

**George Mason University  
College of Education and Human Development  
Learning Design and Technology (LDT)**

EDIT 526-B01.41231 (2cr)  
EDIT 526-B02.43834 (2cr)  
EDIT 526-B03.44328 (3cr)  
Web Accessibility and Design  
Summer 2023  
Online

**Faculty**

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**Prerequisites/Corequisites**

None

**University Catalog Course Description**

Develops understanding of principles of universal web and document design. Students apply this understanding by designing and developing accessible websites and documents using web and document authoring tools. Offered by [School of Education](#). May not be repeated for credit.

**Course Delivery Method**

This course will be delivered online (76% or more) using an asynchronous format via Blackboard Learning Management system (LMS) housed in the MyMason portal. You will log in to the Blackboard (Bb) course site using your Mason email name (everything before @*gmu.edu*) and email password. The course site will be available on May 29<sup>th</sup>, 2023.

**Under no circumstances, may candidates/students participate in online class sessions (either by phone or Internet) while operating motor vehicles. Further, as expected in a face-to-face class meeting, such online participation requires undivided attention to course content and communication.**

**Technical Requirements**

To participate in this course, students will need to satisfy the following technical requirements:

- High-speed Internet access with standard up-to-date browsers. To get a list of Blackboard's supported browsers see:

[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#supported-browsers](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#supported-browsers)

To get a list of supported operation systems on different devices see:

[https://help.blackboard.com/Learn/Student/Getting\\_Started/Browser\\_Support#tested-devices-and-operating-systems](https://help.blackboard.com/Learn/Student/Getting_Started/Browser_Support#tested-devices-and-operating-systems)

- Students must maintain consistent and reliable access to their GMU email and Blackboard, as these are the official methods of communication for this course.
- Students may be asked to create logins and passwords on supplemental websites and/or to download trial software to their computer or tablet as part of course requirements.

### *Expectations*

- Course Module: Because asynchronous courses do not have a “fixed” meeting day, our module will **start** on Tuesday, and **finish** on Monday.
- Log-in Frequency:  
Students must actively check the course Blackboard site and their GMU email for communications from the instructor, class discussions, and/or access to course materials at least 3-4 times per week.
- Participation:  
Students are expected to actively engage in all course activities throughout the semester, which includes viewing all course materials, completing course activities and assignments, and participating in course discussions and group interactions.
- Technical Competence:  
Students are expected to demonstrate competence in the use of all course technology. Students who are struggling with technical components of the course are expected to seek assistance from the instructor and/or College or University technical services.
- Technical Issues:  
Students should anticipate some technical difficulties during the semester and should, therefore, budget their time accordingly. Late work will not be accepted based on individual technical issues.
- Workload:  
This online course is equivalent to a traditional classroom full-semester course. Since it is offered in a **compressed time frame**, please plan to spend approximately **12 hours a week** completing course activities, assignments, and readings; and viewing mini-lectures and other videos. Please be aware that this course is **not** self-paced. Students are expected to meet *specific deadlines* and *due dates* listed in the **Class Schedule** section of this syllabus. It is the student's responsibility to keep track of the weekly course schedule of topics, readings, activities and assignments due.
- Instructor Support:  
Students may schedule a one-on-one meeting to discuss course requirements, content or other course-related issues. Those unable to come to a Mason campus can meet with the instructor via

telephone or web conference. Students should email the instructor to schedule a one-on-one session, including their preferred meeting method and suggested dates/times.

- Netiquette:  
The course environment is a collaborative space. Experience shows that even an innocent remark typed in the online environment can be misconstrued. Students must always re-read their responses carefully before posting them, so as others do not consider them as personal offenses. *Be positive in your approach with others and diplomatic in selecting your words.* Remember that you are not competing with classmates, but sharing information and learning from others. All faculty are similarly expected to be respectful in all communications.
- Accommodations:  
Online learners who require effective accommodations to insure accessibility must be registered with George Mason University Disability Services.

## **Learner Outcomes or Objectives**

This course is designed to enable students to do the following:

1. Name various types of disabilities and their potential functional limitations.
2. Define accessibility in the context of digital technologies.
3. List the various software tools available to determine the extent to which a digital content item is accessible.
4. Evaluate the accessibility of digital content.
5. Create accessible Word, PPT, and PDF documents.
6. Create accessible web content using HTML and CSS.

