# Accessible Digital Design

Creating websites that can be navigated and used by people with disabilities requires a different mindset, both in terms of design and development. Blind users use screen readers to read websites to them. Hearing-impaired users will use closed captioning to understand a video or podcast. People with motor difficulties may be unable to use a mouse, instead navigating by keyboard, voice or touch, while people with cognitive disorders may require a different reading level. This course walks students through what it means to be disabled and how those disabilities impact their web experiences. From there, designers will dive into scenarios of how they can employ the Web Content Accessibility Guidelines (WCAG)—and their creativity—to ensure their designs are accessible to everyone.

## COURSE OUTCOMES

After completing this course, learners will be able to...

- Have a greater appreciation for the challenges people with disabilities face in their day-to-day
- Identify accessibility barriers in their own environment
- Identify the tools disabled individuals use to navigate the digital world
- Understand accessibility initiatives, including the ADA and WCAG 2.0
- Think outside the typical accessibility approach based around guidelines
- Create immersive experiences that work for anyone

## COURSE LOGISTICS

| Format | Credits | Meeting Place | Days | Times |
|---|---|---|---|---|
| Online Course | 3 Credit Hours | Online | No class meetings. | Online. Anytime (unless a scheduled synchronous meeting) |

Expect to visit the Canvas site for this course at least four times a week for discussions, exercises, announcements, and other activities/information. This site will be our main classroom.

## INSTRUCTOR

| Coleen Sallot | Office Hours |
|---|---|
| Teaching Assistant [sallotcm@miamioh.edu](mailto:sallotcm@miamioh.edu) | Tuesdays, 2:00–4:00 p.m. Eastern (one-on-one office hours) |

| Coleen Sallot | Office Hours |
|---|---|
| 223 Hiestand Hall<br>Miami University<br>Oxford, Ohio | I can meet after "normal" work hours. If you would like to meet after 6 p.m. in your time zone, please ask me and I will do my best to make it work. |

Please use the [Course and Assignment Questions Discussion](#) to ask about coursework. I typically respond to email twice per university business day during the school year. Please allow for a 24-hour response period for all emails during these times. I may not reply to messages on weekends. If you have an urgent question or need, please do not rely on email as your only means of contact. If you miss a class or do not post work to a critique on time, you will have to wait until the next class meeting or activity to receive feedback.

# COURSE ACTIVITIES

Activities in this course will include a mix of quizzes, presentations, exercises, projects, completed individually and in groups. Learning design requires everyone in the course is engaged, completing work and sharing constructive criticism in critiques and discussions. Attendance, timeliness, and preparedness are imperative if you expect to grow your design thinking, knowledge, and skills.

## Grade Breakdown

Course activities and grading for this course will be weighted. This weighting will be the most significant factor in determining your final grade.

| Course Activity | % of Final Grade |
|---|---|
| Course Orientation Activities | 5 % |
| Accessibility Challenges & Collaborative Studio Workshops | 10% |
| Discussions | 15% |
| Design Projects | 35% |
| Final Project | 35% |
| *Total* | *100%* |

### Assignments

### Accessibility Challenges

Accessibility challenges are quick, informal assignments that will be shared through designated channels on our Slack workspace. They are designed to get designers outside the classroom and explore accessibility challenges in their own environment. You will be expected to post and reply to earn the completion points associated with these activities. You can expect one accessibility challenge per week.

### Collaborative Studio Workshops

We will have three synchronous sessions conducted via Zoom this semester. Our collaborative studio workshops allow us to bring in outside partners to help us better understand and address the challenges people with disabilities face. Each workshop will have an agenda and will require you to come with specific materials prepared to engage in a dialogue with the outside expertise that is necessary for each design project. Participation points will be assigned based on your attendance and ability to achieve the specific tasks assigned. Stay tuned for upcoming dates.

### Discussions

Discussions ask you to provide a written response to an open-ended prompt. You can expect about 1-3 discussion assignments per module.

### Design Projects

You will have three unique design projects this semester focused on three domains of disabilities: visual, hearing, and mobility. You will have four weeks to complete each design project. Each design project is geared toward taking you out of your comfort zone so you can create truly immersive experiences that work for anyone.

