Faculty Guide for Virtual Instruction for DSS Students

We have provided the below guidance to assist you in virtually teaching students with disabilities. If you have any questions or concerns, DSS is here to help!

Blue = links to more information

5 Things to Know about DSS

1. Students have the legal right to register with DSS at any time in the semester. The laws below prevent DSS from creating ‘deadlines’ for services. There are many reasons why a student might send letters later in the semester including a new diagnosis or recently obtaining documentation.
2. Students connected to DSS ‘activate’ their accommodations each semester by sending faculty a Course Accessibility Letter. Students are not eligible for accommodations until this letter has been sent, and accommodations are not retroactive.
3. Faculty are required to provide the approved accommodations listed on the Course Accessibility Letter only. If students request additional accommodations, please refer them to DSS.
4. DSS holds all disability documentation. We encourage students to deposit documentation safely with us and not distribute it throughout campus. Students are not required to provide a diagnosis or to provide disability documentation to any other campus entity other than DSS. DSS is always available to verify documentation received.
5. Students are provided accommodations on an individual basis. Each student is provided the opportunity to meet with a Specialist and go through the interactive process before accommodations are individually assigned. Two students with the same diagnosis may have completely different accommodations based on current access barriers.

Consider an Accessible Approach with your Students

- Communicate your commitment to access and inclusion to your students.
  Include a statement on your course syllabus and course website inviting students to connect with DSS if they encounter any access barriers.

- Consider flexibility during this time.
  Online instruction is a very different experience than in-person classes. Considerations may be beneficial for your students:
  - in different time zones
  - living in environments unconducive to learning (e.g., distractions, shared spaces)
  - who have to adapt their learning style to new formats of instruction and assessment that may not be conducive with their disability
  - dealing with life challenges and stressors during this time
  - who need to limit screen time due to their disability
  - who cannot sit for extended periods of time due to their disability
  - whose focus may be split between necessary software (e.g., for notetaking), or captions, and viewing the remainder of the screen
• whose internet connection may be unreliable, nonexistent or have a lack of computer resources

• **Consider alternate types of assessment or flexibility given individual circumstances.** Different ways to assess student learning include:
  • Writing a paper that demonstrates synthesis of course content
  • Demonstrating course content through a project such as a poster board, presentation, creating applications for course content, opinion polls, creating concept maps.
  • [9 ways to assess online learning](#).

• **Consider incorporating the principles of Universal Design into your course** by doing things such as:
  • Chunking content and videos into shorter segments
  • Sharing copies of documents presented in lectures with students (including lecture slides)
  • Giving students access to recordings of lectures by recording in Zoom and posting
  • Providing students multiple ways to ask questions and multiple ways to demonstrate knowledge learned

• **Recognize that some disability accommodations will need to be modified for online courses.** For example, a student may require breaks during exams because of the need to get up and stretch or take a break from the screen, or they may need to receive additional exam time due to the online environment. Please consult with DSS if you need guidance on implementing accommodations in your online course.

### Ensure the Accessibility of your Course Materials

Online instruction can provide challenges for students of various types of disabilities, not just those with hearing and visual disabilities. When thinking about accessibility, keep the diverse landscape of disability in mind.

• **Software** - Ensure whatever software you are employing in your course is fully accessible. The [Academic Technology Center](#) can help you assess the accessibility of your course software. This includes any learning management systems, or other software (including web applications) that will be used.

• **Videos (Including Lectures)**
  • **Videos with audio content** should have accurate captions. Automated captions do not meet accessibility standards in most cases.
  • **Videos with visual content** may need to have all visual content verbally described in the video or have an audio description track. Students who cannot see the visual information need to have equal access to the materials being presented if it is important to the course content.
  • **Example:** Instead of saying “as you can see, the number peaked here,” say, “this chart shows that the number of apples produced reached the maximum of 13 pecks in July 2019”
  • Alternately, **audio descriptions** can be provided for the video if all visual information could not be described by the lecturer.
  • **Avoid flashing or flickering video and visual content as it can cause seizures.**
  • Please contact the DSS Deaf Services Coordinator at [dssdeafservices@fullerton.edu](mailto:dssdeafservices@fullerton.edu) for further information and support.
• **Documents and LMS Content**
  All content put on your LMS or course website, and any files or documents you share with students, needs to be accessible.
  
  - Do not use PDF image files (documents scanned as pictures).
  - Use an appropriate heading structure
  - All links must be descriptive
  - All images and graphics should have appropriate alternative text
  - Text should be an appropriate font and size (e.g., 12 pt).
  - Use color appropriately (e.g., high contrast, designed with colorblindness in mind).
  - Tables should have appropriate labels and headers

• Specific guidance on creating accessible...

  - Word files
  - PDFs
  - Excel files
  - PowerPoint files
  - Content posted to Canvas
    (see also: How to use the Accessibility Checker in the Rich Text Editor in Canvas)
  - Qualtrics surveys
  - Web-based content

Meeting this base level of accessibility will result in access for most students. For students who have access needs that go beyond this base level, DSS is available to help!

