

PIE Virtual Coffee Hour & Teaching Workshops:

Make Learning Inclusive with Universal Design

Dr. John L. Crow

2 September 2020



Workshop/Webinar Agenda

- What is Assistive Technology?
- What is Accessibility?
- What is Universal Design for Learning (UDL)?
- What are UDL's Three Principles?
- Reasons for implementing UDL
- What can Universal Design for Learning look like in Canvas?
- What is Blackboard Ally?
- How does Blackboard Ally assist students, instructors, and administrators?
- Tips on making course content accessible (as time permits)
- Questions & Answers



What is Assistive Technology?

- Any assistive technology or device made to facilitate and overcome any person's visible or invisible disability
- Curb cuts and platform ramps
- Wheelchair, prosthetics, crutches, cane, etc.
- Automatic and push-button doors
- Computer screen readers, adjustable text size, screen magnification, high-contrast themes, responsive page layouts, electronic braille readers, etc.



What is Accessibility?

- Accessibility:
 - the quality of being easily reached, entered, or used by people with a variety of abilities
- ADA Accommodations – Accommodation Letters Each Semester
 - Often addressed after document created
 - Requires more effort to “fix” existing documents
- Accessibility = Reactive



What is Universal Design?

- Universal Design:
 - framework based on research focusing on creating flexible environments and materials to accommodate individual differences and circumstances
- Universally Designed Documents
 - Preemptively meets people's use needs regardless of ability
 - Material usable when first encountered, no need for additional accommodation requests
 - Universal Design = Proactive



Reasons for implementing UDL

- Individual Benefits
 - All people's use needs, both inside and outside SUS are facilitated regardless of disability and disclosure
- Legal Requirements
 - Meets minimum federal & state regulations
 - Section 504 & 508 of Rehabilitation Act of 1973 & Amendments
 - Adoption of [Web Content Accessibility Guidelines \(WCAG\) 2.x standards](#)
 - Americans with Disabilities Act of 1990 & Amendments
 - State University System's policies and rules

UDL Principles: *Engagement* Part 1

- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Engagement*
 - Affect represents a crucial element to learning, and learners differ markedly in the ways in which they can be engaged or motivated to learn. **There is no one means of engagement that will be optimal for all learners in all contexts;** providing multiple options for engagement is essential.

UDL Principles: *Engagement* Part 2

- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Engagement*
 - Recruiting Interest
 - Optimize individual choice and autonomy
 - Optimize relevance, value, and authenticity
 - Sustaining Effort & Persistence
 - Heighten salience of goals and objectives
 - Foster collaboration and community
 - Self Regulation
 - Promote expectations and beliefs that optimize motivation
 - Develop self-assessment and reflection



UDL Principles: *Representation* Part 1

- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Representation*
 - Learners differ in the ways that they perceive and comprehend information that is presented to them. There is not one means of representation that will be optimal for all learners; providing options for representation is essential.

UDL Principles: *Representation* Part 2

- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Representation*
 - Perception
 - Offer ways of customizing the display of information
 - Offer alternatives for auditory & visual information
 - Language & Symbols
 - Illustrate through multiple media
 - Clarify vocabulary, symbols, syntax, and structure
 - Comprehension
 - Activate or supply background knowledge
 - Highlight patterns, critical features, big ideas, and relationships

UDL Principles: *Action & Expression* Part 1

- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Action & Expression*
 - Learners differ in the ways that they can navigate a learning environment and express what they know. In reality, there is not one means of action and expression that will be optimal for all learners; providing options for action and expression is essential.



UDL Principles: *Action & Expression* Part 2


- Universal Design for Learning has Three Primary Principles:
 - *Provide multiple means of Action & Expression*
 - Physical Action
 - Vary the methods for response and navigation
 - Optimize access to tools and assistive technologies
 - Expression & Communication
 - Use multiple media for communication
 - Build fluencies with graduated levels of support for practice and performance
 - Executive Functions
 - Facilitate managing information and resources
 - Guide appropriate goal-setting

What does Universal Design look like? Part 1

Provide multiple means of Engagement

WEEK 1


ABOUT RELIGION - OVERVIEW



ACTIVITIES & ASSIGNMENTS

The following are the activities and assignments for Week 1.

1. Introduce yourself in the [First Day Attendance discussion board](#). This must be completed by the third day of class by 5PM.
2. Review the learning objectives for Week 1 below.
3. Read chapter 1, *About Religion*, pages 3-28 in the textbook.
4. Read the three essays about the different definitions of religion offered by Sigmund Freud, Emile Durkheim, and Rudolf Otto. These essays are provided on the [Week 1: Primary Texts](#) page.
5. Watch the [three lecture videos by Dr. Joseph Hellweg](#).
6. Take the [Week 1 quiz](#). You may take it as many times as you wish.
7. Participate in the three Week 1 discussion boards.



LEARNING OBJECTIVES

At the completion of this week, students will be able to:

1. Improve your critical thinking skills by examining various definitions of religion and understanding the difficulty of formulating a definition that encompasses the vast diversity among world religions.
2. Evaluate critically seminal thinkers whose writings have helped people understand religion, including Freud, Otto, and Durkheim.