### Final Project

Your final project for this class will be to choose a website, application or piece of functionality you feel presents accessibility challenges. You will document the current accessibility experience using an audit tool and journey maps. You will then create a plan on how to redesign it, spend time creating your design solution, and then present your final solution using Adobe Spark.

## COURSE SCHEDULE

This schedule is an overview of the content we will cover this semester.

| *Week 1* | **00. Course Orientation** | **Objective:** Course expectations, housekeeping, and introductions. |
| | | **Discussion:** Introduce yourself and talk about someone in your life who has a disability. |

| | | |
|---|---|---|
| *Week 1* | **01. What is Accessibility?** | **Objective:** Learning about the different types of disabilities, the types of tools used by people with disabilities, and past/current web accessibility initiatives. |
| | | **Assignment:** Review the WCAG 2.0 criteria. Run five websites through the WAVE audit tool and explain why or why not they succeed in accommodating disabled users. |
| *Weeks 2-5* | **02. Designing for the Blind** | **Objective:** Exploring what it means to be blind in today's society, the challenges they face, and the tools they use to navigate the web. |
| | | **Accessibility Challenges:** |
| | | <ul><li>Choose a handful of items. Close your eyes and pick up each item and attempt to guess what it is.</li><li>Take a video of yourself reading in Braille.</li><li>Navigate a website using different settings for color blindness.</li></ul> |
| | | **Assignment:** Acting like you are blind, conduct a regular online task (order a pizza, etc) using only a screen reader. Post your insights and questions in the discussion. |
| | | **Project:** Voice is a key feature of designing for the blind. In a collaborative studio workshop you and your group will co-design a new Alexa skill for this population. |
| *Weeks 6-9* | **03. Designing for the Deaf and Hearing Impaired** | **Objective:** Exploring what it means to be deaf or hearing-impaired in today's society, the challenges they face, and the tools they use to navigate the web. |
| | | **Accessibility Challenges:** |
| | | <ul><li>Take a video of yourself spelling your name in sign language.</li><li>Go shopping wearing noise-cancelling headphones, so you have to rely on the cashier for information.</li><li>Conduct a phone call with a friend using only a captioning service.</li></ul> |
| | | **Assignment:** Attempt to understand a video using only a person's facial expressions and body gestures. Post your insights and questions in the discussion. |
| | | **Project:** Visuals are key for people who are hearing-impaired. In a collaborative studio workshop you and your group will co-design a Zoom conference format that will work for this population. |

| | | |
|---|---|---|
| *Weeks 10-13* | **04. Designing for the Mobility-Impaired** | **Objective:** Exploring what it means to be mobility-impaired in today's society, the challenges they face, and the tools they use to navigate the web.<br><br>**Accessibility Challenges:**<br><br>• Go shopping at your favorite store using a crutch or, even better, in a wheelchair.<br>• Navigate your favorite website using only a keyboard.<br>• Conduct a conversation using a text-to-speech app.<br><br>**Assignment:** Go about your day only using your index and middle finger (no thumb). Post your insights and questions in the discussion.<br><br>**Project:** Finding alternate methods to navigate their environment are crucial for people with mobility impairments. In a collaborative studio workshop you and your group will co-design a touch-based app that will work for this population. |
| *Weeks 14-16* | **05. Final Project** | **Objective:** Exploring real-life examples of accessibility challenges and using your knowledge and design skills to redesign them.<br><br>**Project:** Choose a website, application or piece of functionality that presents accessibility challenges. Document the current experience, redesign it, and present your final solution using Adobe Spark. |

# COURSE REQUIREMENTS

## Required Texts

A varied, extensive, and interdisciplinary reading list will be thoroughly studied by all learners in this course.

## Required Software

You may use any software you like to complete assignments, but the following are highly recommended. These are standard software in design professions and you likely have them already. Make sure to get student pricing when available.

