

## Virginia Consortium for Teacher Preparation in Vision Impairment

### Braille Reading and Writing —Syllabus Spring 2012

Wednesdays 4:00pm-6:40pm

Dates: Jan. 25<sup>th</sup> -May. 2<sup>nd</sup>

#### Host University

George Mason University

**Instructor:** Holly Lawson

**Office phone:** 703.993.5625

**Office hours:** by appointment,  
before and after class

**Email**

**address:** [hlawson2@gmu.edu](mailto:hlawson2@gmu.edu)

#### Participating Universities

- GMU – EDSE 616 Braille Reading and Writing Section 6V1
- JMU – EXED 632 Braille Reading and Writing
- RU – EDSP 656 Braille Reading and Writing
- NSU – SPE 712 Braille Reading and Writing
- ODU – SPED 6389 Braille Reading and Writing

**Course Delivery:** Synchronous, real time using videoconferencing; Students attend class at participating university sites

**COURSE DESCRIPTION:** (Co/Pre-req: EDSE 411/511: Characteristics of Students with Visual Impairments; EDSE 412/512 Braille Code)

Provides basic instruction on transcription of advanced Braille codes, including: music, foreign language, chemistry, computer Braille, and Nemeth Code (Braille math code). 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 math and science.

#### NATURE OF COURSE DELIVERY:

Learning activities in this class will include the following:

1. Class lecture, discussion, and participation via synchronous face to face, web-conferences or videoconferences
2. Video and other relevant interactive media presentations
3. Study and independent research
4. Application activities, including regular assignments
5. Written responses to posted discussion questions on Blackboard.
6. In-depth study and work on course requirements require outside class time.

#### LEARNER OUTCOMES:

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

- Demonstrate basic understanding of reading and writing contracted Braille using the following Braille codes:
  - a. Nemeth Code
  - b. Braille Code for Chemical Notation
  - c. Computer Braille Code

- d. Foreign Language
  - e. Phonetics and Diacritical Markings
  - f. Music Braille Code
- Demonstrate knowledge of materials and instructional strategies for teaching mathematics and science to students with visual disabilities using the following devices:
    - a. Abacus
    - b. Talking calculator
    - c. Computer technology
    - d. Adapted science equipment
  - Demonstrate knowledge of basic guidelines for production of tactile graphics including:
    - a. Production methods
    - b. Tools and equipment
    - c. Strategies for teaching the reading of tactile graphics to students.
  - Demonstrate knowledge of materials and instructional strategies for teaching reading and writing of literary Braille

### **Required Textbooks:**

Craig, Ruth H. (1987). *Learning the Nemeth Braille Code*. Louisville, KY: American Printing House for the Blind.

Holbrook, C. M., D'Andrea, F., & Sanford, L. (2011). *Ashcroft's Programmed Instruction in Braille* (4th ed.). Germantown, TN: Scalars. ISBN 0-9712139-4-1

Swenson, A. (1998). *Beginning with Braille: A Balanced Approach to Literacy*. New York, NY: American Foundation for the Blind. ISBN: 978-0-89128-323-2.

Livingston, R. (1997). *Use of the Cranmer Abacus* (2nd ed.). Austin, TX: Texas School for the Blind and Visually Impaired. Order # 59420CAP.

### **Required Materials:**

- Cranmer Abacus - American Printing House for the Blind. **Catalog Number: 1-03150-00**
- Slate & Stylus. Available from American Printing House for the Blind
- Heavyweight braille paper, 8 1/2" x 11"
- Standard Perkins Braille (Available through VI Consortium on Loan)
- Nemeth Code reference sheet. Available from American Printing House for the Blind. Braille copy: Catalog Number: 5-87400-00
- Print Copy: Catalog Number: 7-87500-00
- Microphone/headset (for home-streamers)
- Computer keyboard capable of six key entry .

### **Required Articles:**

- 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.
- 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.
- 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.
- Siligo, W. (2005). Enriching the ensemble experience for students with visual impairments. *Music Educators Journal*, 91(5), 31.

All articles are posted on Blackboard under the lectures. It is expected prior to class meetings that students will have read the materials on Blackboard in addition to the chapters from the book *Beginning with Braille: Firsthand Experiences with a Balanced Approach to Literacy*. PowerPoint notes in Word format for the methods lectures will be available on Blackboard under LECTURES.

Additional handouts and resources are also posted on the Blackboard site under the lectures for each week.