**Are Courses Required to be Accessible?**

Yes. Students with disabilities need to be provided equal and integrated access to classes and programs from the first day of class, including all online content. All course handouts must be made accessible at the time they are handed out to the class.

It is required under:

  - **Section 504** of the Rehabilitation Act
  - **Titles II and III** of the Americans with Disabilities Act
  - California AB-434
  - California State University Executive Order 1111

Guidance about technical standards that online content (including course content) must meet comes from:

  - **Section 508** of the Rehabilitation Act (as revised by the Information and Communication Technology (ICT) Final Standards and Guidelines)
  - The World Wide Web Consortium’s Web Content Accessibility Guidelines (WCAG) (i.e. 2.0 AA)
  - CSUF Accessible Technology Initiative (ATI)
Where to get assistance.

The Online Education and Training, Faculty Development Center and Academic Technology Center have a number of resources to help guide you.

They have:

- resources on their website,
- private consultations,
- drop-in hours through ATC,
- and training workshops.

And can:

- Answer your general questions about accessible course design
- Review content for best practices and accessibility
- Facilitate the captioning process for videos
- Recommend guides, tools, and other resources

We strongly encourage you to attend one of their upcoming Training Workshops on Accessibility.

When to Contact DSS

Our office will continue to provide support to students with disabilities virtually. We may connect with you to help navigate the specific access needs of students in your courses.

If you have a specific question about meeting the needs of a student in your course, we recommend reaching out to the Disability Management Specialists by email at dsspecialists@fullerton.edu.

If you have concerns about a student who is not yet connected to our office, please refer the student to us and contact us with any questions.

Additional Reading

- Inside Higher Ed: 5 Tips for ADA-Compliant Inclusive Design
- DO-IT: 20 Tips for Teaching an Accessible Online Course
- DO-IT: Equal Access: Universal Design of Instruction

8 Online Course Design Tips to Accommodate Teaching Students with Disabilities

1. **Cue important information:** Provide a table of contents or site map to show how information is organized within your course. Include an audio description of where students can find important course information.

2. **Practice redundancy:** Describe course content in a variety of ways. Include detailed captions for images and tables. Provide additional notes on PowerPoint slides. If using a video as part of course content, ensure that closed captions are used or that a transcript of the video is available.
3. **Be consistent:** Rather than changing navigation bars or buttons from page to page, one navigation scheme should be used consistently throughout your online course design.

4. **Organize your links:** Organize long lists of hyperlinks into categories, providing a label and a short description of the site content for each link.

5. **Keep it simple:** Avoid using color, flashing text and unnecessary graphics to emphasize points. Avoid using media that requires special software or plugins that must be obtained from external sites.

6. **Be flexible:** For example, offer students a choice of several possible essay questions or provide students a choice in how they will present the final product of a research project.

7. **Use asynchronous discussion:** Synchronous discussions can be overwhelming for students who suffer from distractibility or factual recall limitations. Asynchronous discussions allow all students more time for reflection and clarification.

8. **Be creative when extending times for testing:** Extended time on exams is a common modification for accommodating students with disabilities on campus. Both learning management systems utilized at CSUF have the ability for instructors to extend time for individual users. DSS does not generally have access to your course to modify the exam time. If you need further assistance, please contact dsstesting@fullerton.edu.

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**More about Universal Design**

Inclusive and accessible course design offers all students the opportunity to learn to the best of their ability. Universal Design strategies can be easily integrated into course and program design.

- **Reach out:** Invite students, via your syllabus and in announcements, to meet with you to discuss disability-related accommodations and learning needs.

- **Instructions:** Deliver instructions and course requirements clearly and in multiple ways (e.g., orally, in printed form, electronically on course website).

- **Summarize:** Summarize big ideas, give background and contextual information, and prompt students.

- **Aids:** Provide scaffolding tools (e.g., outlines, class notes, study guides, presentation visuals/handouts) for learning and generalization. Make them available in both printed and electronic forms.

- **Speaking:** Communicate effectively by facing the camera, speaking clearly, using a microphone if needed, and making eye contact with students.

- **Group roles:** Encourage cooperative learning among students, and within group-work, so learners may employ different skills and roles.

- **Timing:** Minimize time constraints when appropriate. Announce assignments well in advance of due date. Allow adequate time for all students on tests and projects, unless speed is an essential learning outcome.

- **Instruction:** Use multiple instructional methods that are accessible to various learning styles (e.g., lecture, small group discussions, visual aids, hands-on activities, examples that make concepts relevant and digestible).

- **Assessments:** Provide multiple ways to demonstrate knowledge by having numerous course requirements (e.g., tests, classroom participation, papers, presentations, group projects, portfolios,
demonstrations). Give equitable weight to each as appropriate. Assess students in a variety of ways so as to measure essential skills or knowledge needed in the course or field of study.

