

# Accessibility Requirements for UH Websites

Section 508 and WCAG 2.0 Level A & AA

These slides are at [goo.gl/09Ifa2](https://goo.gl/09Ifa2)



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What is Accessibility?

Accessibility is about  
access, not disability.



Why is Accessibility Important?

Without accessibility, those with disabilities would not be able to participate in this increasingly technology driven world.

Permanent

Temporary

Situational

Touch



One arm



Arm injury



New parent

See



Blind



Cataract



Distracted driver

Hear



Deaf



Ear infection



Bartender

Speak



Non-verbal



Laryngitis



Heavy accent

# Physical Disabilities

- Color blind
- Low-vision or legally blind
- Hearing loss
- Low motor control
- Cognitive (e.g., dyslexia, high stress, non-native speaker, etc.)
- and more...





# Environmental/Temporary Disabilities

- Very small or large screen sizes
- Touch-only or keyboard-only
- Projected or on a TV
- Poor lighting
- Slow connection speed
- Background noise
- Printed
- User-overridden style sheets
- and more...



# Browser “Disabilities”

- Old IE
- Edge
- Safari (the new IE)
- Chrome
- Firefox
- Opera Mini
- UC Browser
- WebView (in-app)
- Different versions of the same browser
- and more...





2 Rule Sets

# Section 508

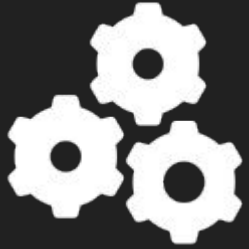


**Law:** [www.section508.gov](http://www.section508.gov)



**Checklist:** [webaim.org/standards/508/checklist](http://webaim.org/standards/508/checklist)

# WCAG 2.0



**Specs:** [www.w3.org/TR/WCAG20](http://www.w3.org/TR/WCAG20)



508 ♥  WCAG



**Checklist:** [webaim.org/standards/wcag/checklist](http://webaim.org/standards/wcag/checklist)



Compliance Deadline  
(spoiler: January 18, 2018)

## Section 508 or WCAG 2.0?

### **Already 508 compliant?**

**Should** update  
to WCAG 2.0 A and AA.

“Safe-harbor” exemption if  
already fully compliant as of  
January 2018.

### **Not yet 508 compliant?**

**Must** update  
to WCAG 2.0 A and AA.



What does compliance mean?





What **I** see is **not** what **you** get.