## **Professional Standards**

Upon completion of this course, students will have met the following professional standards:

- Web Design
  - HTML
  - CSS
  - WAI-ARIA
- Media and document accessibility
  - Adobe PDF accessibility
  - MS Word accessibility
  - MS PowerPoint accessibility
- Accessibility laws and guidelines
  - Section 508 of the Rehabilitation of 1973
  - Americans with Disabilities Act (ADA)
  - Web Content Accessibility Guidelines (WCAG) 2.1
- International Board of Standards for Training, Performance and Instruction ([IBSTPI](#)):
  - Professional Foundations:
    1. Communicate effectively in visual, oral and written form.

5. Identify and respond to ethical, legal, and political implications of design in the workplace.
- Planning and Analysis:
  8. Select and use analysis techniques for determining instructional content.
  9. Analyze the characteristics of existing and emerging technologies and their potential use.
- Design and Development:
  14. Select or modify existing instructional materials.
  15. Develop instructional materials.

## Required Texts

None.

## Course Performance Evaluation

Students are expected to submit all assignments on time in the manner outlined by the instructor (e.g., Blackboard, VIA, hard copy).

- **Assignments and/or Examinations**

Detailed assignment requirements are posted in Blackboard, along with the grading rubrics for each assignment.

ASSESSMENTS	%
Assignments (6)	45%
Group Reflections/Peer Evaluations (4)	15%
Final Project	40%
<b>Total</b>	<b>100%</b>

- **Other Requirements**

Every student registered for any course with a required performance-based assessment is required to submit this assessment to Blackboard (regardless of whether a course is an elective, a onetime course or part of an undergraduate minor). Evaluation of the performance-based assessment by the course instructor will also be completed in Blackboard. Failure to submit the assessment to Blackboard will result in the course instructor reporting the course grade as Incomplete (IN). Unless the IN grade is changed upon completion of the required Blackboard submission, the IN will convert to an F nine weeks into the following semester.

- **Grading**

The grading scale used in this course is the official George Mason University scale for graduate-level courses. Decimal percentage values  $\geq .5$  will be rounded up (e.g., 92.5% will be rounded up to 93%); decimal percentage values  $< .5$  will be rounded down (e.g., 92.4% will be rounded down to 92%).

<b>Letter Grade</b>	<b>Total Points Earned</b>
A	94%-100%
A-	90%-93%
B+	86%-89%
B	83%-85%
B-	80%-82%
C	70%-79%
F	<70%

### **Professional Dispositions**

See <https://cehd.gmu.edu/students/policies-procedures/>.

### **Class Schedule**

Module/ Learning Outcomes	Topic	Readings/Mini-lectures	Assignments
<b>Module 1</b> Tues, 5/30 – Mon, 6/5  <i>Learning Outcomes:</i> 1, 2	Overview of web accessibility, assistive technology, usability, and disability	Mini-lectures <ul style="list-style-type: none"> <li>• Accessible Web Design</li> <li>• Examples of how assistive technology applications interact with web content</li> </ul> Readings <ul style="list-style-type: none"> <li>• Intro to Web Accessibility</li> <li>• How Individuals with Disabilities are impacted on the web</li> </ul> <b>Opening Q&amp;A (WED, 5/31)</b> <ul style="list-style-type: none"> <li>• Please note: This synchronous session is not required. Also, all other sessions going forward will take place on Thursday evenings.</li> </ul>	<b>Assignment #1 (20 pts.): Simulation Lab Report</b> (Due June 5 <sup>th</sup> by 11:59pm)  <b>Group Reflection #1 (5 pts.): Accessibility Maze</b> (Due June 5 <sup>th</sup> by 11:59pm)
<b>Module 2</b> Tues, 6/6 – Mon, 6/12  <i>Learning Outcomes:</i> 3, 4, 6	HTML & CSS Basics	Mini-lectures <ul style="list-style-type: none"> <li>• HTML Basics</li> <li>• Common HTML Elements</li> <li>• CSS – Basics</li> <li>• CSS – Font color and formatting</li> </ul>	
<b>Module 3</b> Tues, 6/13 – Mon, 6/19  <i>Learning Outcomes:</i> 3, 4, 6	Complex HTML & ARIA (Accessible Rich Internet Applications)	Mini-lectures <ul style="list-style-type: none"> <li>• Accessible Rich Internet Applications (ARIA)</li> <li>• Creating Accessible Tables</li> <li>• Creating Accessible Images</li> <li>• Creating Accessible Forms</li> </ul> <b>Instructor Q&amp;A (Thurs, 6/15)</b> <ul style="list-style-type: none"> <li>• Please note: this synchronous session is not required</li> </ul>	<b>Assignment #2 (60 pts.): Create a practice web page using HTML, CSS, &amp; ARIA</b> (Due June 19 <sup>th</sup> by 11:59pm)  <b>Group Reflection #2 (5 pts.): P.O.U.R. Matching Exercise</b> (Due June 19 <sup>th</sup> by 11:59pm)

