

# Remediating PDFs in Adobe Acrobat Pro

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**Dates:** 3/2/20 - 3/22/20

## Goal of Instruction

After taking this course, you will be able to construct metadata and tag trees for PDFs (Portable Document Format) that are legible to screen readers such as NVDA or VoiceOver and preserve a logical reading order, rendering the PDF accessible.

## Rationale

There are no federal laws that set out standards for what makes a PDF accessible. The law that comes closest to dealing with PDF accessibility is the Americans with Disabilities Act (ADA), which states that all media in “places of public accommodation” must be made accessible. It neither defines exactly what such a “place” is, nor what the standard for accessibility is, nor does it mention PDFs. Websites are usually understood to be places of public accommodation. However, even this is ambiguous, as evinced by the recent controversy over whether the Domino's Pizza website needs to be accessible!

Academic institutions, especially small colleges with limited funding, face both an absence of clear federal or legal guidelines and a dearth of resources with which to meet recommended standards like PDF/UA. Even Adobe's support documents on remediation are dense and unwelcoming at best. So, when you (or faculty you support) need to place PDFs in an online instructional setting, how do you ensure those PDFs are accessible to all students? This module is intended to equip staff in a small instructional design/technology department with the skills needed to help PDFs meet some basic benchmarks of accessibility drawn from the PDF/UA standard.

The course will focus on the metadata and tagging workflows in Adobe Acrobat Pro. Tags are markers added to each unit of content in a PDF—headers, paragraphs, figures, lists, tables, and more—that let screen readers identify the document's reading order and allow visually-impaired users to navigate the document in a meaningful way. The module will also touch on adding metadata to a PDF, embedding fonts, and using Adobe's accessibility checker.

It's in the best interest of staff and students to get in the habit of making PDFs as accessible as possible before it becomes a legal requirement to do so. Schools that don't do this may

someday find themselves with a massive backlog of inaccessible media and not a lot of time or resources to fix it. These practices take time to develop, and this module will provide only the first few steps, not a full primer on PDF/UA. But, it's a good place to start.

As a summative assessment, this course asks participants to perform the full remediation process on a model PDF so that it passes Acrobat's Accessibility Full Check tool, test it in a free screen reader, and reflect on their experience.

## Audience

This course is intended for instructional technology/design staff at a small college who manage online courses and want to learn more about digital accessibility, or implement their own remediation workflows.

## Prerequisites

Skills necessary for successful completion of this course include:

- Ability to conduct research using Google or other major search engines
- Ability to identify common digital document formats including Word documents and PDFs

I recommend brushing up on research skills by practicing searching for terms in Google Scholar and reviewing its documentation, and by going over APA citation style. We won't be doing a lot of research in this course, but research will be necessary to find model PDFs and to learn more about the remediation process, especially if specific challenges arise. You will be expected to seek out a solution first before contacting me.

## Technological Requirements

Technologies and proficiencies necessary for successful completion of this course include:

- Proficiency with Adobe Acrobat Reader
- Proficiency with Microsoft Word
- License for Adobe Acrobat Pro
- Computer able to run Adobe Acrobat Pro
- Internet connection able to support Canvas

## Enabling Objectives and Assessments

The following weekly objectives will enable you to master the course's goal: to remediate PDFs by constructing their metadata and tag trees.

All assessments will be completed in Canvas, and will receive a grade and comments, delivered via the Canvas [Grades](#) section, within 72 hours of their due date/time. Although I will provide as much as I'm able, please also take your peers' comments seriously! Their experience and the solutions they've found to the various challenges in remediating PDFs will be invaluable.

**Week 1. (Evaluate)** Determine whether a PDF is a suitable candidate for remediation.

### **Assessment: Ranking Candidates for Remediation**

Participants will be given three model PDFs, each with different challenges to their accessibility. They will be asked to measure the initial accessibility of each PDF and its potential to be remediated, based on the accessible qualities they will learn to identify. Participants will rank the models and provide feedback justifying their decisions in a discussion. They will also take a short quiz, housed in Canvas, demonstrating their mastery of content covered so far.

This assessment will measure these objectives:

1. **(Understand)** Describe the qualities of an accessible PDF, including Optical Character Recognition (OCR), contrast, sharpness, and composition.
2. **(Apply)** Determine whether a given PDF has undergone OCR and has sufficient contrast, sharpness, and composition to be made accessible.
3. **(Evaluate)** Compare a scanned document with a born-digital PDF.
4. **(Understand)** Explain why a fully-remediated PDF functions in screen readers, and why this matters to the user experience.

**Week 2. (Create)** Create metadata for a PDF in Adobe Acrobat Pro.

### **Assessment: Challenges Finding or Adding Metadata**

Participants will select one of three model PDFs and create its metadata using the Properties panel and Preflight tool in Adobe Acrobat Pro; this includes title, author, copyright status, initial view, language, and embedded fonts. They will then submit a brief summary of their process of discovering this data and any pain points encountered to a Canvas discussion and comment on two peers' replies. They will also take a short quiz, housed in Canvas, demonstrating their mastery of content covered so far.