Unit 1

Reflection Essay

Essay Prompt:	<p>Choose one of the following to write:</p> <ol style="list-style-type: none">1. After posting your definition of religion in this unit's discussion board, reflect upon and describe your thinking process in creating a definition of religion. Did you have any difficulties? If so, why? describe what factors you considered, why you rejected, and overall how you approached the assignment. This essay should be more detailed and thoughtful than the "why" of the discussion post. More specifically, this essay should be a reflection on your thought processes, not the definition itself. Did you have strong inclination to focus on one thing versus another? How did the process of making the definition make you feel? How did you approach thinking about the definition?2. After watching George Fitchett discuss the future of religion and reviewing the essays on The Pew-Templeton Global Religious Futures project website, reflect upon what these sources indicate about the future of religion, and more importantly, what were your thoughts when watching/reading these sources? What were your impressions? How did you feel? What did you think? This essay is more about the mental and emotional processes of your response to the material than the material itself.
Essay Goal:	<p>Often university coursework focuses on content related to the course. But courses do not focus on the process of thinking itself. As a result, students do not always pay attention to how they think and feel about the content. This is unfortunate because preexisting thoughts and feelings, as well as prior experiences, all influence how we approach and learn course content. The study of religion attempts to foster a specific way of thinking and learning about religion. But before such a way can be engaged, we must first become aware of our how we currently think and feel about the topic of religion. These essays are an attempt to shift the focus from course content to your thoughts and feelings about course content. In other words, this is not about your opinion regarding the course content, but a reflection on how and why you came to the opinion you have. This may be new to you and may be a little confusing and/or uncomfortable. This is normal. Just do the best you can and simply be honest with yourself and in your writing.</p>
Technical Details:	<ul style="list-style-type: none">• You must submit your essay by the due date listed in Canvas.• You must put your full name at the top of the essay.• The essay must be at least 250 words.• You must submit your essay as a file in either MS Word or PDF files. No other file formats will be accepted.• You do not have to follow any essay formatting structure. But you should include citations/footnotes if you use any sources.• You should include a bibliography/sources listing if you do not use footnotes listing the source.• Your source citations (in footnotes or a bibliography) should include all the usual information and not just be a link to a webpage or source. Do not expect the instructor to click any link to see what your source is. There should be enough information in your citation listing for the instructor to fully understand what you are referencing without clicking.• Late essays will not be accepted without prior approval from the instructor.



What does Universal Design look like? Part 2


Provide multiple means of
Representation

WEEK 1

LECTURE VIDEOS

This week's lectures are presented by [Dr. Joseph Helliweg](#), a cultural anthropologist with interests in religion, Islam, politics, performance, and health in West Africa.

THINKING CRITICALLY ABOUT THE CATEGORY OF RELIGION





0:00 / 9:06

The transcript for this lecture is available in the following formats:

[PDF](#) [MS Word](#) [HTML](#)

THINKING CRITICALLY ABOUT THE CATEGORY OF WORLD RELIGION






0:00 / 10:54

The transcript for this lecture is available in the following formats:

[PDF](#) [MS Word](#) [HTML](#)

PARTICIPANT OBSERVATION IN THE STUDY OF RELIGION



0:00 / 5:19

The transcript for this lecture is available in the following formats:

[PDF](#) [MS Word](#) [HTML](#)

PRESENTATION FILES

Presentation Slides Used in the Lectures:


- [Week 1 Lectures Presentation Slides\(.pptx\)](#)
- [Week 1 Lectures Presentation Slides\(.pdf\)](#)
- [Week 1 Lectures Presentation Slides Outline\(.docx\)](#)



What does Universal Design look like? Part 3

Provide multiple means of Action & Expression

This is a graded discussion: 25 points possible due Apr 21

 [John Crow](#) Apr 30 at 10:46am

Unit 7

Discussion: Religious Reform Movements

Discussion Prompt:	In previous units we discussed how religions emerged out of other religion. But in this unit, we look at how reform movements within a religion result in new forms of the same religion. For this discussion analyze and compare at least two religious reform movements detailing their similarities and differences, as well as the circumstances which led to their creation. Be sure to use examples from the readings and/or videos, but keep the focus on the patterns of reform, not just the details of the reform.
Discussion Goal:	The goal of this discussion is to engage analytical and problem-solving skills to recognize patterns within reform movements. Identifying patterns with a collection of data is an important skill like going from the specific to the general. However here, the skill of comparison is included. This is an activity all scholars, including scholars of religion, frequently engage.
Technical Details:	You may make your initial post and/or your comment in writing or by using a video. To post by video, follow the instruction on how to Post a Video as a Discussion Reply . You must make your initial post before you will be able to see the posts of others. You must post your initial post by midnight (11:59 pm mountain time) the Friday before the discussion is listed as due in Canvas. There will be a reminder assignment linking to this discussion noting the initial post is due. If you do not make the initial post by midnight Friday, you will lose half (10 pts) off your discussion grade regardless of what you earn on the discussion post. You must make your comment to the discussion by the discussion due date. No discussion posts or comments will be accepted after the discussion due date without prior permission of the instructor. Any post that is incomplete and accidentally submitted or any attempt to bypass the security of the post first requirement will receive a zero. If bypass posting occurs more than once, an academic honor violation report may be given to the university. If you quote from any source, be sure to cite it with an in-text citation and a listing/linking to sources at the end of the post and/or comment.

Search entries or author Unread 🔍 📄 📅 🔔 Subscribe


Discussion posts have "heavens" and "hells", but they are the various levels of realms in which a person can occur, whereas Christianity affords a person one life only, after which a determination is made wherein the person is "assigned" to heaven or hell. (Though various Christian doctrines differ on how this occurs.)