Module/ Learning Outcomes	Topic	Readings/Mini-lectures	Assignments
<b>Module 4</b> Tues, 6/20 – Mon, 6/26  <i>Learning Outcomes:</i> 2, 3, 4, 5, 6	Basic web accessibility evaluation techniques and tools	Mini-lectures <ul style="list-style-type: none"> <li><i>Basic Strategies for Assessing the Accessibility of a website</i></li> </ul> <b>Instructor Q&amp;A (Thurs., 6/22)</b> <ul style="list-style-type: none"> <li><i>Please note: this synchronous session is not required</i></li> </ul>	<b>Assignment #3 (25 pts.):</b> <i>Evaluate the accessibility of a website</i> (Post eval videos by Sat, 6/24; Responses and comments due June 26 <sup>th</sup> by 11:59pm)  <b>Peer Feedback #1 (5 pts):</b> <i>Accessibility Review of W2 &amp; W3 Assignments</i> (Due June 26 <sup>th</sup> by 11:59pm)
<b>Module 5</b> Tues, 6/27 – Mon, 7/3  <i>Learning Outcomes:</i> 2, 3, 4, 5	Overview of relevant accessibility laws/guidelines  Create accessible Word and PPT documents	Readings <ul style="list-style-type: none"> <li><i>Converting MS Office documents into accessible PDFs</i></li> </ul> Mini-lectures <ul style="list-style-type: none"> <li><i>Disability Laws and Guidelines</i></li> <li><i>Creating more accessible Word documents</i></li> <li><i>Creating more accessible PPT presentations</i></li> <li><i>Using the Accessibility Checker</i></li> </ul> <b>Instructor Q&amp;A (Thurs., 6/29)</b> <ul style="list-style-type: none"> <li><i>Please note: this synchronous session is not required</i></li> </ul>	<b>Assignment #4 (24 pts.):</b> <i>Fix accessibility issues in Microsoft 365 documents</i> (Due July 3 <sup>rd</sup> by 11:59pm)
<b>Module 6</b> Tues, 7/4 – Mon, 7/10  <i>Learning Outcomes:</i> 2, 3, 4, 5	PDF Accessibility Basics	Mini-lectures <ul style="list-style-type: none"> <li><i>Converting accessible Word and PPT documents into PDFs</i></li> <li><i>Remediating PDFs</i></li> </ul>	<b>Assignment #5 (6 pts.):</b> <i>Convert accessible MS Office documents into accessible PDFs</i> (Due July 10 <sup>th</sup> by 11:59pm)
<b>Module 7</b>	Advanced PDF	Mini-lectures	<b>Assignment #6 (60 pts):</b>

Module/ Learning Outcomes	Topic	Readings/Mini-lectures	Assignments
Tues, 7/11 – Mon, 7/17  <i>Learning Outcomes:</i> 2, 3, 4, 5	Accessibility	<ul style="list-style-type: none"> <li>Remediating PDFs cont.</li> </ul> <b>Instructor Q&amp;A – Remediating PDFs (Thurs., 7/13)</b> <ul style="list-style-type: none"> <li><b>Please note: this synchronous session is not required</b></li> </ul>	<b>Fix inaccessible PDF documents</b> (Due July 17 <sup>th</sup> by 11:59pm)
Module 8 Tues, 7/18 – Mon, 7/24  <i>Learning Outcomes:</i> 4, 6	Final Project – Online Course Accessibility	Readings <ul style="list-style-type: none"> <li><b>Final Project:</b> Evaluating the accessibility of an online course</li> </ul>	<b>Group Peer Evaluation (20 pts.):</b> (**Due Mon, July 24 <sup>th</sup> , by 11:59pm**)  <b>Final Project Due (93 pts.):</b> <b>Evaluate the accessibility of an online course</b> (**Due Mon, July 24 <sup>th</sup> , by 11:59pm**)

Note: Faculty reserves the right to alter the schedule as necessary, with notification to students.