This assessment will measure these objectives:

1. (**Apply**) Use the Properties panel to add a PDF's title, author, initial view, language, and copyright status to its metadata.
2. (**Apply**) Use the Preflight tool to embed fonts in a PDF.
3. (**Create**) Compose brief, descriptive alternate text for all figures in a PDF.

**Week 3. (Create)** Construct a tag tree for a PDF containing searchable text and images in Adobe Acrobat Pro.

### **Summative Assessment: Accessible PDF and Executive Summary**

Participants will continue work on the PDF they selected previously or choose a new one from provided models, generating and correcting a tag tree with correctly ordered headers, lists, and a table if applicable. They will run the Full Check tool and make corrections until the report is clear. Participants will test their accessible PDFs with a free screen reader such as VoiceOver or NVDA. They will then post their accessible PDF and a 400-500 word executive summary and reflection on any pain points they encountered to a Canvas discussion.

This assessment will measure these objectives:

1. (**Apply**) Use auto-tagging to generate a rough tag tree for a PDF.
2. (**Analyze**) Classify headings, lists, and tables in a PDF.
3. (**Evaluate**) Assess whether a PDF's tag tree flows in a logical reading order, and correct it if necessary.
4. (**Apply**) Use the Full Check tool to produce a list of leftover accessibility issues in a PDF that has been remediated.

## Grade Distribution

<b>Assessment</b>	<b>Percent of final grade</b>
Week 1 Discussion	20%
Week 1 Quiz	10%
Week 2 Discussion	20%

Week 2 Quiz	10%
Week 3 Deliverable (posted via discussion)	40%
	=100%

I will calculate your final grade according to this scale:

- 93-100%: A
- 90-92.99%: A-
- 88-89.99%: B+
- 83-87.99%: B
- 80-82.99%: B-
- 78-79.99%: C+
- 73-77.99%: C
- 70-72.99%: C-
- 62-69.99%: D
- 0-61.99%: F

## Discussion Expectations and Etiquette

All discussions will ask you to give a substantial response to at least 2 of your peers before the end of that week. "Substantial" means the comment is at least 2-3 sentences and makes a productive suggestion or asks a specific question. Instead of only saying whether you liked or disliked the post, point to something specific and intriguing in the post, an aspect you'd like to know more about, or an aspect for which you can respectfully suggest improvement.

The Week 1 and 2 discussions will each be worth 20% of your final grade: 10% based on your post, and 10% for your peer responses (5% per peer). Responding to additional peers is encouraged, but it will not factor into grading.

The final Week 3 discussion, where you post your deliverable, will be worth 40% of your final grade.

## Late Work Policy

Late work will be docked 10% for each day it is late. I will not accept work more than three calendar days after it is due.

## Communication Policy

Your success in this class is important to me. If you have any situation that may impact your work or well-being, please contact me early in the semester so that we can work together to meet your needs. You can reach me at [ajengel8@gmail.com](mailto:ajengel8@gmail.com) or by using the [Canvas Inbox \(Links to an external site.\)](#). I will do my best to respond to all messages within 24 hours during business days.

## Non-Discrimination Policy

This course does not discriminate against learners based on race, color, national origin, religion, sex, sexual orientation, gender identity, age, or disability. In this course we will strive to maintain an open atmosphere with shared respect for all people. Such respect is vital for your success in this classroom and in your professional career.

## Academic Honesty Policy

Any time you quote from, paraphrase, or otherwise borrow text, images, ideas, video footage, audio, etc., you are required to cite each source correctly in APA style (or another applicable citation style). Failure to do so will result in either intentional or unintentional plagiarism, which will disqualify you from the course. Should you have questions about whether something needs to be cited or how it should be cited and you can't find the answer on your own, always check with me before submitting your work.

## Course Schedule

Week	Topic	Assessments
Week 1 (3/2 - 3/8)	Can it be remediated?	Discussion: Ranking candidates for remediation (post due <b>3/6 at 11:59pm</b> ; peer replies due <b>3/8 at 11:59pm</b> )  Quiz: Knowledge Check #1 (due <b>3/8 at 11:59pm</b> )
Week 2 (3/9 - 3/15)	Adding Metadata	Discussion: Challenges finding or adding metadata (post due <b>3/13 at 11:59pm</b> ; peer replies due <b>3/15 at 11:59pm</b> )

Quiz: Knowledge Check #2 (due **3/15 at 11:59pm**)

**Week 3**  
(3/16 - 3/22) Building a tag tree

Deliverable: Accessible PDF and executive summary (post due **3/20 at 11:59pm**; peer replies due **3/22 at 11:59pm**)