



Cornell University

**STUDENT DISABILITY SERVICES  
RESOURCE GUIDE FOR  
TEACHING STUDENTS  
WITH DISABILITIES**

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Dear Cornell Faculty Members,

We are pleased to offer The *Resource Guide for Teaching Students with Disabilities* to the Cornell faculty. This guide provides important information about disability rights, the conditions that encompass the heterogeneous category of disability, services provided through Student Disability Services (SDS), and suggestions for addressing disability-specific issues.

The process of addressing the access needs of the 800+ students registered with SDS is a collaboration between SDS, the student, and the instructor. SDS determines eligibility for disability services and approves accommodations based on limitations caused by the student's disability. Instructors are responsible for providing the approved accommodations for students enrolled in their courses. The most frequently used accommodation is extended time for exams. This addresses many issues that students face as a result of their disabilities.

Increasingly we are working with students whose disabilities cannot be addressed with the accommodations that have been successful in the past. Chronic medical conditions and psychological disabilities pose new challenges to ensuring equal access while maintaining academic standards and reasonable modifications. The staff of SDS assists faculty and students with identifying the impact of the disability on the course or degree program and recommending mitigating measures to ensure non-discrimination and equal access.

Universal Design in Instruction (UDI) is an approach to teaching that incorporates inclusive instructional strategies in course design and delivery to benefit the broadest range of learners; thus the need for individual accommodations is minimized.

It is my hope that this resource guide will provide insight into the effect of a disability on the life of a student and assist you in the important endeavor of creating an accessible academic environment.

Best Regards,

Katherine Fahey  
Director, Student Disability Services

# **Section I: Universal Design**

## What is Universal Design for Instruction?

Universal Design for Instruction (UDI)<sup>1</sup> is an approach to teaching that consists of proactive design and the use of inclusive instructional strategies that benefit a broad range of learners including students with disabilities. In other words, the principles of Universal Design benefit all students and prevent the need for “retro-fitting” teaching methods when a student in class discloses a disability.

*The Nine Principles of UDI* provide a framework for college faculty to use when designing or revising instruction to be responsive to diverse student learners and minimize the need for special accommodations and retrofitted changes to the learning environment. UDI operates on the premise that the planning and delivery of instruction, as well as the evaluation of learning, can incorporate inclusive attributes that embrace diversity in learners without compromising academic standards.

## Who Benefits?

Universal design benefits students with disabilities but also benefits others. For example, captioning course videos, which provides access to deaf students, is also a benefit to students for whom English is a second language, to some students with learning disabilities, and to those watching the tape in a noisy environment. Delivering content in redundant ways can improve instruction for students with a variety of learning styles and cultural backgrounds. Letting all students have access to your class notes and assignments on a website benefits students with disabilities and everyone else. Putting a class outline or a PowerPoint presentation on a class web page allows students to prepare in advance of class and fill in notes as you lecture, leaving more time for concentration and attention to the lectures. Planning ahead saves time in the long run.

Employing universal design principles in everything we do makes a more accessible world for all of us and minimizes the need individual accommodation.

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*The Principles of Universal Design for Instruction*©

Principle	Definition	Examples
<b>Principle 1:</b> Equitable Use	Instruction is designed to be useful to and accessible by people with diverse abilities. Provide the same means of use for all students, identical whenever possible, equivalent when not.	Provide links to online support and resources so all students can access materials as needed regardless of varying academic preparation, need for review of content, distance from campus, etc.
<b>Principle 2:</b> Flexibility in Use	Instruction is designed to accommodate a wide range of individual abilities. Provide choice in methods of use.	Use of varied instructional methods (lecture with a visual outline, group activities, use of stories, or web board/chat discussions to provide different ways of learning and experiencing knowledge).
<b>Principle 3:</b> Simple and Intuitive	Instruction is designed in a straightforward and predictable manner, regardless of the student's experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.	Provision of a grading rubric for papers or projects to clearly lay out expectations for performance.
<b>Principle 4:</b> Perceptible Information	Instruction is designed so that necessary information is communicated effectively to the student, regardless of ambient conditions or the student's sensory abilities.	Selection of text books, reading material, and other instructional supports in digital format or online so students with diverse needs (e.g., vision, learning, attention, ESL) can access materials through traditional hard copy or with the use of various technological supports (e.g. screen reader, text enlarger, on-line dictionary).
<b>Principle 5:</b> Tolerance for Error	Instruction anticipates variation in individual student learning pace and prerequisite skills.	Allow students to use a word processor for writing and editing papers or essay exams.