**Recommended Books: (not required)**

- Roberts, H., Krebs, B. M., & Taffet, B. (1978). *An Introduction to Braille Mathematics*. Washington DC: Library of Congress.
- Mangold, P. *Teaching the braille slate and stylus*. Castro Valley, CA: Exceptional Teaching Aids.
- Olsen, M. (1981). *Guidelines and games for teaching efficient braille reading*. New York: American Foundation for the Blind.
- 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.

PowerPoint Notes for the braille code lectures will be available on Blackboard under CONTENT.

Date	Nemeth/Braille Code Topic	Readings	Due Dates
Jan. 25	Syllabus overview Lesson 1: Writing Numbers and Linear Problems ABACUS: Setting Numbers & Beginning Addition	Holbrook & MacCuspie BWB-Ch. 1&2	
Feb. 1	Lesson 2: Numeric Indicator, Decimal Point, Monetary, Percent & Signs of Omission Lesson 3: Alphabet, English Letter Indicator, Abbreviations ABACUS: Addition, cont. SLATE & STYLUS Practice <b>(bring it each week!)</b>	BWB-Ch. 4	Reading 1
Feb. 8	Lesson 5: Grouping and Number Bases Lesson 6: Superscripts, Subscripts and Level Indicators ABACUS: Addition, cont.	BWB-Ch. 3 & 5	Braille 1 (Lesson 1)
Feb. 15	Lesson 7: Fractions Tactile Graphics Guest Presenter: Shanna Sciola ABACUS: Addition, cont.	Rosenblum & Herzberg Ryles & Bell	Reading 2
Feb. 22	Braille Music Guest Presenters: Karen Gearreald, Ruth Rozen	Siligo	Braille 2 (Lessons, 1, 2, & 3)
Feb. 29	Lessons 8 & 9: Roman Numerals and Arrows Foreign Language Braille ABACUS: Introduction of Subtraction	BWB-Ch. 6 & 7	Reading 3 Abacus Quiz: Addition
March 7	SPRING BREAK-NO CLASS		
March 14	Technology ABACUS: Subtraction Cont.		Braille 3 (Lessons 1-7)
March 21	VA AER CONFERENCE-NO CLASS MEETING ABACUS: Subtraction cont.		<b>Take Home Final Exam Distributed</b>
March 28	Lessons 10: Shapes ABACUS: Introduction to Multiplication		Foreign Language HW Abacus Quiz: Subtraction
April 4	Lesson 14: Contractions and Short Form Words ABACUS: Multiplication cont		Reading 4
	NEMETH: Lessons 11, 12 and		Reading 5

April 11	13: Selected Components ABACUS: Multiplication cont		
April 18	Lessons 15 & 16 Spatial Arrangements ABACUS: Introduction to Division and Decimals COMPUTER BRAILLE	Samuels	Braille 4 (Lessons 1-10 & 14) Abacus Quiz: Multiplication
April 25	<b>REVIEW DAY for Nemeth and Abacus</b> <b>Guest Presentation: TBA</b>		
May 2	<b>Class Presentations for Literacy Plan and Intervention Project</b>		Braille 5 (Lessons 1-16) Take Home Finals Due

### Course Requirements:

#### 1. **Assignment # 1: Six (6) Braille Homeworks** – (150 points total)

For each of these assignments valued at 25 points each you will be given directions that are unique to each assignment. They may include transcription of math problems into Nemeth code, slate and stylus, interlining, identifying errors/strengths/weaknesses, and adapting worksheets. Braille portions must be completed using a Perkins Braille Writer and the hard copy braille will be handed in/mailed to the instructor. A **half-point** will be subtracted for each error, including each braille cell of omitted characters/word/s, repeat errors, and contractions. Please take your time with the assignments, ask questions if you are unsure, and braille slowly. Re-dos & late assignments will **not** be accepted

Braille homework assignments will be transcribed using the Perkins Braille Writer. **Electronic braille will not be accepted.** Work transcribed using braille translation software is unacceptable and subject to academic dishonesty policies. Work must be transcribed on standard braille paper without tractor-feed holes. For an 8.5 x 11 sheet of braille paper, you should have no more than 30 braille cells per line for portrait and 40 cells per line for landscape. For an 11.5 x 11 sheet of paper, you should have no more than 40 cells per line.