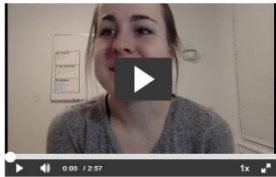
As for resurrection, this is a purely Christian theology, based on Jesus Christ's corporal resurrection from the dead. The Buddhists believe that karma affects one's rebirth into advantageous or disadvantageous subsequent lives.

Interestingly, Jesus is considered a Buddha in some Buddhist movements, a Prophet in Islam and Judaism, and, of course, part of God's Trinity in Christianity.

←_Becky


0

 Apr 17, 2020



←_Becky

0

 Apr 17, 2020

H:

Thanks for the brief break-down of Calvinism and Lutheranism. Grievances of some sort seem to be a common theme across the majority of the reformations. The I think you zeroed in on a key point with people's influence on each other and how intended reformations have unintended consequences like new sects. I appreciate how you point out how motivation of historical figures is often coming from a place of devotion and desire to commune with a deity.

Have a great weekend!



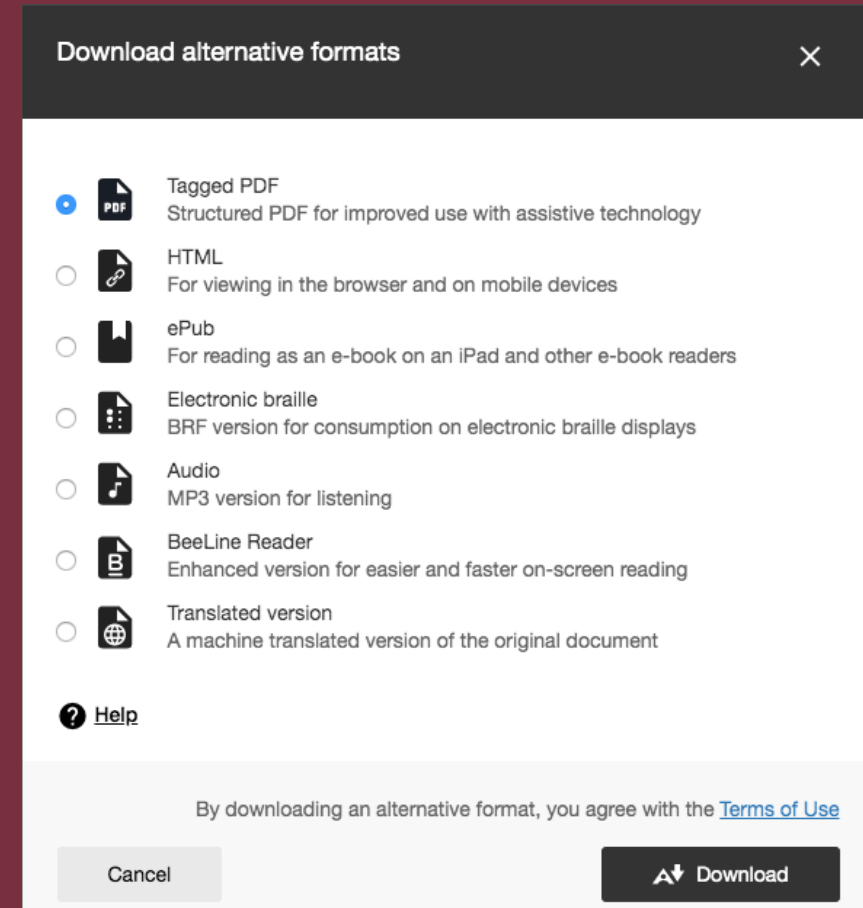
What is Blackboard Ally?

- Blackboard Ally is a software product that integrates into Canvas and focuses on making course content more accessible in three ways:
 1. **For students**, Ally offers automated conversion of less accessible content in more accessible formats
 2. **For instructors**, Ally gives indicates content accessibility and gives reports and instructions indicating what needs addressing and how
 3. **For university administration**, Ally gives detailed reports for tacking past, current, and forecasting future content accessibility



Blackboard Ally for Students

- Students can download course content in alternative formats
- Available formats determined by original format and Canvas configuration
 - Example: BeeLine Reader and Translated versions not necessarily activated



Blackboard Ally for Instructors, Part 1

- All uploaded course content, images, and embedded YouTube videos are checked and gauge icons indicate score of content accessibility



- Scores range from Low to Perfect. The higher the score the fewer the issues.
 - Low (0-33%): Needs help! There are severe accessibility issues.
 - Medium (34-66%): A little better. The file is somewhat accessible and needs improvement.
 - High (67-99%): Almost there. The file is accessible but more improvements are possible.
 - Perfect (100%): Perfect! Ally didn't identify any accessibility issues but further improvements may still be possible.
- When clicked, Ally opens up the Feedback Panel

Blackboard Ally for Instructors, Part 2

- Ally provides you detailed feedback and support to help you become an accessibility pro. Learn about accessibility issues, why they matter, and how to fix them

Page 2 of 2

2 Images without a description

Accessibility score for: The Periodic Table(10).docx

27% All issues ⓘ

This document contains images that are missing a description

[What this means](#)

[How to add descriptions](#)

Upload a version with image descriptions

Drop file to upload or [Browse](#)

The Russian chemist Dmitri Mendeleev published the first widely used periodic table in 1869. He used his table to illustrate periodic trends in the properties of the then-known elements. Mendeleev also predicted some properties of then-unknown elements that would be expected to fill gaps in this table. Most of his predictions were proved correct when the elements in question were discovered.