### Core Values Commitment

The College of Education and Human Development is committed to collaboration, ethical leadership, innovation, research-based practice, and social justice. Students are expected to adhere to these principles: <http://cehd.gmu.edu/values/>.

### GMU Policies and Resources for Students

#### *Policies*

- Students must adhere to the guidelines of the Mason Honor Code (see <https://catalog.gmu.edu/policies/honor-code-system/> ).
- Students must follow the university policy for Responsible Use of Computing (see <https://universitypolicy.gmu.edu/policies/responsible-use-of-computing/>).
- Students are responsible for the content of university communications sent to their Mason email account and are required to activate their account and check it regularly. All communication from the university, college, school, and program will be sent to students **solely** through their Mason email account.



- Students with disabilities who seek accommodations in a course must be registered with George Mason University Disability Services. Approved accommodations will begin at the time the written letter from Disability Services is received by the instructor (see <https://ds.gmu.edu/>).
- Students must silence all sound emitting devices during class unless otherwise authorized by the instructor.

### *Campus Resources*

- Support for submission of assignments to VIA should be directed to [viahelp@gmu.edu](mailto:viahelp@gmu.edu) or <https://cehd.gmu.edu/aero/assessments>. Questions or concerns regarding use of Blackboard should be directed to <https://its.gmu.edu/knowledge-base/blackboard-instructional-technology-support-for-students/>.
- For information on student support resources on campus, see <https://ctfe.gmu.edu/teaching/student-support-resources-on-campus>

### **Notice of mandatory reporting of sexual assault, sexual harassment, interpersonal violence, and stalking:**

As a faculty member, I am designated as a “Non-Confidential Employee,” and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, and stalking to Mason’s Title IX Coordinator per [University Policy 1202](#). If you wish to speak with someone confidentially, please contact one of Mason’s confidential resources, such as [Student Support and Advocacy Center](#) (SSAC) at 703-380-1434 or [Counseling and Psychological Services](#) (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason’s Title IX Coordinator by calling 703-993-8730, or emailing [titleix@gmu.edu](mailto:titleix@gmu.edu).

**For additional information on the College of Education and Human Development, please visit our website <https://cehd.gmu.edu/students/> .**

### **FINAL PROJECT ASSESSMENT RUBRIC**

<b>IBSTPI Competency</b>	<b>Criteria</b>	<b>Does Not Meet Standards</b>	<b>Meets Standards</b>	<b>Exceeds Standards</b>
1: Communicate effectively in visual, oral and written form	<b>Language</b>	Rules of English grammar, usage, spelling and punctuation are not followed; multiple language errors throughout the document	Rules of English grammar, usage, spelling and punctuation are generally followed throughout the document; one or two minor language errors	Rules of English grammar, usage, spelling and punctuation are followed consistently throughout the document; no language errors.

5: Identify ethical, legal & political implications of design in the workplace	<b>Action Items &amp; Resources (Top 5 Report)</b>	<p>Recommendations are unclear, fewer than 5 accessibility issues are provided, or the issues are not consistent with the evaluation of the checklist and section summaries.</p> <p>Action Items are unclear, fewer than 5 Action items are provided, or action items are not appropriate to the accessibility issue identified.</p> <p>Fewer than 5 accurate and reputable resources are provided to assist faculty/course designers remediate the issues.</p>	<p>At least 5 recommendations are provided and are consistent with the evaluation of the checklist and section summaries.</p> <p>Action items are not fully developed, or links to appropriate resources are not provided for all action items.</p>	<p>Five appropriate accessibility issues are provided using clear language and consistent with the evaluation of the checklist and section summaries</p> <p>Five appropriate action Items are provided using clear language appropriate to the accessibility issue identified.</p> <p>At least 5 appropriate and reputable links to resources are provided to assist faculty/course designers remediate the issues.</p>
8: Select and use analysis techniques for determining instructional content.	<b>Issues Summary</b>	Most section summaries are incomplete, do not provide enough detail, or are inaccurate.	The majority of section summaries are completed and provide detailed and accurate information.	All of the section summaries are completed and provide detailed and accurate information.
9: Analyze the characteristics of existing and emerging technologies and their potential use.	<b>Course Review using Online Accessibility Checklist</b>	The majority of the checklist is not complete or is incorrect.	The majority of checklist items are completed and accurate.	All checklist items are completed and accurate.