College of San Mateo
Official Course Outline

1. **COURSE ID:** DSKL 835 **TITLE:** Assistive Technology - Speech Recognition
   Units: 1.0 units **Hours/Semester:** 16.0-18.0 Lecture hours; and 32.0-36.0 Homework hours
   Method of Grading: Pass/No Pass Only

2. **COURSE DESIGNATION:**
   Non-Degree Credit
   Transfer credit: none

3. **COURSE DESCRIPTIONS:**
   Catalog Description:
   Designed primarily for students with disabilities; provides training in the use of a speech recognition program, which supports students' learning styles and/or physical needs in the area of written expression. Students will learn how to use this assistive technology tool as an accommodation for completing written assignments and essay-based tests/exams. Students will use computers with this software in the Disability Resource Center's Assistive Technology classroom/lab. No previous computer experience is required. (Units do not apply toward AA/AS Degree.)

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Demonstrate how to use speech recognition software to dictate, correct, edit, and format text using appropriate voice commands in a simple word processor.
   2. Compose an email in a web-based email system using speech recognition software.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
   Upon successful completion of this course, a student will be able to:
   1. Use a speech recognition program to dictate text into a document.
   2. Use appropriate voice commands with a speech recognition program to correct various types of recognition errors.
   3. Use appropriate voice commands in a speech recognition program to edit text and complete simple formatting of dictated text in a document.
   4. Use a speech recognition program to compose emails in a web-based email system.
   5. Use a voice recorder to record composed text in a dictation and transfer the recording to a speech recognition program for transcription into a document.
   6. Demonstrate the skills required to troubleshoot some common technical problems that may arise when using a speech recognition program.

6. **COURSE CONTENT:**
   Lecture Content:
   Speech recognition software is used by students who have physical disabilities that restrict their use of their hands for keyboard and mouse access to the computer. In addition, students who have learning differences use speech recognition software as a means for getting their thoughts recorded quickly without getting slowed down by spelling difficulties, slow keyboarding speed, or illegible handwriting. The following topics are addressed during classes:
   1. Creating a new user file, saving user files, and controlling the microphone by voice commands.
   2. Dictating text and deleting text.
   3. Correcting recognition errors using appropriate voice commands.
   4. Spelling words using the Radio Alphabet and editing text.
   5. Capitalizing words, saving and printing a document using voice commands
   6. Moving the cursor by voice commands, inserting text before words and inserting missing punctuation after a word.
   7. Dictating numbers in various formats, including phone numbers, zip codes, dates and time.
   8. Basic formatting of documents including adding bolded, underlined, and italicized text, centering, left and right aligning text, and creating a bulleted list.
   9. Creating custom commands for email addresses and student's contact information.
   10. Composing an email using dictation in a web-based email system.
   11. Recording, transferring and transcribing a voice recording from a digital recorder.

12. Backing up a user profile to USB flash drive.
13. Demonstrate the skills required to troubleshoot some common technical problems that may arise when using a speech recognition program.

Lab Content:

None

TBA Hours Content:

None

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

A. Lecture
B. Activity
C. Individualized Instruction
D. Observation and Demonstration
E. Other (Specify): Methods of instruction will include the following: lecture, demonstration, hands-on computer use to complete classroom-based assignments using a speech recognition program, reading of printed material provided in classroom handouts, and posted online in Learning Management System.

8. **REPRESENTATIVE ASSIGNMENTS**

Representative assignments in this course may include, but are not limited to the following:

Writing Assignments:

Representative assignments in this course may include, but are not limited to the following:

- Weekly hands-on, in-class assignments that demonstrate the student's ability to use the features of the speech recognition program that were taught in class.
- A review assignment to give the students practice in accessing and using various features of the speech recognition program which incorporate dictating text, correcting recognition errors, and basic formatting of text in a document.
- Composing and sending an email to the instructor using student's web-based email account about a given topic.
- A final practical exam to assess the student's ability to access and use various features of the speech recognition program which incorporates dictating text, correcting recognition errors, and basic formatting of text in a document and composing and sending an email to the instructor using student's web-based email account about a given topic.

Reading Assignments:

Download and read instructional step-by-step handouts posted on the Learning Management System about using various features of the speech recognition program.

9. **REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

A. Class Participation
B. Class Performance
C. Class Work
D. Exams/Tests

10. **REPRESENTATIVE TEXT(S):**

Other:

A. A textbook is not required or available.

Instructor-prepared materials for the speech recognition program will be provided to students in the form of downloadable handouts from the Learning Management System currently being used.

In addition, instructional handouts are provided to students during class.

Origination Date: April 2019
Curriculum Committee Approval Date: September 2019
Effective Term: Fall 2020
Course Originator: Judith Lariviere