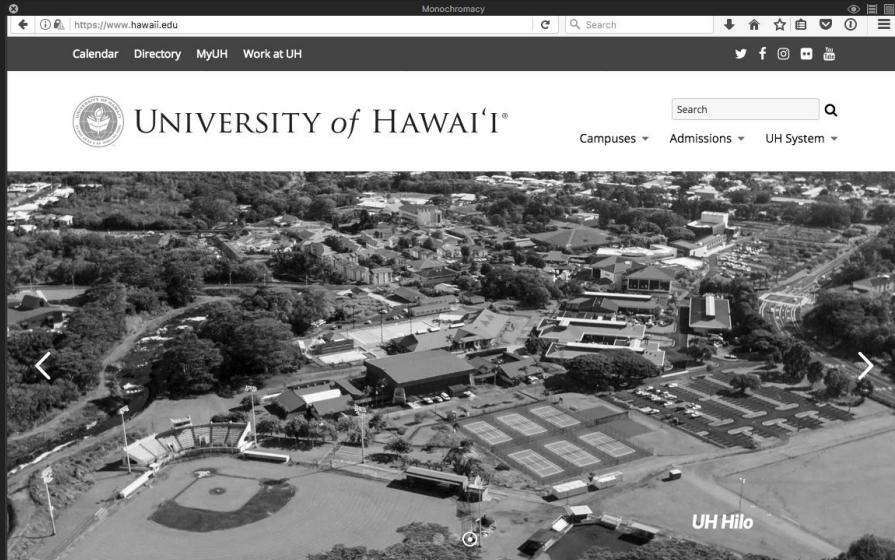


# Alt Text on Images

`alt="A woman sits under a tree reading a book"`

For design only: `alt="" aria-hidden="true" role="presentation"`

# Color Blindness



## Monochromacy

Our 10 Campuses Across the Hawaiian Islands

### Programs of Study

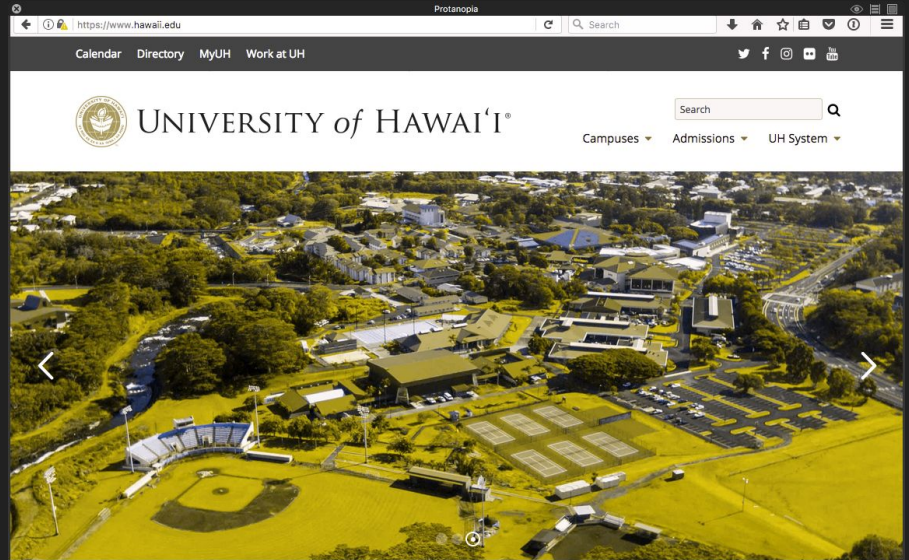
Discover the program that is right for you

### How to Apply

Enroll in one of our dynamic and diverse campuses

### Paying for College

Find financial aid and scholarship opportunities



## Protanopia

Our 10 Campuses Across the Hawaiian Islands

### Programs of Study

Discover the program that is right for you

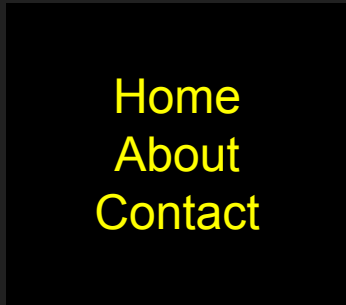
### How to Apply

Enroll in one of our dynamic and diverse campuses

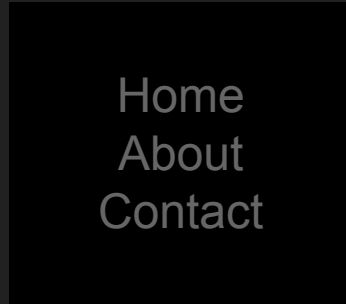
### Paying for College

Find financial aid and scholarship opportunities

# Color Contrast



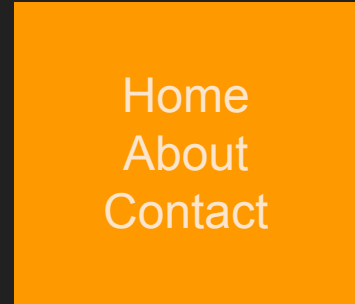
19.6



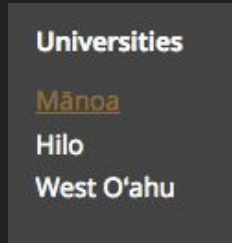
1.7



2.1



1.8



<https://leaverou.github.io/contrast-ratio/>

# Low Vision



## Cataracts

<https://www.aao.org/eye-health/diseases/cataracts-vision-simulator>

# Low Vision



## Glaucoma

<https://www.aao.org/eye-health/diseases/glaucoma-vision-simulator>

# Hearing Challenges



Ua mālama 'ia nā waihona leo ma ke 'ano he waiho a MP3 a AAC pa a.

## Nā Mele Oli

1. [He Hale Aloha](#)
2. [Mele Komo](#) (A Uka Ho'i...)
3. [Mele Kāhea](#) (He Hālaulani I Ke Ao O Hilo...)
4. [Ke Lei Maila](#)

# Closed Captions on Video

A screenshot of a YouTube video player interface. The video title is "UH Hilo STAR GPS Registration Fall 2017". The video player shows a title card with the text "UH Hilo STAR GPS Registration" and logos for STAR and the University of Hawaii Hilo. The video player controls show a progress bar at 0:00 / 6:10. To the left of the video player, there is a list of closed captions with their corresponding timestamps. The "Subtitles/CC" menu is highlighted in the top navigation bar.

