Email Accessibility
Email Client

Software client
Outlook
• Plain text
• Rich text
• HTML

Web/browser
• Gmail, Yahoo, etc.
• Email Marketing
  • MailChimp
  • Campaign Monitor
  • Constant Contact
Plain Text Format

- No structure but widely compatible

Rich Text Format

- Follow Word best practices
- Not compatible with every client

Email Text Format

- No structure but widely compatible

Rich Text Format

- Follow Word best practices
- Not compatible with every client

HTML Format

- Follow web best practices
Creating accessible email content not only provides access to people with disabilities, it also improves the overall readability of the email content.

Use the same strategies as Word Essentials best practices in Format Text > HTML.
Creating Accessible Email

Use the same strategies as Word Essentials best practices in Format Text > HTML

Rule of Thumb

• Text Display
• Content Organization
• Bulleted and Numbers Lists
• Alt Text to Images

• Descriptive Links
• Extra Spaces
• Reading Order
• Good Color Contrast
Forwarding Image-Only Email

SUMMIT FOR GAY LATINO MALE COLLEGIANS

SATURDAY, FEBRUARY 17, 2018
10AM TO 4PM
USC UNIVERSITY PARK CAMPUS,
FERTITTA HALL 125 LL
LOS ANGELES, CA
Avoid Image-Only Email

Creating email to send text on image of the event poster/flyer. Two major drawbacks:

1. Text on image will not be accessible to readers who have visual impairments rely on screen readers or braille writers.
2. Readers may be blocking images from their email client if they use plain text format.

Best practices

Provide a text-based equivalent to the information contained in the image. Email with all of the relevant information typed in text then add image with Alt Text.
What is Assistive Technology?

 Assistive Technology (AT) are “products, equipment, and systems that enhance learning, working, and daily living for persons with disabilities.”

- Screen Readers
- Magnification Software
- Speech Recognition
- Trackball Mouse
- Keyboard
- Zoom Text
- Braille
- Captions/Subtitles
- Captioned Telephone
- Video Relay Services

Screen Readers: Magnification Software: Speech Recognition: Trackball Mouse: Keyboard:

Zoom Text: Braille: Captions/Subtitles: Captioned Telephone: Video Relay Services:

Deaf Caller: Hearing Caller: Sign Language Interpreter

Video Relay Services (VRS)
What are Screen Readers

Screen readers are a form of assistive technology (AT) software that enables access to a computer, and all the things a computer does, by attempting to identify and interpret what is being displayed on the computer screen using text-to-speech. Screen readers can only access and process live text. Normally used by someone who is visually impaired.
Types of screen readers

Screen reader program for Microsoft Windows that allows blind and visually impaired users to read the screen either with a text-to-speech output or by a refreshable Braille display. **NVDA screen reader** can be downloaded free of charge by anyone.

Provides auditory descriptions of each onscreen element using gestures, a keyboard, or a braille display.

Adds spoken, audible, and vibration feedback to your device.

Screen magnifier for Microsoft Windows that allows you to see and hear everything on the computer.
Benefits of using a screen reader

• **provides access** to someone who does not have useful vision, mobility or has a learning disability to access text on the screen

• offers same level of **independence** and privacy as anyone else
Text Display

• Text should be clear and easy to read

• Use simple, sans serif fonts, which don’t use decorative details. Examples of sans serif fonts include: Arial, Calibri, Verdana or Franklin Gothic Book

• Avoid difficult fonts, fancy script, or decorative fonts with curly edges

• Font size of 12 points or larger

• Ensure there is enough contrast between the foreground color and background color
Content Organization

Use Heading Styles in a logical sequence

- Heading 1 <H1> is usually the title of the document or a major section. Heading 2 <H2> is the next level of heading, first subhead.
- **Heading styles** are Heading 1 <H1>, Heading 2 <H2>, Heading 3 <H3>....Heading 6 <H6>
- **Modify ALL Heading Styles before first use**
Heading Styles

Example 1: Reading long, dense text documents can be a daunting task for learners

As part of our commitment to excellence through diversity and inclusion, California State University, Northridge (CSUN) strives to ensure that campus communication and information technology is accessible to everyone. The California State University system statement on accessibility is articulated in California State University - Executive Order 1111, in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) and Section 508 of the U.S. Rehabilitation Act.

Need assistance or have a question not answered here? Please contact the Universal Design Center (UDC) at UDC@csun.edu or, during business hours (Monday through Friday, 8am to 5pm Pacific time), at (818) 677-5898.

In this context, “accessibility” means that people with disabilities have access – to facilities, to information and to technology.

“Universal design” takes this concept one step further, to ensure that everyone can perceive, understand, engage, navigate and interact regardless of ability or preference.

The UDC supports the campus community in their efforts to make it possible for individuals to learn, communicate, and share via information and communication technology. One way we do this is by assisting the campus community to ensure their information and communication technology is interoperable, usable and accessible, so that individual learning and processing styles and/or physical characteristics are not barriers to access.

