</p>

	<b>Does Not Meet Expectations</b> <b>1</b>	<b>Meets Expectations</b> <b>2</b>	<b>Exceeds Expectations</b> <b>3</b>
		<p>practices validated for specific characteristics of learners and settings and uses APA style references.</p> <p>Candidate develops comprehensive lesson plans that are written with high levels of detail such that a substitute TVI could carry them out. Candidate describes strategies for teaching learner who is a non-native English speaker.</p>	<p>practices validated for specific characteristics of learners and settings and uses APA style references. Each evidence-based practice also contains a clear rationale for incorporating strategy.</p> <p>Candidate develops comprehensive lesson plans that are written with high levels of detail such that a substitute TVI could carry them out. Candidate includes clear plans for connecting the concepts from one lesson to the next throughout the unit and strategies for integrating student initiated learning (critical thinking, problem solving). Candidate describes strategies for teaching learner who is a non-native English speaker.</p>
<p>Assessment Plan for the Unit</p> <p>CEC/B&amp;VI Standard 4</p> <p>The candidate creates and interprets formal and informal assessment methods embedded in the unit.</p>	<p>Candidate does not to embed or interpret formal and informal assessment methods in the unit.</p> <p>Candidate does not demonstrate ability to create and maintain accurate records of student learning.</p>	<p>Candidate creates a formal assessment, including one test, focusing on literacy and concept development, for the overall unit. Each lesson plan includes informal assessment procedures, including an assessment form/worksheet for collecting data on student learning to</p>	<p>Candidate creates a formal assessment, including one test, focusing on literacy and concept development, for the overall unit, connecting the concepts from one lesson to the next throughout the unit and strategies for integrating student initiated learning (critical thinking,</p>

	<b>Does Not Meet Expectations</b> <b>1</b>	<b>Meets Expectations</b> <b>2</b>	<b>Exceeds Expectations</b> <b>3</b>
		conduct self-evaluation of instruction. Candidate documents ability to create and maintain accurate records of student learning.	problem solving). Each lesson plan includes informal assessment procedures, including an assessment form/worksheet for collecting data on student learning to conduct self-evaluation of instruction. Candidate demonstrates ability to create and maintain accurate records of student learning.
<p>Tactile Models, Diagrams, or Drawings</p> <p>Instructional Planning &amp; Strategies</p> <p>CEC/B&amp;VI Standard 5</p> <p>The candidate will select and adapt materials in tactile/accessible format. The candidate provides strategies for teaching tactual perceptual skills.</p>	<p>Tactile materials are not well designed or materials used to prepare materials are not appropriate. Tactile materials do not represent the concept/skill being taught in a logical or sequential order. Tactile materials do not accurately represent the concept/skill being taught.</p> <p>Strategies for teaching tactual perceptual skills are not included as needed.</p>	<p>Tactile materials are well designed. Candidate selected appropriate materials and provided clear rationale for selection of materials, including considerations of the unique characteristics of the student with visual impairment. Tactile materials clearly communicate concept/skill taught in a sequential and logical order.</p> <p>Strategies for teaching tactual perceptual skills are included as needed. Tactile materials accurately depict concept/skill and include essential elements.</p>	<p>Tactile materials are well designed. Candidate considered: size, scale, density, use of symbols, labels and legend, if appropriate. Candidate selected appropriate materials and provided clear rationale for selection of materials, including considerations of the unique characteristics of the student with visual impairment. Tactile materials clearly communicate concept/skill taught in a sequential and logical order. Tactile materials accurately depict concept/skill and include essential elements, avoiding extraneous information.</p> <p>Strategies for teaching tactual perceptual skills are included as needed</p>