1 / 2

List of Chemical Elements

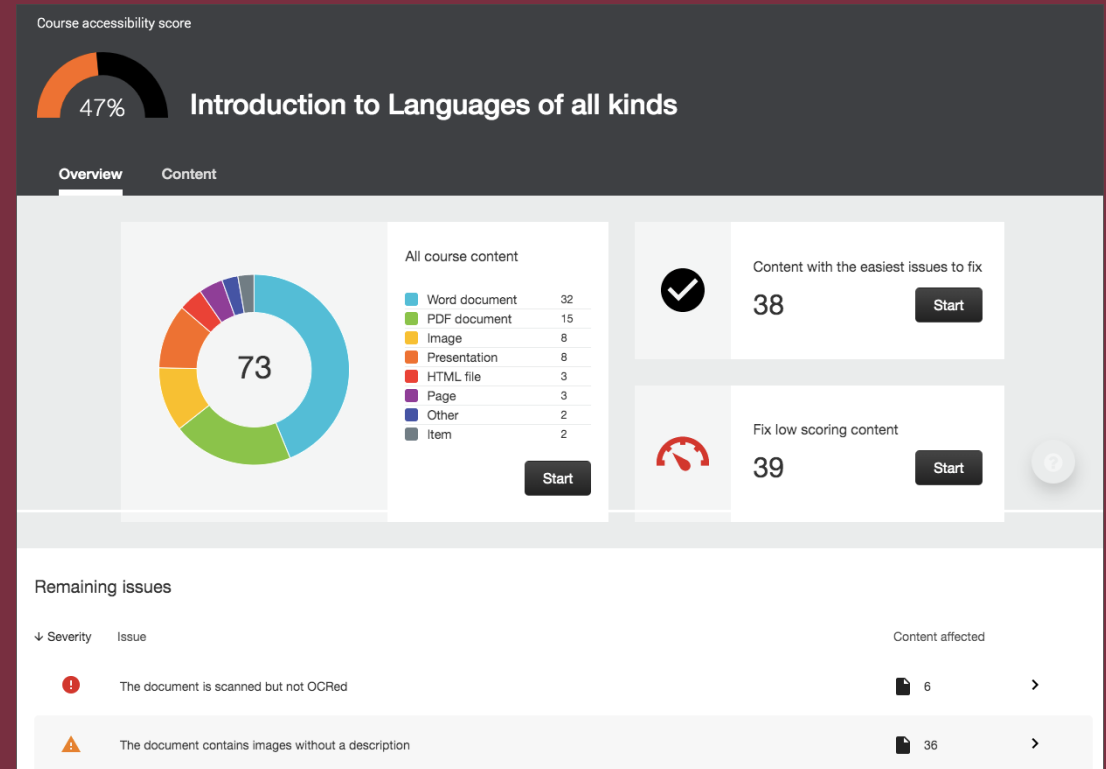
Z	Symbol	Element	Origin of Name	Group	Period
1	H	Hydrogen	composed of the Greek elements hydro- and -gen meaning 'water-forming'	1	1
2	He	Helium	the Greek helios, 'sun'	18	1
3	Li	Lithium	the Greek lithos, 'stone'	1	2
4	Be	Beryllium	beryl, a mineral	2	2
5	B	Boron	borax, a mineral	13	2

