OFFICIAL SYLLABUS

DISCIPLINE: EDSP
COURSE: 656

A. Catalog Entry:

EDSP 656 Braille Reading and Writing
(3) Three credit hours
Prerequisites: EDSP 650: Characteristics of Students with Visual Impairments
AND EDSP 655: Braille Code
(Abbreviation: BRAILLE READ WRITE)

Catalogue Description of course:
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.

B. Detailed Description of Content of Course

This course as described above will include the following topics:

- Nemeth Code of Braille Mathematics
  - Basic notation
  - Advanced notation
- Advanced Braille Codes
  - Music Braille Code
  - Computer Braille code
  - Foreign language
  - Chemistry
  - Phonetics and diacritical markings
- Tactile graphics overview
  - Theoretical principles
  - Materials, tools, and equipment
- Instructional strategies for mathematics (abacus, talking calculator, electronic
  notetakers)
- Instructional strategies for science
- Computer technology
- Braille textbook formatting rules and procedures.

C. Detailed Description of Conduct of Course

This course is delivered on-line. 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. Application activities, including regular assignments
4. Written responses to posted discussion questions posted on Blackboard.
5. In-depth study and work on course requirements which require significant outside class time.

D. Goals and Objectives of the Course

This course is part of the Virginia Department of Education approved licensure program in Visual Impairment and is offered through the Statewide Training Consortium in Visual Impairment.

Goals, objectives, and assignments in this class address NCATE Standard 1b Pedagogical Content Knowledge and Skills, 1c Professional and Pedagogical Knowledge and Skills, and 1d Student Learning for Teacher Candidates. The following CEC and VDOE standard areas are also addressed:

- **CEC Knowledge and Skill Base for All Entry-Level Special Education Teachers of Students with Visual Impairment (VI) Standard #4: Instructional Strategies**
  - VI4K1 Strategies for teaching Braille reading and writing.
  - VI4K6 Strategies for teaching technology skills to individuals with visual impairments.
  - VI4S2 Prepare adapted or modified materials in Braille . . .
  - VI4S3 Transcribe, proofread, and interline materials in Braille . . .
  - VI4S4 Use brailewriter, slate and stylus, and computer technology to produce Braille materials.
  - VI4S5 Prepare individuals with visual impairments to access information and services from the community.
  - VI4K7 Strategies for teaching use of the abacus, talking calculator, tactile graphics, and adapted science equipment.

- **Virginia Department of Education Teacher [VDOE]Licensure Standards**
  - Professional studies requirements in Reading
  - Visual Impairment pre-K 12 requirements in Understanding of the Foundations of Braille Reading and Writing

This course is designed to enable students to:

1. 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

2. 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

3. 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.

4. Demonstrate knowledge of materials and instructional strategies for teaching reading and writing of literary Braille

E. Assessment measures

1. Mid-term Exam
2. Weekly Braille Nemeth Code Transcription which will include at least two samples of Tactile Graphics
3. Weekly lesson plans.
4. Participation in weekly on-line discussions which require knowledge and application from readings.
5. Final Project. For each item below, you must develop a lesson plan, teach the lesson, collect data on child performance in response to the lesson, and write a reflection on your planning, instruction, and results.
   a. Braille production of a children’s book
   b. Braille reading lesson plan
   c. Braille mathematics lesson plan
   d. Braille codes for science, music, math or foreign language
6. Response to Case Study: Identify the issues presented in the case study, recommend possible solutions, and develop a plan for addressing the child’s Braille reading and writing needs.

F. Other Course Information:

None