- **Transparency:** Be clear and transparent about how students will be assessed in overall course and on individual assignments (e.g., provide grading rubric in advance of deadline).

- **Feedback:** Provide specific feedback on a regular basis both on individual performance and progress on assignments/projects.

**Advantages with virtual learning for students with disabilities**

Students with compromised mobility can avoid the challenges of travel and negotiating the confines of a campus classroom. Instead, they can design their own study space at home to accommodate their range of motion.

Those less able to control their hands and feet because of cerebral palsy, muscular dystrophy or Lou Gehrig's disease can dictate text or email using voice-activated programs or speech-recognition programs like Dragon NaturallySpeaking.

There is freedom from fixed class schedules allowing students with psychological or psychiatric disabilities, or post-traumatic stress disorder or cyclical mood disorders the flexibility to map study times according to fluctuations in receptivity.

Students with Asperger's syndrome and other autism spectrum disorders, or who otherwise struggle socially, can avoid large classroom settings and instead work in familiar, comfortable settings, such as at home. Communicating via forums and social media removes the pressure of interacting with others for students who are uncomfortable speaking in front of a crowd or who need time to assemble their thoughts.

The virtual environment also frees students with learning disabilities like attention deficit hyperactivity disorder, known as ADHD; dyslexia; visual processing disorder; or dysgraphia from the time pressure, stress and aural or visual over-stimulus and distractions of the traditional classroom. Working at home at their own pace, students can review materials and as often as needed and manipulate digital text to process information.

Digital texts, subtitled lectures and forum- and email-based communications open doors for students with hearing disabilities.

Rather than navigating a physical campus, students with low or no vision can capture class lectures with hand-held digital voice recorders and note-taking apps like Audio Note. Screen reader software, including the open-source NVDA and JAWS, or Job Access With Speech, provides text-to-speech output or to a Braille display.

With advanced screen readers, students can navigate text with commands like "announce cursor position" and "refresh page." The Mobile Lorm Glove enables students who are deaf and blind to transmit Lorm, a “tactile alphabet," to text on a computer or mobile device.

**Disadvantages with virtual learning for students with disabilities**
Despite the advantages of online learning, students with disabilities can face many barriers. Digital-based online programs assume students can navigate that content. But some learning management systems and course software challenge students with print disabilities or physical, cognitive or other impairments.

Not all e-texts are keyboard friendly or accessible and may have a proprietary format that those with visual, motor or physical or sensory limitations cannot easily access. For students with motor neuron disease but have visual acuity, pop-ups and overlays can make web browsing problematic. For those with photosensitive epilepsy, flashing lights or images may cause seizures.

Those with low vision or color blindness may have challenges viewing certain colors, fonts and formats. Dynamic e-learning content, like enhancements to e-texts such as videos and graphics that change as a user rolls over or clicks on different parts, can be problematic for those with other visual problems.

In video-based material, students may not comprehend every nonverbalized action, and captions can't tell the whole story. Assume, for instance, that people talk at 150 words per minute. Even if captions are 99 percent accurate, that means that three words are inaccurate every two minutes, or 15 wrong words per 10-minute video.

Visual aids like screen readers and audio transcribers may require higher bandwidth than students may have at home. Punctuation tends to be inconsistent from one screen reader to another, and not all marks translate. And keeping pace with improvements means regularly updating software, which can be costly with specialist screen readers.

There are also the cultural and linguistic challenges. Online learning doesn't mask all differences in educational styles, social customs and body language. Chat environments styles can vary, seem strident and intimidating, and thus risk alienating or marginalizing students of different cultures.

**Virtual Services for Deaf/Hard of Hearing Students**

**TIPS FOR INSTRUCTORS: TEACHING DEAF STUDENTS ONLINE**

**Record meetings and lectures**

- Provides access in case of technology or internet connectivity issues.
- Allows for accessibility features to be added.
- Allows recorded courses, discussions, and lectures to be reused and refined for the semester.

**Limit the number of participants on screen (Rotate participants as needed)**

- Makes it easier to follow what is going on.
- Makes it easier to facilitate the course.
- Improves video and audio quality.

**Establish participation protocols, including rules for turn-taking**

- Makes it easier to follow and allows service providers to keep up
- *Example:* Students must comment or use built-in “hand-raising” features in the chat box of the video conferencing software to ask or answer a question or to turn on video.
State your name when talking

- Makes it easier for the student and the service providers to follow the conversation, especially for participants who don’t use video
- Leads to more accurate transcripts and videos

Build in pauses

- Makes it easier to follow along:
  - It can be difficult read and listen at the same time. Deaf students often have to watch the interpreter, look at the information on the screen, and read captions at the same time.
  - Deaf students need time to process visual information before responding to a discussion prompt. Lag time is expected and should be built in.

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DSS Faculty Resources
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