A Periodic Table



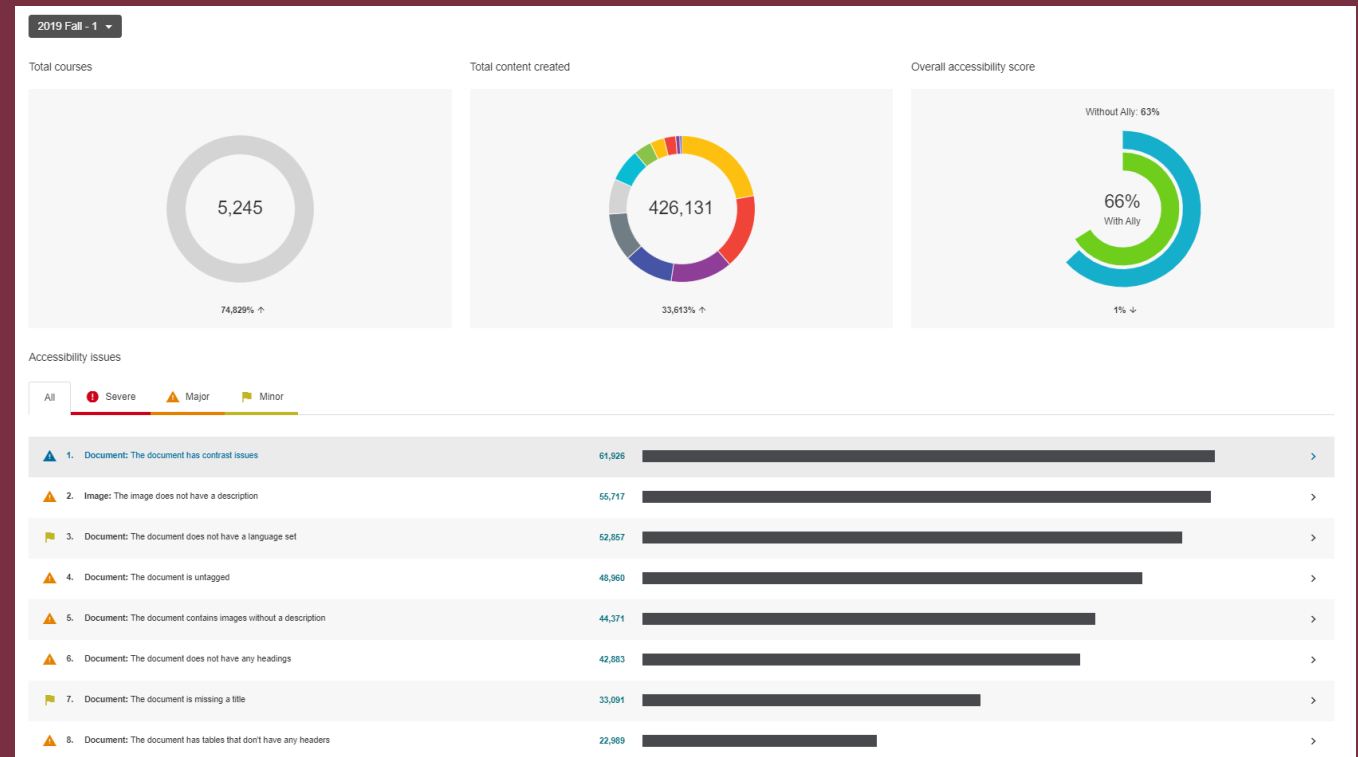
Blackboard Ally for Instructors, Part 3

- Ally also offers a course accessibility report which provides an accessibility summary and overview at the course level
- The report is also interactive allowing instructors to focus on the content and issues that need greatest attention first



Blackboard Ally for University Administration

- Ally's comprehensive reporting allows university, college, and department administrators to:
 - Gain an understanding of FSU's accessibility performance
 - View accessibility trends and detailed graphs to monitor improvement over semesters
 - Drill down into particular courses or content issues



How to Activate Blackboard Ally in Your Course

- You must request Blackboard Ally to be activated in each of your canvas courses
 - Via [ODL's Ally Request Form](https://odl.fsu.edu/allyenroll) (odl.fsu.edu/allyenroll)
- or*
- Email Dewel Lindsey - dlindsey@campus.fsu.edu
 - Please provide all the information listed below to identify each course
 - Course letters and numbers
 - Section
 - Semester
- You can request Ally to be activated on courses you have already taught so you can review previously used materials which may need updating

General Rules for All Documents, Part 1

- Check document using built-in accessibility checker
- Use descriptive file naming – develop internal policy
 - Good file naming: 2017-2018-SUS-Consolidated-Financial-Statement.pdf
 - Okay file naming : ArticulationRegulation.pdf
 - Not good file naming : Facilities-doc-8.xls
- Use predefined styles, *especially header styles*, and templates, if available
 - Screen Reader Header Example (bit.ly/2rTfQDH)
- Descriptive hyperlinks



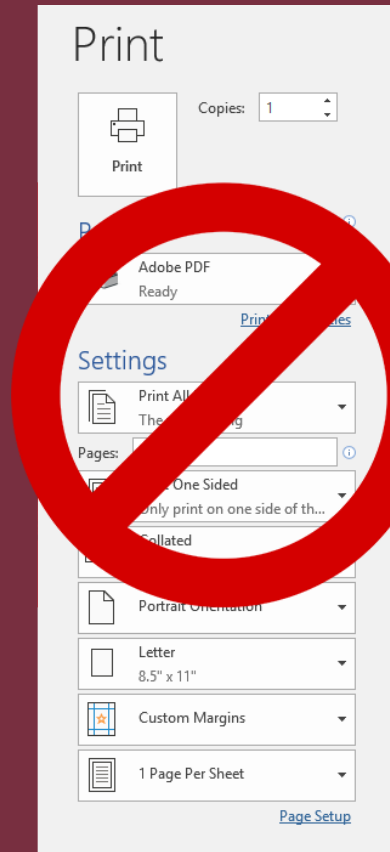
General Rules for All Documents, Part 2

- Don't use tabs or spaces to indent or center text
 - Do use built-in formatting such as center alignment and first-line indentation
- Don't underline text for emphasis; underlining generally indicates a hyperlink
 - Do use *italics*, **bold**, **color**, **different font**, and/or **text size** for emphasis
- Don't put blank lines between paragraphs
 - Do use space before and/or space after and line spacing
- Don't use multiple blank lines to go to the next page
 - Do use section or page breaks



Converting Office Files to PDF

- Fill out the document/presentation's basic metadata
 - Metadata will be used by Acrobat
 - Metadata is searchable
- Don't print to PDF
 - Do save document as PDF
- In PowerPoint, check object reading order in Selection and/or Reading Order Pane
 - The built-in Title 1 box will be tagged as Header 1 within PDF





Properties ▾

Size	170KB
Pages	6
Words	1933
Total Editing Time	183 Minutes
Title	Add a title
Tags	Add a tag
Comments	Add comments
Template	BOG_letterhead.dotx
Status	Add text
Categories	Add a category
Subject	Specify the subject
Hyperlink Base	Add text
Company	Specify the company


Related Dates

Last Modified	4/16/2019 9:58 AM
Created	4/11/2019 12:23 PM
Last Printed	4/5/2019 3:14 PM

Related People

Manager	Specify the manager
Author	 doeadmin Add an author
Last Modified By	 AK Azzato, Kristine