	<b>Does Not Meet Expectations</b> <b>1</b>	<b>Meets Expectations</b> <b>2</b>	<b>Exceeds Expectations</b> <b>3</b>
			and described in depth.
<p>Direct Instruction Reflection</p> <p>CEC/B&amp;VI Standard 6</p> <p>The candidate will reflect on one's practice to improve instruction and guide professional growth.</p>	<p>Candidate does not write a self-evaluation of instruction or does not reflect on the practice to improve instruction and guide professional growth.</p> <p>Candidate does not describe specific considerations for improving the lesson unit; or Candidate fails to describe the ease with which the student was able to interpret the tactile materials; or Candidate fails to describe the next steps to promote further understanding of concepts/skills.</p>	<p>Candidate writes a general self-evaluation of instruction and reflects on the practice to improve instruction and guide professional growth.</p> <p>Candidate describes specific considerations for improving the lesson unit.</p> <p>Candidate describes the ease with which the student was able to interpret the tactile materials.</p> <p>Candidate describes the next steps to promote further understanding of concepts/skills.</p>	<p>Candidate provides an in-depth self-evaluation of instruction and reflects on the practice to improve instruction and guide professional growth.</p> <p>Candidate describes specific considerations for improving the lesson unit.</p> <p>Candidate describes the ease with which the student was able to interpret the tactile materials and discusses potential adaptations for improving them.</p> <p>Candidate describes the next steps to promote further understanding of concepts/skills in general education curriculum.</p>



## **VI Consortium Syllabi Addendum**

### **Disability Accommodations**

Students with disabilities who seek accommodations in VI Consortium courses must be registered with their university disability services office and provide documentation of approved accommodations privately to instructors in a timely manner each semester. No accommodations will be implemented before official notification from the student's home Consortium university is received. Accommodations will be implemented as stated in the official notification from the university.

### **Honor Code**

All students participating in BVI courses must adhere to their university honor code and will be asked to pledge adherence to the honor code. Additionally, all work submitted must be the students' own work and contain proper citations and any work submitted for a grade must be completed during the academic semester in which it is submitted for grading. Any deviations from the home university honor code will be reviewed by that university's governing body. The VI Consortium agrees to accept the actions or sanctions imposed by the home university's governing body.

### **Field Experiences**

Many VI Consortium courses require field and practical experiences in schools or other settings. Students may not arrange their own field experiences. All students must comply with their home university protocol for participation in field experiences, including:

- Immediate and timely correspondence with the home university field placement office to submit field placement request procedures by home university deadlines;
- Timely compliance with submitting applications, documentation, background checks, and credentialing by the university and participating school system and/or agency for field work within the required deadlines; and
- Compliance with provisions and protocol for engaging in field experiences with the selected school, student(s), teachers, and administration.

No field experience placements will be made until all Consortium and home university requirements have been successfully met. Students may be removed from field placement settings if deemed necessary by the Consortium or home university.

### **Identification, Course, and Resource Access**

While students apply to and register through their Consortium universities, all Consortium BVI courses operate through Mason and all VI Consortium students are given Mason credentials and a Mason G number. Students must keep record of their Mason G number, as this will serve as their identification should they ever pursue

education or employment directly through Mason. All courses require Mason credentials to log on, as does access to the electronic library and other resources used in courses. All students are also given Mason electronic mail accounts. Please activate and maintain this account, as course and program information are supplied through this account.

### **Advising**

All students taking BVI courses must have current advising and a program of studies to ensure course enrollment follows the advised program for individual candidate circumstances.

### **Copyrighted Material and Intellectual Property**

Materials (e.g., case studies, technology, books, articles, videos, and other media) shared through BVI courses may contain those with copyright and/or intellectual property protections. Students may not share any materials or media outside of this course, on social media, or other means. References with proper citations may be made to refer to these materials and media in all uses, whether in class or elsewhere.

### **Live Course Sessions and Course Recordings**

Generally, synchronous courses are recorded and stored for future access should students experience a disruption to internet or power service during live sessions. Under no circumstances are these recordings to be shared with anyone. Likewise, live sessions and recordings may not be audited or accessed by individuals not currently enrolled in the specified courses. Please also do not disclose personal information about yourself or anyone else during live and recorded sessions, including messages submitted in chat functions. Any personal information needing to be relayed to the instructor must be done so privately.

### **Full Attention**

Students must give 100% of their attention during synchronous class meetings and are expected to be fully engaged. Students may not drive or supervise others during class time or engage in non-course related activities that divert their attention away from the class.