In order to provide students with timely feedback, homework assignments will need to be submitted in-class or mailed to the instructor. **Assignments that are mailed must be post-marked on the Saturday before each class date** and should arrive by Monday. Late penalties will apply to assignments not received by Tuesday (that allows two days for mailing, if it is post-marked on Saturday). Send assignments to:

Holly M. Lawson  
George Mason University  
4400 University Drive, MS 1F2  
Fairfax, Virginia 22030

2. **Reading Passage Assignments:** (120 points total) There are 5 reading passage assignments. For each assignment students will be provided a list of questions. Passages 1, 2 and 3 are each valued at 20 points and have 6 questions. Passages 4 and 5 are each valued at 40 points and have 10 questions each. Students must read the braille passage and answer the questions **in braille**. **A point** will be subtracted for each braille error or incorrect answer. For reading passage assignments **ONLY**, you are permitted to use Perky Duck. Re-dos & late assignments will **not** be accepted.
3. **Abacus Quizzes:** (120 points total) There are 3 in class abacus quizzes. Each quiz will correspond to an operation (addition, subtraction, and multiplication). Each quiz is valued at 40 points. For each quiz students will come up to the instructor one at a time and solve 5 problems. Each problem will be valued at up to 2 points. After the first quiz using this format the instructor may opt to change to a multiple choice format with 10 questions, each valued at 1 point each.
4. **Literacy Plan and Intervention Project:** This assignment is focused on developing a literacy plan for students who are tactile readers. You will be required to 1) observe a student with a visual impairment in an academic class (science or math) and write reflective notes about the class presentation and materials and individual learner needs. You will then, 2) select a math or science concept that requires a tactile graphic, and 3) research what types of graphs and charts are needed to introduce, instruct, practice, and assess the concepts (you will present this project to the class). Based on your observations and research, you will create a series of 5 tactile models/diagrams/drawings and graphics that can be used to introduce and teach the symbols and concepts. Consider the hierarchy of tactile skill development, as you create the materials. Then, write 5 lesson plans to coordinate with each of the tactile material that you have created.
5. **Final Take Home Exam:** (100 points): The Final Exam for this class will be a take home exam. The exam will include transcription/interlining of literary and mathematical braille. It also may include multiple choice or short answer questions based on the readings/lectures; identifying errors in interlining; describing mathematical solutions using the abacus; identifying simple braille symbols for computer, foreign language, and music braille; identifying state standards; adaptations, and modifications to science, social science, expanded core curriculum, and math. The exam also may include case studies to which you must respond.
6. **Extra Credit:** Extra Credit (25 maximum):
  - a. Volunteer at the annual VA AER conference, 4/21-4/23. You will be awarded 1 point for every half hour (30 minutes) of service for up to 5 points of extra credit. You must provide proof of service by having the volunteer coordinator sign this page of your syllabus (see below).
  - b. Up to 20 points can be earned for extra credit by (a) completing a music

braille homework, (b) completing an additional reading assignment or (c) completing a slate and stylus assignment. Extra credit must be turned in by May 2, 2012.

This is to Certify that _____ has contributed _____ hours of volunteer service at the annual VA AER Conference.	
Signature: _____	Date: _____
(VA AER Volunteer Coordinator)	

**Attendance Policy**

Attendance (**40 points**) at all sessions is 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. Information, activities, and guest speakers will be presented in class that are not a part of the text and can only be experienced in the class sessions. Furthermore, as part of this course you are expected to be an active and respectful participant, which includes actively engaging in class discussions and activities. Students who miss a class will not have the opportunity to make up missed in-class assignments. Successful completion of Blackboard class activities will be tracked in the blackboard grade book. As a courtesy, please email me to let me know if you will not be in class.

**Grading**

<b>Assignments</b>	<b>Points</b>
Braille Homework	150
Abacus Quizzes (x3)	120
Responses to Braille Readings (x5)	120
Literacy Plan and Intervention Project	120
Final Exam	75
Class Participation and Attendance	40
<b>Total</b>	<b>625</b>

A = 95-100%

A- = 90-94%  
B = 80-89%  
C = 70-79%  
F = 70% and below

## **CONSORTIUM COURSE POLICIES**

### **HONOR CODE**

Each university has its own honor code and it is important for you to review the honor code at your university. However, all students taking this course, regardless of the university they are enrolled in, are expected to follow this honor code and also to pledge all assignments and their exam to indicate that they have followed the honor code. A pledge means that you have not cheated or plagiarized, nor have you given or received assistance that violated the description of how assignments are to be completed for this course. The shortened version may be used: "Pledged" followed by the date and your full name (typed "signatures" will be OK for assignments/tests submitted electronically). A complete copy of each university's Honor System document is available through

- GMU: <http://academicintegrity.gmu.edu/honorcode/>
- Radford: <http://www.radford.edu/dos-web/honorcode.html>
- NSU: <http://www.nsu.edu/studentjudicial/>
- ODU: [http://orgs.odu.edu/hc/pages/Honor\\_Code.shtml](http://orgs.odu.edu/hc/pages/Honor_Code.shtml)
- JMU: <http://www.jmu.edu/honor/code.shtml#TheHonorCode>