Related Documents

 Open File Location

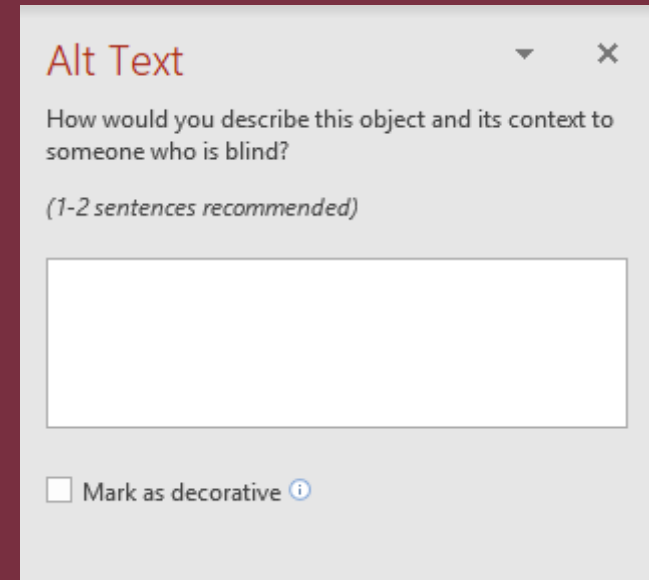
[Show Fewer Properties](#)

Lists & Tables

- Don't make your own bullets, numbering, and lettering for lists
 - Do use built-in lists button/function
- Tables
 - Define header row in table properties
 - Disallow row cells to break across page
 - Refrain from merging cells unless absolutely necessary
 - Don't use tables for formatting
 - Give table an alt-text/summary description

Images, Graphics, and Charts

- Give all graphics an alt-text description or denote it as decorative (PowerPoint 2019/Office 365)
 - What to put in alt-text descriptions?
 - Describe the type of image and what is shown
 - Explain what viewer is intended to get out of image
 - Describe the important information in a chart or graph
- Refrain from wrapping text around images unless decorative
 - Keep images inline (left, center, or right alignment)



The screenshot shows the 'Alt Text' dialog box with a title bar containing a dropdown arrow and a close button. The main text asks, 'How would you describe this object and its context to someone who is blind?' followed by a recommendation '(1-2 sentences recommended)'. Below this is a large text input field. At the bottom, there is a checkbox labeled 'Mark as decorative' with an information icon to its right.

Alt Text

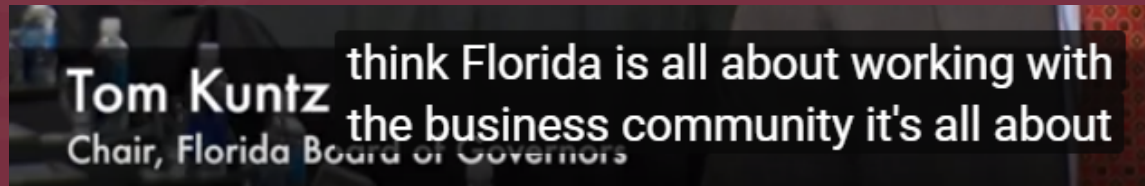
How would you describe this object and its context to someone who is blind?

(1-2 sentences recommended)

☐ Mark as decorative ⓘ

Videos

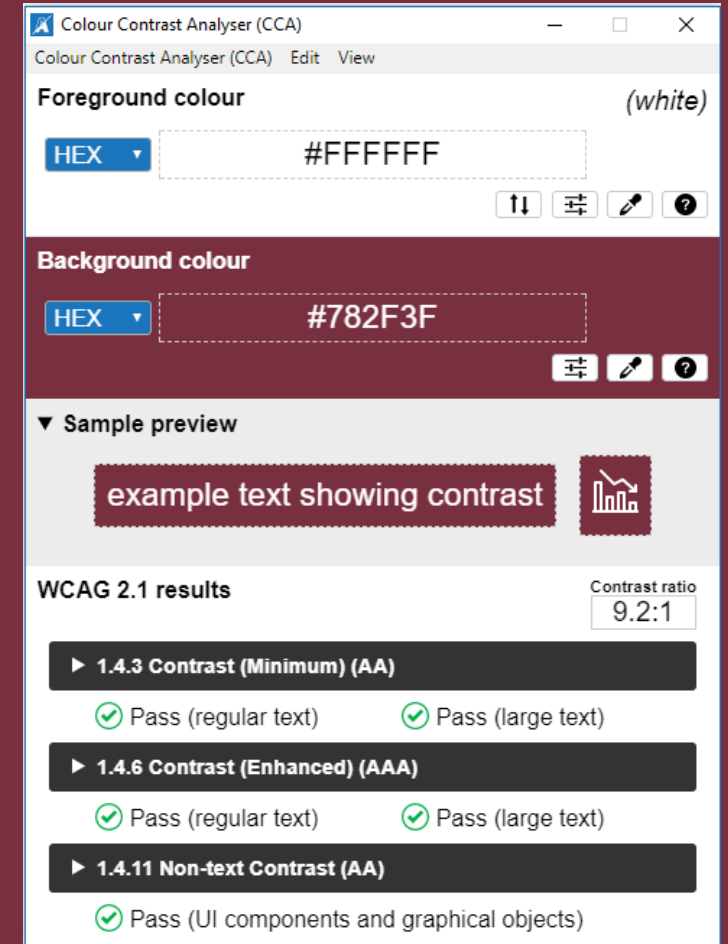
- Videos are required to have captions that are 99.9% accurate
- Captions must have correct capitalization and punctuation
- When showing text in video, be sure captions do not obscure text



- A best practice is for videos to have a textual alternative, such as a transcript
- Beware of auto-captioning; computer generated captions are not adequate to meet accessibility standards
 - Example: [Performance Based Funding Video](#)