- Adobe Creative Cloud
- Slack

## Required Equipment and Materials

- A camera (can be on computer, tablet, or smartphone)
- Microphone or headset (many internal microphones do not record high-quality audio)
- Software to record your screen, voice, and image
- Internet access
- A computer (laptop preferred)

## Attendance for Online or Hybrid Courses

Attendance requirements for courses with online or hybrid formats may not always involve synchronous meetings. In this course, the focus shifts away from "in-class minutes" to "time spent on tasks." It is important that all activities in this course are completed in order to meet the "time spent on task" requirement for credit.  In this course, it is important to pay close attention to the course schedule to determine attendance requirements on a weekly basis. If you have questions about a requirement, please contact me.

Our collaborative studio workshops have point values associated with them. Missing these required events may impact your grade.

It is your responsibility to provide information concerning all absences and you should speak to me before missing a class. The determination of an excused vs. unexcused absence is up to my discretion (doctor's written excuse for example).

Do not arrive late or leave early for class. If you arrive late it is your responsibility to make sure you are counted as present. Notify me that you arrived late at the end of class. Please see the student handbook for specifics on university policies.

## On-time Work and Penalties for Late Work

All stages of each assignment are expected to be completed on time—the more developed your ideas and form are in class, the more feedback can be offered. Project work that is incomplete when it is due such as missing thumbnails, will not be critiqued. Each project must be prepared according to the project specifications. This course was designed to emulate a professional design studio environment and the expectations of students are no different.

All projects/assignments are due on the day and time the instructor specifies. Students are responsible for turning in work on time regardless of attendance. Any work turned in late will lose one letter grade (10 points on a 100 point scale) per calendar day (24 hours) past the moment when the assignment was due. This deduction penalty begins immediately following the project's initial due date. The instructor may waive this penalty should a student experience a medical emergency that prevents them from turning in their work. In these instances, it is the student's responsibility to communicate with the instructor that the work will be turned in late due to a medical emergency and a note signed by a doctor will be required.

## COVID-19 Information

In addition to your learning, I am concerned with the health and safety of you and your community. Whether you have opted for face-to-face instruction here in Oxford or plan on staying online for the semester, I encourage you to do everything you can do to stay safe and use good judgment while going to class and participating in outside social events. The best way to prevent illness is to avoid being exposed to this virus. However, as a reminder, the Centers for Disease Control and Prevention (CDC) [recommend several everyday preventive actions to help prevent the spread of COVID-19](#). Additionally, Miami University has compiled its own policies, procedures, and guidelines related to COVID-19 on its [Healthy Together](#) website.

If you are unable to attend class or complete course work due to COVID-19 or another serious illness, you should notify me through email or Canvas messenger as soon as possible. We will work together to create accommodations for you to access all course material and complete missed assignments in a timely manner. You will not be penalized for absences/late work assuming you make-up missed assignments in accordance with our agreed-upon accommodations.

If I become unable to teach due to COVID-19, I have arranged a substitute instructor to fill in for me while I get well. I will notify you as soon as possible through a Canvas announcement if the substitute takes over teaching for me. The substitute instructor has the right to change any and all aspects of this course, if necessary.

# EVALUATION

## Grading System

This course uses a letter grade mode. The final grade for this course will be factored into your cumulative GPA.

## What Will Be Graded?

Graded activities in this course include:

- Individual and Collaborative Design Projects
- Discussions
- Accessibility Challenges
- Collaborative Studio Workshops
- Quizzes

These activities earn points in different ways. Here's a breakdown for each graded activity type.

| Activity | How points are earned | Total points possible |
|---|---|---|
| Discussions | Specific learning objectives vary based on | 5 points per learning objective—points |

| Activity | How points are earned | Total points possible |
|---|---|---|
| Design Projects | the activity | add up to a total possible score |
| Collaborative Studio Workshops | Points for participation | 10 points per Collaborative Studio Workshop |
| Accessibility Challenges | Points for completion | 10 points per challenge |
| Quizzes | Points for correct responses | Depends on the number of questions per quiz |

## Learning Objectives and Grading

Every graded activity in this course will have a set of learning objectives. Some activities will have many learning objectives and some will have only a few. If you want to know what to focus on when completing an activity, look closely at the outcomes. Learners' performance on each objective will be evaluated and a score will be given for the achievement level achieved.