**View published subtitles and CC: English**  
Subtitles/CC source: University of Hawaii at Hilo

Actions ▾

0:00.4 0:02.9	Welcome to UH Hilo's registration tutorial.
0:02.9 0:08.0	Here you will find out how easy it is to register for classes using our STAR GPS Registration
0:08.0 0:09.6	system.
0:09.6 0:13.1	Before registration, you will need a UH username and password.
0:13.1 0:16.5	If you do not already have one, please go to the link below this video to learn how
0:16.5 0:19.5	to create a username and password before continuing.
0:24.5	Go to the 'MyUH Services' page.

UH Hilo STAR GPS Registration Fall 2017

UH Hilo  
STAR GPS Registration

STAR  
A UH Mānoa Innovation

UNIVERSITY of HAWAII'  
HILO

0:00 / 6:10

Welcome to UH Hilo's registration tutorial.

Here you will find out how easy it is to register for classes using our STAR GPS Registration

system.

Before registr need a UH user and password.



# Transcripts for Audio



[UH Hilo Report Apr 5, 2017 MP3 file](#)



## Transcript:

This is the UH Hilo report. News about people, events and programs at the University of Hawai`i at Hilo.

UH Hilo Vice Chancellor for Academic Affairs (VCAA) Dr. Matthew Platz and the University's Maintenance Crew have been nominated by the University of Hawai'i System for 2017 Governor's Awards. The awards honor state executive branch employees, managers and work teams who exemplify the highest caliber of public service and dedication to serving the people of Hawai'i.

Dr. Platz was selected as the system nominee for Manager of the Year. His colleagues describe him as "a visionary with courage to lead institutional change" and "a true leader who inspires, empowers and brings out the best in those around him."

The eight-member Maintenance Crew is the system's choice for Team of the Year. Their positive 'can-do' attitude, teamwork and efficiency has enabled them to complete more complex tasks in-house, and save the campus thousands of dollars.

The statewide winners along with the Employee of the Year will be announced at the Governor's Awards Ceremony May 18 at the State Capitol. For more news about the University, visit [hilo.hawaii.edu](http://hilo.hawaii.edu). That's the UH Hilo Report. I'm Ken Hupp.

# Stress and Crisis



UNIVERSITY OF HAWAII

Campuses ▼ Admissions ▼ UH System ▼

Community Colleges	Distance Learning
Hawai'i	UH Education Centers
Honolulu	Continuing Education
Kapi'olani	UH Community Colleges
Kaua'i	
Leeward	
Maui	
Windward	

# Dyslexia



## Dsiylxea

A freid who has dixselya dseiercbd to me how she excpenreies rindaeg. She can raed, but it taeks a lot of ctoicranotnen, and the lertets smees to "jmup aounrd".

I rmeembeerd reinadg aubot [tpcmyylgecia](#). Wdoun't it be plisbose to do it iltvcaeetiny on a wbieste with Jirsvaapct? Srue it wulod.

Feel like minakg a bkrmoelkat of tihs or smohitneg? [Fork it](#) on ghiutb.

Diyxslea is chtriazaeecd by dfftiilcuy wtih lanrineg to raed flitnuey and wtih atrcuace chseoiemorpnn dsitpee nmroal ienetgcnille. Tihs iecnduls dftucifliy wtih pilohaongocl anerawess, pgachinolool dcdnoieg, pssroeicng speed, oorgthprahic cdnoig, auodrtiy sohrt-trem memroy, lggauane siklis/vebarl crioehensopmn, and/or riapd nmniag.

Dvampeeoeentll rdaeing dosider (DRD) is the msot cmmoon larening ditbslliay. Dixyelsa is the most reigzoencd of rndeaign dsrrdoies, hewevor not all ridenag dsreidors are lenikd to dieylxsa.

Piseulhbd

03 Mcrah 2016

Tgas

[dxseiyla](#) <sup>1</sup>

[tyeglcopimya](#) <sup>1</sup>

[Jpcvriasat](#) <sup>1</sup>

# Low Motor Control / Large Input Device



Home

About

Sci

Conta



# Low Motor Control / Large Input Device



Home

About

Sched

Contact Us



# Viewport Sizes



Calendar Directory MyUH Work at UH

Twitter Facebook Instagram YouTube



UNIVERSITY  
of HAWAI'I

MENU



Our 10 Campuses

University of Hawai'i

Calendar Directory MyUH Work at UH

UNIVERSITY of HAWAI'I

Our 10 Campuses Across the Hawaiian Islands

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UH News

- New registration app guides students to timely graduation
- Cancer treatment potential of Pinewood plant
- More UH News
  - In Memoriam: Roy Takeyama remembered for decades of service to UH
  - Nursing simulation lab offers UH West Oahu students hands-on learning
  - Raising mental health awareness
  - James Burns remembered during ABSOM healing garden ceremony



# Other Common Issues



No :hover on mobile





PDF, Word, Excel, PowerPoint





No!