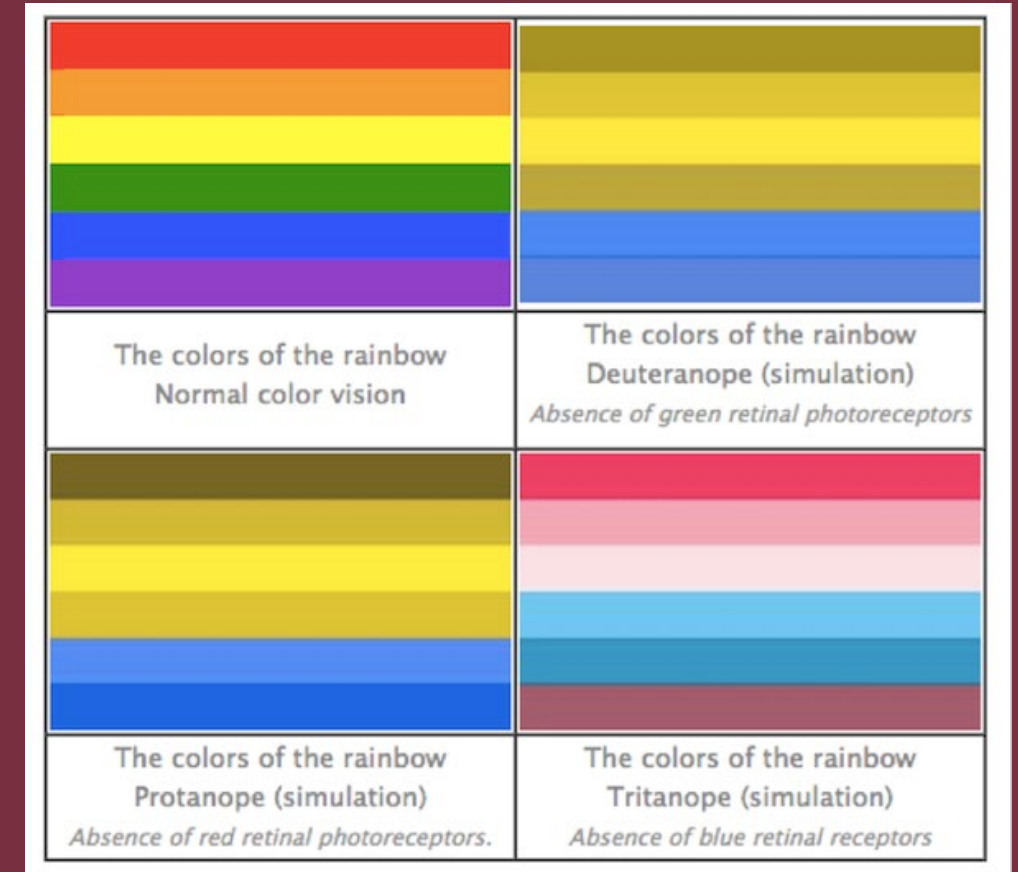
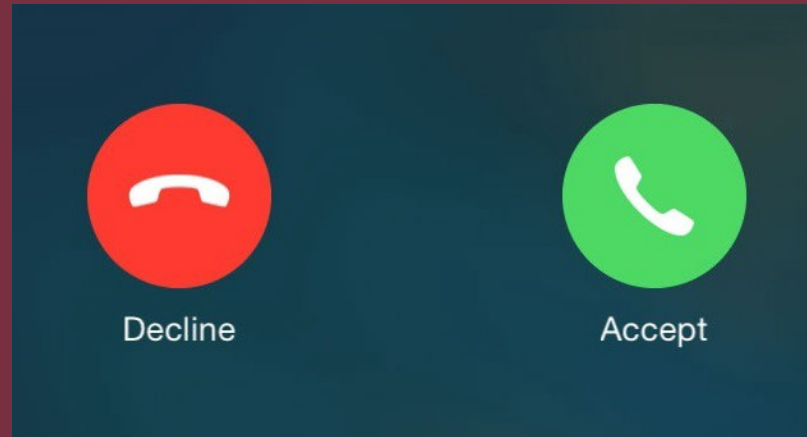
Color Contrast

- Make sure your text and backgrounds have a high color contrast
 - Examples of **poor** contrast
 - Examples of **good** contrast
 - Contrast ratio based on color luminosity
- Refrain from using patterned or picture backgrounds
- Color Contrast Checkers
 - [AIM Online Contrast Checker](https://webaim.org/resources/contrastchecker/)
(webaim.org/resources/contrastchecker/)
 - [Colour Contrast Analyser](https://developer.paciellogroup.com/resources/contrastanalyser/) - Program for PC & Mac
(developer.paciellogroup.com/resources/contrastanalyser/)