A maximum of 5 points may be earned for each objective. These achievement levels include:

| Exemplary | Mastery | Developing | Beginning | Incomplete | Missing |
|---|---|---|---|---|---|
| extraordinary performance | full competency | approaching competency | basic execution | missing assigned elements | no apparent attempt |
| 5 pts | 4.5 pts | 4 pts | 3.5 pts | 3 pts | 0 pts |

### Grading Examples

The following examples demonstrate how performance on learning objectives are evaluated and how points are awarded.

| Learning Objective | Work Example | Evaluation Earned | Points Earned |
|---|---|---|---|
| Demonstrate careful attention to | Layout grid was unclear, typos in | Beginning | 3.5 pts |

| Learning Objective | Work Example | Evaluation Earned | Points Earned |
|---|---|---|---|
| detailed execution. | writing, mounting was not straight | | |
| Produce the required number and frequency of comments over the discussion session period. | Three posts were required but the learner posted five comments over the course of three days. | Exemplary | 5 pts |
| Work collegially and collaboratively during the project process. | In a group project, team members gave feedback that the individual was great to work with and did everything they were assigned to do on-time. | Mastery | 4.5 pts |
| Demonstrate observation skills that render detailed, high-fidelity field notes. | Field notes were not included in the final report. | Missing | 0 pts |
| Create a clear information hierarchy using typographic styling and sizing. | A mix of sizes, bold, and italics was used to create a usable and understandable hierarchy. | Mastery | 4.5 pts |

All earned points for objectives are added together and divided by the total points possible for the activity. This number is multiplied by 100 to produce the earned percentage grade for the activity. The calculation below uses the four above objectives as an example:

| Total Earned Points | | Total Possible Points | | As Percentage |
|---|---|---|---|---|
| 17.5 pts | divided by | 25 pts | x 100 = | 70% |

**Converting to Letter Grades**

All percentage grades relate to a letter grade that will be the final grade for the course. The standard Miami University grade scale is shown below.

| A | B | C | D | F |
|---|---|---|---|---|
| A+ 100–97 | B+ 89–87 | C+ 79–77 | D+ 69–67 | F 60-0 |
| A 96-94 | B 86–84 | C 76–74 | D 66–64 | |
| A- 93–90 | B- 83–80 | C- 73–70 | D- 63–61 | |

Final grades are recorded to the hundredths place and will be rounded to the nearest whole number before a letter grade is recorded. A "5" in the tenths or hundredths place will be rounded up. Example: 91.5% will be rounded up to 92. 91.4% will remain 91. 91.45% will be rounded up to 92.

Details about grading are available at the Office of the University Registrar: Grades web page.

# POLICIES

## Zoom Policies

The Miami University Student Handbook applies to online behavior as well as in-person or classroom behavior. You are expected to be professional and respectful when attending class on Zoom. The following are class policies for our meetings with Zoom. All learners are expected to adhere to the policies. Class meetings on Zoom (including video, audio, and chat text) may be recorded. Violations are subject to the Miami University Student Code of Conduct and will be adjudicated accordingly.

**General**

Sign in with your full first name and last name as listed on the class roster. Do not use a nickname or other pseudonym when you log in. It makes it impossible to know who is in attendance. Using your full name quickly sorts students into their groups when needed. Users who do not provide their full names will NOT be admitted to class.

- *Exceptions*
  Since enrolling in class, some students may have changed their names to better reflect their gender identity. If you currently use a different name than what is listed on the official roster, please send me a private Canvas message so this can be noted on the roster and you can use your current name on Zoom. (If you would like to change your name officially with Miami University, please see the Center for Student Diversity & Inclusion for more information).

If you do not have access to a computer or smartphone with internet access, call into class using a landline phone. This is not optimal; please try to locate an internet-enabled device to use for class.

Stay focused. Please stay engaged in-class activities. Close any apps on your device that are not relevant and turn off notifications.

If you need technical help contact the IT Help Desk at [MiamiOH.edu/ITChat](MiamiOH.edu/ITChat) or 513-529-7900.

