College of San Mateo Official Course Outline

1. **COURSE ID:** DSKL 829 **TITLE:** Assistive Technology - Text-to-Speech Program **Units:** 0.5 units **Hours/Semester:** 8.0-9.0 Lecture hours; and 16.0-18.0 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 text-to-speech program, which supports students' learning styles and/or physical needs in the area of reading and studying their textbooks. Students will learn how to use this assistive technology tool as an accommodation for reading and studying electronic versions of their textbooks and completing tests/exams from concurrent subject area classes. No previous computer experience is required.

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 a text-to-speech program to open and read electronic text-based files from various sources (i.e., Google drive, USB flash drive, or downloaded file).
- 2. Demonstrate how to use and apply various study skill tools in a text-to-speech program to an electronic text-based file.

5. SPECIFIC INSTRUCTIONAL OBJECTIVES:

Upon successful completion of this course, a student will be able to:

Text-to-speech

- 1. Use a text-to-speech program to open and read an electronic chapter from a textbook or another text-based document from various sources (i.e., Google drive, USB flash drive, or a downloaded file from a Course Management System).
- 2. Adjust the reading settings in a text-to-speech program, including changing the reading voice, reading speed, reading mode, and the size of the displayed pages.
- 3. Use the various study skill tools in a text-to-speech program, including bookmarks and highlighting.
- 4. Configure and use a text-to-speech program to read content on the web.
- 5. Demonstrate the skills required to troubleshoot some common technical problems that may arise when using a text-to-speech program.

6. COURSE CONTENT:

Lecture Content:

A text-to-speech program is primarily used by students with learning differences. It is also appropriate for students with other print-based disabilities including low vision, students who experience difficulties with physical handling of books as a result of dexterity-related disabilities or other physical limitations, or students with disabilities who are also English Language Learners (ELL). The following topics are covered in DSKL 829 – Assistive Technology - Text-to-Speech Program classes:

- 1. Starting the text-to-speech program.
- 2. Opening and saving files to and from various sources, including Google drive, from a file download location on a computer, and to and from a USB flash drive.
- 3. Configuring reading options according to student's preferences and reading needs (including reading voice, reading mode, reading unit, reading rate, and magnification of text on the displayed page)
- 4. Looking up definitions and synonyms for unfamiliar words using the built-in "talking" dictionary and thesaurus
- 5. Opening and saving a PDF document using the text-to-speech program.
- 6. Using various study skills tools such as highlighting, adding Bookmarks, and adding annotations in the form of Text Notes, in conjunction with strategies for application of these study skill tools to the different types of classes students are taking.
- 7. Extracting highlights to outline format, removing color highlights prior to printing and saving the file to a computer's hard drive or Google drive.

- 8. Application of a strategy for making study notes using the text-to-speech program's highlighting tools on provided text files in class.
- 9. Converting files incorporating extracted highlighted text into portable audio files (i.e., MP3s) that can be played on Smartphones, iPods, iPads, etc.
- 10. Configuring and using the text-to-speech program to read content on the web.
- 11. Demonstration of the various features in the web-based, iPad and Android versions of the text-to-speech program.

7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Lecture
- B. Discussion
- 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 text-to-speech program, classroom discussion, and reading of printed material(s) provided in electronic format using a text-to-speech program.

8. REPRESENTATIVE ASSIGNMENTS

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

Reading Assignments:

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

- A. Weekly hands-on, in-class assignments that demonstrate the student's ability to use the features of the text-to-speech program that were taught in class.
- B. Completion of a "Review Assignment" that incorporates use of the study tools and their application that are taught in class

Other Outside Assignments:

A final "take home" exam will be given and used to assess the student's ability to access and use various features of the text-to-speech program including reading the text, adding bookmarks, highlighting text using different colors of highlighters, extracting highlights to outline format, and extracting these annotations. Students will be given the opportunity to complete these assignments on their home computers using the text-to-speech program or using DRC's computers during open Assistive Technology Lab hours.

9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Class Work
- C. Exams/Tests
- D. Quizzes
- E. Additional Information: a) Completion of in-class assignments. b) Participation in classroom discussions about the use and application of study tools and strategies using a text-to-speech program to support comprehension and retention of textbook materials. Student participation in these discussions is included as a component of the grade. c) Completion of the review assignment. d) Completion of the final "take home" exam.

10. REPRESENTATIVE TEXT(S):

Possible software includes:

A. Read&Write/Kurzweil 3000. Texthelp/Kurzweil Educational Systems, Version 11.5/15 ed. Students who registered for this class would be given access to Read&Write Google Chrome extension and/or Read & Write for Macintosh or Windows given CSM's DRC has purchased a subscription for this software to loan to students on a semester basis when they have an approved accommodation for use of text-to-speech. Students who register for a different section of this class would be given access to a web-based version of Kurzweil 3000 and/or Kurzweil 3000 for Windows or Macintosh. CSM's DRC has purchased a subscription for this software to loan to students on a semester basis when they have an approved accommodation for use of text-to-speech.

Other:

A. None required. Instructor-prepared materials for the text-to-speech program will be provided in electronic format on Canvas so that students can use the text-to-speech program to read these materials. Students will also be shown how to access additional resources that are built into the text-to-speech program.

Origination Date: August 2017
Curriculum Committee Approval Date: December 2017
Effective Term: Fall 2018
Course Originator: Judith Lariviere