The role of the UDC is to help CSUN implement business practices which enable the campus to meet policy standards under the Accessible Technology Initiative Coded Memoranda.

What does this mean to me?

Everyone has a part in creating accessible and usable information. The responsibility of creating and maintaining accessible content falls to the entire campus community.

Example 2: Well-structured documents help students organize and process texts

Universal Design Center (Heading 1)

Accessibility Statement (Heading 2)

As part of our commitment to excellence through diversity and inclusion, California State University, Northridge (CSUN) strives to ensure that campus communication and information technology is accessible to everyone. The California State University system statement on accessibility is articulated in California State University - Executive Order 1111, in accordance with both federal and state laws including the Americans with Disabilities Act of 1990 (ADA) and Section 508 of the U.S. Rehabilitation Act.

Need help? (Heading 3)

Need assistance or have a question not answered here? Please contact the Universal Design Center (UDC) at UDC@csun.edu or, during business hours (Monday through Friday, 8am to 5pm Pacific time), at (818) 677-5898.

What is Accessibility? What is Universal Design? (Heading 2)

In this context, “accessibility” means that people with disabilities have access – to facilities, to information and to technology. “Universal design” takes this concept one step further, to ensure that everyone can perceive, understand, engage, navigate and interact regardless of ability or preference.

Universal Design Center Mission (Heading 2)

The UDC supports the campus community in their efforts to make it possible for individuals to learn, communicate, and share via information and communication technology. One way we do this is by assisting the campus community to ensure their information and communication technology is interoperable, usable and accessible, so that individual learning and processing styles and/or physical characteristics are not barriers to access.

The role of the UDC is to help CSUN implement business practices which enable the campus to meet policy standards under the Accessible Technology Initiative Coded Memoranda.

Shared Campus Responsibility (Heading 3)

Everyone has a part in creating accessible and usable information. The responsibility of creating and maintaining accessible content falls to the entire campus community.
Outlook Heading 1 – Modify Style

• Modify heading styles to match your preference
• Repeat for Heading 2 to 6

Modify Style
Email Marketing Headers/Styles

**Mail Chimp:** Templates have heading levels 1-4 to organize the content in a hierarchical structure. Headings are located under the “styles tab” in WYSIWIG.

**Campaign Monitor:** There are heading levels 1 - 3. In addition, creators can choose from normal text, numbered or bulleted lists, and block quotes.

Refer to [Email Marketing Accessibility](#)
Bulleted and Numbers Lists

• Use list to organize information by ideas or processes
• Use Outlook’s built-in functionality to create
  • Bulleted List (order of list items does not matter)
  • Numbers List (order of list items does matter)
• Avoid
  • Spacebar, tab, enter
Visual Challenge

What’s the best way to make images accessible to everyone?
Alternative or Alt Text

• A written description of images and/or objects that can be read by a blind or low vision using screen reader technology.

• Screen readers and other assistive technologies can’t convert images into words/texts.

• Captions are universal and accessible for everyone.

• “Image of...”, “photo of...” is not needed.

• Recommend brief descriptive text within 8 to 80 characters long.

• Best practices for accessible images

Tiny turtle eating a ripe strawberry.
Add Alt Text to an image in an email

1. Right-click the image, select **Format Picture**, select **Layout & Properties**, and then select **Alt text**.

2. Add a detailed description of the image, and why the image is important to your message.
Outlook Client: Adding an image in Email Signature (Alt Text)

**Outlook 2016**

1. After adding Alt Text to an image, select the entire email signature to copy.
2. Open email signature box (File | Options | Mail | Signatures) then paste in signature box.

**Outlook 2016**

Right-click the image, select Format Picture, select Layout & Properties, and then select Alt text.

"Image of...", "photo of..." is not needed.

**Outlook 365**

1. Open email signature box (File | Options | Mail | Signatures).
2. Add an image, right-click to select Pictures then Alt Text tab.
Office 365 Outlook Web App (Alt Text)

1. Insert Image
2. Right click on image to select Insert alt text
3. Add alternative text to image
4. Run Accessibility Check

- Insert Image
- Right click on image to select Insert alt text
- Run Accessibility Check
Office 365 Outlook Web App Email Signature (Alt Text)

- At the top Settings
- Your app Settings > Mail
- Layout > Email Signature

Add alternative text to image
Descriptive Hyperlinks, 1 of 2

• Link text should clearly identify the target of each link. Good link text should not be overly general.
  • Make sense when read out of context.
  • Describe the destination (document name, website).
  • Be unique for unique destinations.
  • Do not use click here or read more or continue.
  • Do not use different link text to refer to the same resource.
  • Do not use the same link text to refer to different resources.

• Best practice is to bold or underline links.