**Video**

Turn on your video when possible. It is helpful to be able to see each other, just as in an in-person class.

- *Exceptions*
  If you have limited internet bandwidth or no webcam, it is ok to not use video. If you're unable to find an environment without a lot of visual distractions, it is also ok to turn off your video.  If you're overwhelmed or have Zoom fatigue, it is also ok to turn off your video.

Keep it clean. Don't share anything you wouldn't put up on the projector in class!

**Audio**

Mute your microphone when you are not talking. This helps eliminate background noise.

Use a headset when possible. If you own headphones with a microphone, please use them. This improves audio quality.

Be in a quiet place when possible. Find a quiet, distraction-free spot to log in. Turn off any music, videos, etc. in the background.

**Chat**

Stay on topic. Use the chat window for questions and comments that are relevant to class. The chat window is not a place for socializing or posting comments that distract from the course activities. If you fill it up with random comments, I will be unable to sort through the information quickly to address students' real questions/concerns about the course.

No disrespect or hate speech. Just like in our in-person class, respectful behavior is expected. Consider Zoom a professional environment, and act like you're at a job interview, even when you're typing in the chat.

## Classroom Climate

We all learn best when we engage, and this course is designed to encourage active participation. It's critical that classroom discussions and critiques are conducted respectfully, practicing tolerance and respecting others ideas. Be mindful of these differences –we all come from a variety of experiences. All discussions should be respectful of those differences so all everyone's learning is enhanced by

contributions. I believe in a supportive climate that is conducive to learning and I will make every effort to facilitate an environment that encourages interaction and mutual respect for differing ideas.

## Accommodating Different Abilities

If you are a student with a disability and feel you may need a reasonable accommodation to fulfill the essential functions of this course, you are encouraged to contact Student Disability Services (SDS). SDS provides accommodations and services for students with a variety of disabilities, including physical, medical and psychiatric disabilities. You are encouraged to contact SDS to learn more about registration and procedures for requesting accommodations.

- Oxford Campus: SDS@miamioh.edu
- Hamilton Campus: MUHODS@miamioh.edu
- Middletown Campus: MUMDC@miamioh.edu

Current SDS registered students should request accommodations according to [SDS procedure](#). You are strongly encouraged to request and discuss your accommodations needs during the first 1-2 weeks of the semester.

## Religious Observations

Students will be excused for a religious observance that requires the student to be absent. If the observance may be made at any time during the day, please arrange to fulfill your religious obligation at some other time than during class. In addition, please note that Section 701 of the Student Handbook requires the student to tell the faculty the date of the observance, if officially known, in writing during the first two weeks of class.

## School Sponsored Athletics

I will gladly excuse student-athletes from class when necessary for school-sponsored athletic events. However, please note that Section 701 of the Student Handbook requires the student to tell the faculty the date of the event in writing during the first two weeks of class. Please see the Student Handbook for additional details.

## Academic Honesty

Plagiarism is literary or artistic theft. It is the false assumption of authorship; the wrongful act of taking the product of another person's mind and presenting it as one's own. Copying someone else's writing or art, intact or with inconsequential changes, and adding one's name to the result constitutes plagiarism. Assignments must be your own work unless they are specifically group projects. At times, designers will use content like photography which was generated by someone else. In these cases, the original content owner/producer must be credited, if such use is allowed by law. It is unlawful and unethical to copy work found elsewhere such as a social networking site and make a "close copy" or to make only slight changes and present it as one's own work. Evidence of plagiarism can lead to failure of the project

and/or dismissal from the class with a grade of F. Visit the [Miami University Academic Integrity website](#) for full information regarding academic integrity.

## Computer Failures

No allowance is made for computer or network failures. Be sure to back up your work frequently and do not wait until the last minute to complete the assignment. Use Dropbox, Google Drive, or another cloud-based storage method to keep copies of working files. A portable hard drive paired with Time Machine or another backup solution for periodic comprehensive backups can help you recover from hardware failures when they happen.