### **ACCOMMODATIONS FOR DISABILITY**

Students with disabilities who seek accommodations in a course must be registered with the disability service center at their participating university and inform their instructor, in writing, at the beginning of the semester. University specific information regarding eligibility, services and accommodations can be found at:

- GMU: <http://ods.gmu.edu/>
- Radford: <http://www.radford.edu/~dro/>
- NSU: <http://www.nsu.edu/disabilityservices/index.html>
- ODU: <http://studentaffairs.odu.edu/educationalaccessibility/>
- JMU: <http://www.jmu.edu/ods/>

### **INCLEMENT WEATHER**

If classes are cancelled at George Mason University, a message will be posted on the class Blackboard site and all class members will receive an email. Because such cancellations are often at the last minute, it may be difficult to get this message prior to leaving for class. Please note that the cancellation of classes due to inclement weather is determined by the decision of the instructing university only. If the instructing university is open and operational then you are expected to attend class.

### **CELL PHONES AND WEAPONS**



All cell phones and beepers should be deactivated while in the classroom. Also, University rules at all participating universities prohibit the possession any firearm, other weapon, or explosive.

## **COURSE MATERIALS**

This course gives you access to PowerPoint files, class lecture notes, handouts, and copyrighted articles. For the articles (available on Blackboard), copyright laws must be followed: print only one copy per student. The PowerPoint presentations, notes, and handouts are provided on Blackboard for your convenience and to facilitate your mastery of concepts presented in this course; Outlines of PowerPoints will be available on Blackboard by noon of the class day or sooner.

## **TECHNOLOGY PROFICIENCIES**

All students participating in this course are expected to be proficient in several technology skills. Students are expected to be proficient in using the Internet and have reliable and consistent Internet access. Students are also expected to have an active email account and to check email regularly. This course requires students to use Blackboard, which is our online course management system located at <http://mymason.gmu.edu>

Key Points Blackboard. Our Blackboard server has been updated from version 8.0 to 9.1. For students this means:

- Students MUST access Blackboard through <http://mymason.gmu.edu>.
- Login
  - GMU Students: Enter your Mason NetID (the first portion of your e-mail address, before the @) then enter your Password (PatriotPass credentials).
  - NON-GMU Students:
    - Username: x\_firstname.lastname
    - Password: bbcommunity
- Select the “Organizations” tab to access classes.

Students are expected to login to this system frequently and be proficient in using its features. Students are expected to be proficient in using the computer, which includes downloading and saving files, typing, and word processing skills. Students participating in this course are expected to use Microsoft Word for all written assignments.

Furthermore, students are expected to use Microsoft PowerPoint and Adobe Acrobat Reader for class documents located on the Blackboard website.

Adobe Acrobat Reader is a free software program used to read PDF files and can be downloaded

at: <http://www.adobe.com/support/downloads/product.jsp?product=10&platform=Windows>

## **TASKSTREAM SUBMISSION**

TaskStream ([www.taskstream.com](http://www.taskstream.com)) is an electronic portfolio and assessment management tool that the VI Consortium is utilizing in part to meet accreditation requirements for the National Council of Accreditation of Teacher Education (NCATE). Note: EVERY student taking this course at EVERY university IS REQUIRED to upload and submit the signature assignment for this course to TaskStream for evaluation by the end of the semester (regardless of whether a course is an elective, a one time course or part of an undergraduate minor). TaskStream information is available at <http://gse.gmu.edu/programs/sped/>. Failure to submit the assessment to TaskStream will result in the course instructor reporting the course grade as Incomplete (IN). Unless this grade is changed upon completion of the required TaskStream submission, the IN will convert to an F nine weeks into the following semester.

The **NCATE assignment(s)** for this class is: **Literacy Plan and Intervention Project**

**Note: Please submit these items together as ONE pdf file into Taskstream.**

### **GMU STUDENTS ONLY: COLLEGE OF EDUCATION AND HUMAN DEVELOPMENT**

#### **Student Expectations**

- Students must adhere to the guidelines of the George Mason University Honor Code [See <http://academicintegrity.gmu.edu/honorcode/>].
- 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/>].
- Students must follow the university policy for Responsible Use of Computing [See <http://universitypolicy.gmu.edu/1301gen.html>].
- 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.
- Students must follow the university policy stating that all sound emitting devices shall be turned off during class unless otherwise authorized by the instructor.
- Students are expected to exhibit professional behaviors and dispositions at all times.

#### **Campus Resources**

- 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/>].
- 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/>].

**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. <http://cehd.gmu.edu/values/>