<p><b>Principle 6:</b> Low Physical Effort</p>	<p>Instruction is designed to minimize nonessential physical effort in order to allow maximum attention to learning. <i>Note: This principle does not apply when physical effort is integral to essential requirements of a course.</i></p>	<p>Allow students to use a word processor for writing and editing papers or essay exams.</p>
<p><b>Principle 7:</b> Size and Space for Approach and Use</p>	<p>Instruction is designed with consideration for appropriate size and space for approach, reach, manipulations, and use regardless of a student's body size, posture, mobility, and communication needs.</p>	<p>In small class settings, use of a circular seating arrangement to allow students to see and face speakers during discussion, which is important for students with attention deficit disorder or those who are deaf or hard of hearing.</p>
<p><b>Principle 8:</b> A Community of Learners</p>	<p>The instructional environment promotes interaction and communication among students and between students and faculty.</p>	<p>Fostering communication among students in and out of class by structuring study groups, discussion groups, e-mail lists, or chat rooms.</p>
<p><b>Principle 9:</b> Instructional Climate</p>	<p>Instruction is designed to be welcoming and inclusive. High expectations are espoused for all students.</p>	<p>A statement in the class syllabus affirming the need for class members to respect diversity in order to establish the expectation of tolerance as well as encourage students to discuss any special learning needs with the instructor.</p>

Note: From Principles of Universal Design for Instruction by Sally Scott, Joan McGuire and Stan Shaw, Center on Postsecondary Education and Disability, University of Connecticut. Copyright 2001. Reprinted with permission.

## **Section II: General Information**

## **BACKGROUND INFORMATION ON DISABILITY LAWS**

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against individuals with disabilities by recipients of federal funds, and requires recipients to make their programs and activities accessible to everyone. As a recipient of federal funds, Cornell is required to meet the disability mandate of Section 504 and all subsequent applicable state and federal disability laws.

Disability laws define a person with a disability as an individual who:

- has a mental or physical impairment that substantially limits one or more major life activities; or
- has a record of such impairment; or
- is regarded as having such an impairment.

The determination that a condition is a disability depends on whether the impairment substantially limits one or more major life activities and must be assessed by examining the extent, duration, and impact of the impairment. A major life activity is an everyday activity that an average person can perform with little or no difficulty.

Persons who do not have disabilities but who are treated in a discriminatory manner because they are “regarded as” having a disability are also protected by disability laws.

The Americans with Disabilities Act of 1990 broadened the scope of Section 504 to include public accommodations, state and local governments, telecommunications, transportation, and employment. The ADA prohibits discrimination in nearly every sector of life. Its purpose was to dispel stereotypes of persons with disabilities, ensure their equal opportunity, and encourage full participation, independent living, and economic self-sufficiency.

The ADA Amendments Act (ADAAA) was signed into law on September 25, 2008 and took effect on January 1, 2009. The major revision of the law was that disability should be considered broadly to include persons with a wide range of physical and mental impairments. It is the intention of Congress that the focus of the determination of disability should be on how a major life activity is substantially limited, not on what an individual can do in spite of the impairment.

At Cornell, we will continue to make determinations regarding reasonable and effective accommodations to ensure equal access and opportunity on an individualized basis after reviewing disability documentation and meeting with the student to discuss his/her access needs.

## **CONFIDENTIALITY**

Disability information provided by a student in order to receive accommodations cannot be used for any reason beyond the scope of this purpose without informing the student of the additional possible use of the information.

The Family Educational Privacy Act (FERPA) protects the privacy of and access to student educational records, including disability documentation. Section 504 and the ADA protect the student from discrimination with respect to the handling of medical records and disability documentation.

The information about a student's disability status and use of accommodations should remain a confidential matter between the instructor, student, and those assisting the instructor with administering accommodations.

## **SELF-IDENTIFICATION**

Cornell does not have an alternate admissions process for students with disabilities. Students with disabilities are admitted under the same highly selective criteria as other students. Students with disabilities are not obliged to disclose a disability during the admissions process, nor at any point during their tenure at Cornell. However, in order to qualify for accommodations, it is necessary for students with disabilities to self-identify and submit disability documentation that meets Cornell's documentation guidelines for eligibility for services.

## **DOCUMENTATION**

Students who request disability services and accommodations must submit current and comprehensive disability documentation from a qualified practitioner. Student Disability Services (SDS) approves the use of disability services when a student has made a direct request for the use of disability services and has met Cornell's disability documentation guidelines. Cornell University's documentation guidelines were developed with guidance from the Association of Higher Education and Disability (AHEAD) and Counsel's office.

Recommendations for effective and reasonable disability accommodations are based on the functional limitations of a student's condition as documented by certified professionals. Faculty will be informed of a student's approved academic accommodations in an accommodation notification letter prepared by the student's SDS counselor and provided to the instructor by the student.

