# Microsoft Word accessibility checklist

## Introduction

Following these guidelines will allow you to create and remediate documents created in Microsoft Word so they are accessible.

## Required

* Before distributing the file, address all warnings and errors in the [Microsoft Word Accessibility checker](http://office.microsoft.com/en-us/word-help/check-for-accessibility-issues-HA010369192.aspx?CTT=1)- (File -> Info -> Prepare for Sharing -> Check Accessibility)<http://office.microsoft.com/en-us/word-help/check-for-accessibility-issues-HA010369192.aspx?CTT=1>
Rationale: The accessibility checker [addresses a number of accessibility issues](http://office.microsoft.com/en-us/word-help/rules-used-by-the-accessibility-checker-HA101823437.aspx?CTT=5&origin=HA010369192). The Accessibility checker is available in Microsoft Office 2010 and 2013.
Note: The document will need to be saved in a .DocX format before using the Accessibility Checker.
* Structure the document using styles for headings (not just bold, italics and/or a different font size) and other formatting elements (such as color). (Styles are on the right side of the Home tab)
Rationale: Screen reader users navigate through a document using heading styles. Styles also convey emphasis and semantic meaning, where formatting (i.e. bold, or size) does not.
* Use the column or table feature to create columns. (Tables are on the insert tab, columns are on the page layout tab)
Rationale: Screen readers read left to right top to bottom. Using the column feature will override this and allow the information to be read top to bottom before being read across. Avoid using tabs and/or spaces to create columns.
* Use text in addition to the color to convey information (e.g. "Important items are red and marked with an \*.")
Rationale: Color blind students may not discern different colors (“required items are in red”), and need a textual marker (such as an \* next to the required item).
* Make document available in either Microsoft Office (.doc or .docx) or Rich Text (.rtf) format.
Rationale: Microsoft Office and Rich Text files are easily processed by screen readers or other tools used to provide materials in alternate formats.
* If the permissions of the document are set to prevent editing, provide an additional copy of document as accessible PDF or HTML (web page).
Rationale: Students with poor visual acuity and those with certain learning disabilities, such as dyslexia, may need to alter text with poor contrast, small type, or fonts with serifs.
* Render any mathematical equations or scientific notation used in the document beyond basic operations (e.g., addition, subtraction, multiplication, and division) in an accessible MathML format through the use of an equation editor (e.g., MathType).
Rationale: Equations are often read by screen readers as graphics and not as actual equations, or the order of the equation is jumbled. MathML can be used to avoid this.
Note: The equation editor in Microsoft Word cannot produce accessible MathML.
* Make sure any videos in the document have closed captions, and any audio has a transcript.
Rationale: Captions (videos) or transcripts (audio files) are essential components of multimedia access for individuals with hearing loss or auditory processing issues.

## Additional usability considerations (suggested but not required)

* (Optional) Long documents (more than about 12 pages) should include a Table of Contents (inserted via the References tab, not manually created), and page numbers which are automatically updated.
Rationale: A Table of Contents inserted via the Review tab has internal links which allow screen reader users to jump to the relevant parts quickly.
* (Optional) Text descriptions of links to websites should be explicit in describing what the reader will encounter when clicking the link (i.e. "Montclair State University Digital Policies website.")
Rationale: Screen reader users often list the hyperlinks in a document; a series of "read more" links is meaningless. “Mike’s Auto Shop” is more meaningful than <http://www.mikefixescars.com>.

## Sources and Additional Resources

The following resources are available to assist with creating accessible documents, and were used as the basis for the creation of this document:

* California State University's [Microsoft Word Guides, Tutorials, Tools, Resources & Best Practices](http://teachingcommons.cdl.edu/access/docs_multi/wordf2f.shtml) - http://teachingcommons.cdl.edu/access/docs\_multi/wordf2f.shtml
* [Accessible Digital Office Document Project](http://adod.idrc.ocad.ca/) - http://adod.idrc.ocad.ca/
* Health and Human Services' [Making Files Accessible](http://www.hhs.gov/web/508/accessiblefiles/index.html) - http://www.hhs.gov/web/508/accessiblefiles/index.html

To help determine contrast ratios, it is recommended that you use a tool such as:

* Joe Dolson's [Color Contrast Spectrum Tester](http://www.joedolson.com/color-contrast-tester.php) - http://www.joedolson.com/color-contrast-tester.php
* The Paciello Group's [Colour Contrast Analyser](http://www.paciellogroup.com/resources/contrastAnalyser) - http://www.paciellogroup.com/resources/contrastAnalyser