## Taking Exams, Tests, and Quizzes

Any exams, tests or quizzes administered in this course will begin when the instructor hands out testing instruments. Out of respect for those completing the exam/test/quiz and in order to create the ideal environment possible for test taking, no one will be permitted to enter the classroom during the exam period. Please be sure to arrive at class on time on exam days and should you need to be late due to an external circumstance, notify the instructor in advance. Online quizzes and exams may be taken anywhere you like during the quiz window.

## Use Of Lab/Studio Equipment

All students should treat computer and studio equipment with respect and care while following safety procedures set out by manufacturers and faculty. Unauthorized use of the lab is a violation of the student code of conduct. This includes equipment in any of the communication design rooms (studio, computer lab or hand media room). Please review the technology chapter of the student handbook. Depending on the infraction, a student could be charged at the university level for a code of conduct or academic violation.

## Electronic Devices

Mobile phones must be silenced while class is in session out of respect for your fellow students in an effort to create an ideal learning environment for all. Text messaging and the use of social networks while in class is permitted only if it is part of a class-wide project or learning experience. Additionally, please be respectful about cell phone use—if you must take an emergency call, please leave the room to take it. Laptops are permitted in class but will only be used during work-in-class days or if you are using the computer to make notes or to show your work for in-class critique. If you listen to music while in class, please use headphones or earbuds that do not allow sound to escape out of respect for other learners.

## Jobs, Internships, and Resources

Our program hosts [a resources website at inside.designmiamioh.org](#) where job opportunities, internships, design resources, events, and other information is posted when it becomes available. The site is password protected and only accessible to current and former students in our design program.

## Archival Images and Work

At the end of the semester, each student may be required to turn in images of all of their projects for review and storage. One image of each project is sufficient — a compilation of several images may be more appropriate depending on the scale of a project. A comp of dimensional projects should be produced and photographed on a white background. Flat projects like posters may be saved as press-ready PDF files from the original digital file. Motion-based work should be saved into a file format that can be easily played/presented. These images may be used in promotional materials for the program and the university and also may be used by the instructor to assist future teaching. If required by the instructor, these files must be turned in for the course to be considered complete.

Each image should be labeled in this way: [coursenumber]_[projectname]_[ studentlastname].pdf (For example: 251_Splice_Smith.pdf). Images should be saved at full press-ready resolution (300 dpi). Students will upload these images to Google Drive into a folder specified by the instructor.

## Work Requested for Display

Some students may have their work selected for display in the Art Department and University galleries and facilities. These students will be notified in advance that their work has been selected. The format for these files can be found at the inside.designmiamioh.org website

## Printing Resources and Expectations

Our studios and production suites are equipped with a variety of printers, tools, and supplies that are provided for student use 24 hours a day when classes are in session. Our program and the Art Department have put processes in place in order to ensure the maximum amount of printer up-time. However, equipment can sometimes fail and should you have a problem with a printer or a piece of equipment that you cannot fix yourself, please add your concern to the form outside the office at Hiestand 206. This document is checked at least once a day. If you build printing and compositing time into your work processes and notify staff of any issues in a timely manner, you will likely avoid most problems that arise during printing and production.

## Resource Usage Reduction

As designers, it is our responsibility to be mindful of the resources we employ. Please endeavor to limit your paper production when it is not necessary and recycle the materials you do use when they are no longer of use.

## Course Evaluations

Students are required to complete an evaluation of faculty performance at the conclusion of the semester. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider the completion of this short survey to be an important part of your participation in this class as it is your opportunity to share your thoughts on how the class is taught and how it can be

improved. You will be notified of the dates for the administration of the student evaluation of faculty by the university.

## Electronic and Social Media

I regularly post design discoveries and insights to social media and you are welcome to follow me. Regarding "friending" current students on Facebook... I would enjoy keeping in touch with you through Facebook but only after graduation.

## Recording

No audio or video recordings of the course may be made without the instructor's permission.

## Student Handbook

Each Miami University student is entitled to certain rights and responsibilities associated with higher education institutions. Take time to familiarize yourself with the student handbook This class adheres to all standards set out in this document. You can find the Student Handbook at the [Miami University Policy Library website](#)

## Changes

The instructor reserves the right to make adjustments/changes to the course syllabus with or without notice.