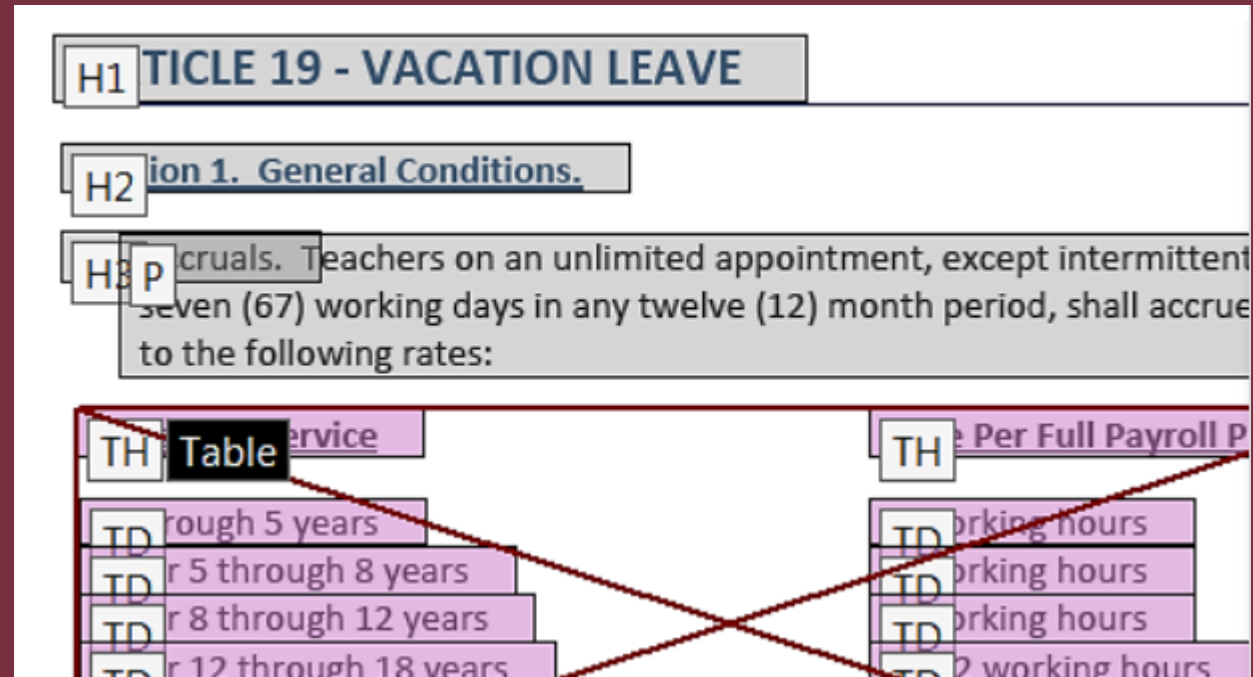
Color to Convey Meaning

- Do use color for emphasis and variety
- Don't use color as the only means of conveying meaning
 - Color blind people have difficulty distinguishing between reds, greens, browns, and oranges.



PDF Tags

- An accessible PDF contains tags which identify parts of the document
- Tags are necessary for assistive technology to navigate the document
- You *must* have **Adobe Acrobat Pro** to see and modify PDF tags



The screenshot shows the PDF tag structure for a document. The tags are as follows:

- H1** TITLE 19 - VACATION LEAVE
- H2** Section 1. General Conditions.
- H3** Accruals. Teachers on an unlimited appointment, except intermittent, shall accrue seven (67) working days in any twelve (12) month period, shall accrue to the following rates:

Below the text is a table with two columns. The first column is titled "Table" and the second column is titled "Per Full Payroll Period". The table is crossed out with a large red X.

Table	Per Full Payroll Period
Through 5 years	Working hours
For 5 through 8 years	Working hours
For 8 through 12 years	Working hours
For 12 through 18 years	2 working hours

PDF Accessibility

- If Microsoft Office document is accessible = PDF mostly accessible
- PDF forms fields must have additional information to make the form accessible
 - Give each field a descriptive name
 - Enter instructions to be read out loud in the “Tooltip”

The screenshot shows a PDF form for the State University System of Florida. The form includes fields for Date, First Name, Last Name, and several other text fields. A 'Text Field Properties' dialog box is open, showing the 'General' tab. The 'Name' field in the dialog is set to 'Text2', and the 'Tooltip' field is empty. The form text reads: 'Date: [Text1]', 'YOUR CONTACT INFORMATION - You may remain anonymous if you choose. However, it is most beneficial if we have the ability to contact you for additional information and/or clarification of the issues you are reporting.', 'First Name: [Text2]', 'Last Name: [Text3]', and several other text fields labeled Text5, Text10, and Text16.

The screenshot shows the same PDF form for the State University System of Florida, but with a 'Text Field Properties' dialog box open for a different field. The 'Name' field in the dialog is set to 'First Name', and the 'Tooltip' field contains the text 'Enter your first name.' The form text reads: 'Date: [Date]', 'YOUR CONTACT INFORMATION - You may remain anonymous if you choose. However, it is most beneficial if we have the ability to contact you for additional information and/or clarification of the issues you are reporting.', 'First Name: [First Name]', 'Last Name: [Last Name]', 'Home Phone No.: [Home Phone]', 'Cell Phone No.: [Cell Phone]', 'E-mail: [E-mail]', 'Home: [Home]', 'City: [City]', 'Your e: [Your e]', 'Work 1: [Work 1]', 'Work 2: [Work 2]', 'City: [City]', 'Zip: [Zip Code]', and 'Zip: [Employer Zip Code]'.

Questions?

Do you have questions?

- Contact Information:
 - Dr. John L. Crow
 - jlcrow@fsu.edu
 - (850) 645-0973

Additional Resources

- LinkedIn Learning Online Training:
 - [Creating Accessible Documents in Microsoft Office \(25m\)](#)
 - [Teaching Complex Topics \(creating lessons& assessments using UDL\) \(2h 38m\)](#)
 - [Creating Accessible PDFs \(4h 47m\)](#)
 - [Accessibility for Web Design \(2h 4m\)](#)
- FSU Canvas Support Articles:
 - [Accessibility & Usability Overview](#)
 - [Blackboard Ally Overview](#)