• Do not use color links as the only method to convey important information.
Descriptive Hyperlinks, 2 of 2

• Not Accessible – vague and redundant
  • Click here
  • Read More
  • Read More
  • Email me
  • URL text https://www.csun.edu/universal-design-center
    (raw URL may not make sense to screen reader users or others, so make the link text descriptive)

• Accessible – descriptive and unique
  • Universal Design Center
  • Microsoft Office Training
  • Accessible Word Document
  • Web Accessibility Best Practices
Avoid Extra Spaces

- Screen readers will read blank or multiple spaces created using the space bar, empty line, empty tab, empty paragraphs or carriage returns as “Blank”.

- This can be very irritating for someone using assistive technology to listen multiple blank characters and may assume they’ve reached the end of a document.

- Use Outlook’s built-in formatting, alignment, tab stop position in paragraph options to create whitespace instead of repeating blank characters.
Provide descriptions if using color to convey meaning

Example 1: Inaccessible color highlights in red
   May 11-17, 2019

Example 1: Accessible with a description
   May 11-17, 2019 (final exams)

Example 2: Inaccessible table

<table>
<thead>
<tr>
<th>Assignments (overdue in red)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
</tr>
<tr>
<td>Chapter 1</td>
</tr>
</tbody>
</table>

Example 2: Accessible table

<table>
<thead>
<tr>
<th>Assignments</th>
<th>Overdue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>Yes</td>
</tr>
<tr>
<td>Chapter 1</td>
<td>No</td>
</tr>
</tbody>
</table>

Example 3: Inaccessible color shape

Color identical may not be recognized by colorblind users

Example 3: Accessible color and number
Check Color Contrast

<table>
<thead>
<tr>
<th>Bad Examples</th>
<th>Good Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red on black is bad</td>
<td>Yellow on black is good</td>
</tr>
<tr>
<td>Blue on orange is bad</td>
<td>Black on orange is ok</td>
</tr>
<tr>
<td>Red on green is bad</td>
<td>White on green is good</td>
</tr>
<tr>
<td>Grey on purple is bad</td>
<td>Aqua on purple is ok</td>
</tr>
</tbody>
</table>

- Download Colour Contrast Analyser onto your computer (PC/Mac) to ensure accessible contrast or use an online contrast checker from WebAIM.
- WCAG Level AA requires a contrast ratio of at least **4.5:1** for normal sized text (12 pt. font) and **3:1** for large text (14 pt. font).
- Coblis Color Blindness Simulator
Attachments

• Files attached to an email must also be accessible.
• Use a descriptive and distinct file name.
• Videos in emails must be captioned.

Unclear / Vague File Name
• 00123345667987.pdf
• Resume.pdf
• Reports.docx
• Excel_2019.xlsx

Descriptive File Name
• Accessible_Email_Infographics.pdf
• Nguyen_Van_Resume.pdf
• UDC_Captioning_2018.docx
• UDC_Budget_2019.xlsx

www.csun.edu/captioning
**Reading Order**

Screen readers read a document from left-to-right and up-to-down. That means reading order is important for users with visual impairments. When content, tables, images or charts is out of order or a document is poorly organized, the reader can become confused to the meaning of the information. The reading order should be the same as visual order for English language.
Accessibility Checker

Office 365 Outlook Client

Office 365 Outlook Web App

Outlook 2016/2013 - No Accessibility Checker
General Email Checklist, 1 of 3

All Email
• Is the email free from content that flashes more than 3 times per second?
• Is the order of the content accurate and logical?
• Can text be resized and considered readable when magnified to 200%?

Headings
• Is text intended to act as a visual heading styled with the built in heading tags (H1 through H6)?
• Do heading styles follow a logical hierarchical progression? (Do not skip)
• Does the Heading text accurately describe the sectional content?
General Email Checklist, 2 of 3

Lists
• Are all visual lists created with the built in list styles?
• Are multiple lists in the same email properly grouped / separated?

Links
• Are links distinguished by a method other than color? Bold or underline.
• Can all link text be understood out of context? If not, does generic link have sufficient content?
General Email Checklist, 3 of 3

Color
• Does any information conveyed with color have a non-color method for understanding?
• Does all text (with the exception of logos) have a contrast ratio of 4.5:1 or greater no matter the size

Images
• Do all images conveying information have alt text that provides the same level of understanding a visual user would gain?
• Do all decorative images have ““ in the alt text field?
• Have all multilayered objects been flattened into one image and does that image use one alternative text description for the image

Refer to HHS.GOV Email 508 Checklist
Resources

• UDC Email Accessibility
• Creating Accessible Emails: Outlook 2013 & 2016
• Improve Email Accessibility
• Improve Image Accessibility in Email
• Add Accessible Tables and Lists to Email
• Accessibility Challenges in Email
  an infographic about accessible email with text-based equivalent
• Email 508 Checklist by HHS.GOV
Reflection

• Creating accessible digital content can’t happen overnight.
• Accessibility is for everyone.

How can we help you make a big difference