Get Adobe  
Acrobat Reader

<https://get.adobe.com/reader/>

# Other Common Issues

- "Skip links" required for repetitive navigation
- Proper <form> markup (e.g., <label> tags)
- Link text must have context (e.g., "click here")
- Multiple links with same link text cannot lead to different places (e.g., "read more")
- Headings (h1-h6) must follow outline hierarchy
- Use lists (ul, ol) for lists and properly marked up tables for data (thead, th)
- Do NOT use outline:0 or outline:none for focus outline in CSS

[hilo.hawaii.edu/help/accessibility.html](https://hilo.hawaii.edu/help/accessibility.html)



# Automated Testing Tools: A good first step

# WAVE: [wave.webaim.org](http://wave.webaim.org)

The image shows a screenshot of the WAVE web accessibility evaluation tool. On the left is a sidebar with the WAVE logo and the text "web accessibility evaluation tool". Below the logo is a search bar containing "www.hawaii.edu/access". There are buttons for "Styles", "No Styles", and "Contrast". A "Details" section has a "Filter: Full" dropdown. The sidebar lists several categories of alerts:

- Alerts (17)**
  - 17 X Redundant title text (1 icon)
  - 6 X Linked image with alternative text (1 icon)
- Features (7)**
  - 1 X Alternative text (1 icon)
- Structural Elements (13)**
  - 1 X Heading level 1 (1 icon)
  - 2 X Heading level 2 (1 icon)
  - 3 X Heading level 3 (1 icon)
  - 7 X Unordered list (1 icon)

The main content area shows the "its" logo for "INFORMATION TECHNOLOGY SERVICES". The page title is "Computers and Disabilities". The main text discusses the use of computers and the Internet in higher education. On the right side of the page, there are several accessibility annotations with icons and text:

- "Mobile top menu toggle" (aria-label="top-nav-mobile-menu")
- "Feed icon"
- "Information Technology Services main mobile menu toggle" (aria-label="main-nav-mobile-menu")
- "Information Technology Services"

The page content includes a navigation menu on the left with items like "UH Accessibility Home", "Section 508 Standards", "508 Refresh", "AT at UH Campuses", "ITS Policy on Equal Access", "Accessibility Software", "Accessibility Devices", "Web Accessibility", and "Resources". The main text is as follows:

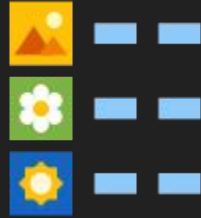
## Computers and Disabilities

The widespread use of computers and the Internet is now commonplace in higher education. College students routinely use computers to complete assignments, conduct research on the Web, and take part in online activities. Although these technologies help students become more productive, concerns exist as to whether the use of these technologies are creating additional barriers for students with disabilities.

The University of Hawaii, in accord with the [Americans with Disabilities Act of 1990 \(ADA\)](#), Section 504 of the Rehabilitation Act of 1973 is committed to ensuring that campus computing and information resources are accessible to disabled students, faculty and staff. Ongoing efforts are a collaboration between Disabled Student Services ([KOKUA](#)), the Office of Equal Employment Opportunities and Affirmative Action, [UH Libraries](#), and Information Technology Services. These efforts include making departmental web sites and online instruction more accessible and also providing assistive technologies in the computer labs on campus.

## What is Assistive Technology?

A general term used to describe technology that assists people with disabilities such as screen reading software or alternate keyboards is "assistive technology". The Assistive Technology Act



# Summary

I do not always experience  
the content  
the same way you do.





# UH Accessibility Website

[www.hawaii.edu/access](http://www.hawaii.edu/access)



# Campus ADA Coordinators

[www.hawaii.edu/offices/eo/ada-504-coordinators/](http://www.hawaii.edu/offices/eo/ada-504-coordinators/)



Q & A

# Additional Links

- [18F Accessibility Guide](#)
- [WAVE](#) (free page accessibility testing tool)
- [SortSite Desktop](#) (paid site testing tool, including accessibility)
- [SiteImprove](#), [Monsido](#), ..., (expensive enterprise-level site testing tools)
- WebAIM Checklists for [508](#) and [WCAG2](#)

These slides are at [goo.gl/09Ifa2](https://goo.gl/09Ifa2)