Students are responsible for providing disability documentation to SDS that supports any request for disability services. When necessary, SDS counselors will consult with appropriate experts in specialized disability fields.

## **DECISION-MAKING ABOUT REASONABLE ACCOMMODATIONS**

Reasonable accommodations are modifications to a course, service, policy, procedure, activity, or facility that provide an individual with a disability an equitable opportunity to obtain the same benefits and privileges available to an individual without a disability.

The university is obligated to make reasonable accommodations for known limitations of otherwise qualified individuals with disabilities. We are not obligated to provide accommodations that would alter the essential components of a course of study or accommodations that are unduly burdensome. Providing accommodation to ensure access is never done at the expense of the essential standards applied to all students.

The determination of appropriate, reasonable accommodations is made on an individual basis and should involve all relevant faculty and/or staff to ensure an understanding of the essential components of the activity and the individual needs of the student. The individual with a disability should be actively involved in the process and may be

provided with his or her first choice of accommodation or an alternative effective accommodation determined by the university. Reasonable accommodations are determined by examining:

- the physical and/or programmatic barriers resulting from the interaction between the disability of the student and the course or program requirements or the campus environment;
- the possible accommodations that might remove the barriers;
- whether or not the student has equal access without accommodations;
- whether or not essential elements of the course, program of study, job, or activity will be fundamentally altered by the accommodations;
- whether the accommodations will result in an undue hardship for the university.

## **RIGHTS AND RESPONSIBILITIES**

Federal law (Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990) was written with the intent of protecting people with disabilities from discrimination and clearly states that students with documented disabilities must be provided with the reasonable accommodations required to provide equal access in programs and activities.

As an institution of higher education, **Cornell University has the right to:**

- Identify and establish essential functions, abilities, skills, knowledge, requirements, and standards for courses, programs, services, and activities, and to evaluate students on this basis.
- Request and receive, through SDS, current documentation that supports requests for accommodations, academic adjustments, and/or auxiliary aids and services.
- Deny a request for accommodations, academic adjustments, and/or auxiliary aids and services if the documentation demonstrates that the request is not warranted, or if the individual fails to provide appropriate documentation.
- Select among equally effective accommodations, adjustments, and/or auxiliary aids and services.
- Refuse an unreasonable accommodation, adjustment, and/or auxiliary aid or service that imposes a fundamental alteration of a program or activity or places an undue burden on the university.

**The university has the responsibility to:**

- Provide information to students with disabilities in accessible formats upon request.
- Ensure that courses, programs, services, and activities, when viewed in their entirety, are available in the most integrated and appropriate settings.
- Evaluate students on their abilities and not their disabilities.
- Provide or arrange for reasonable accommodations, academic adjustments, and/or auxiliary aids and services for students with disabilities in courses, programs, services, and activities.
- Maintain appropriate confidentiality of records and communication except

where sharing information is permitted or required by law or when the student requests that such information be shared.

**Instructors at Cornell University have the right to:**

- Receive notification in writing from SDS of a student's need for accommodation. (Faculty and staff do not have the right to access disability documentation.)
- Decide if an accommodation request meets the academic requirements of the course.
- Contact SDS to clarify student requests for accommodations, academic adjustments, and/or auxiliary aids and services.

**Instructors at Cornell University have the responsibility to:**

- Provide information to all students about the accommodation procedure in their courses with a syllabus statement such as:

*Note to students with disabilities: If you have a disability-related need for reasonable academic adjustments in this course, provide the (Instructor, TA, Course Coordinator) with an accommodation notification letter from Student Disability Services. Students are expected to give two weeks' notice of the need for accommodations. If you need immediate accommodations or physical access, please arrange to meet with the (Instructor, TA, Course Coordinator) within the first two class meetings.*

- Meet the classroom access needs of registered students with disabilities (SWD) in a timely manner. Responsibilities for the provision of testing modifications include scheduling rooms for test-takers, proctoring or recruiting proctors, and providing a scribe. To the greatest extent possible, the testing experience (e.g., the opportunity to ask questions of the instructor, information provided about corrections to the exam during its administration and test format) should be equitable for SWD.

The instructor or designee is responsible for meeting with students who have registered with SDS and have an accommodation notification letter to discuss how the access needs of the student will be met.

If an instructor has an office in a location that is inaccessible for a student with a disability, s/he must make arrangements to meet in an accessible location.

If the instructor thinks that the accommodations approved by SDS for the student may undermine the essential requirements of the course or alter the nature of the course, s/he should contact SDS immediately so that the instructor, student, and SDS counselor can consult about feasible options for modifications to afford equal access.

- Provide an opportunity to take make-up exams on a timely basis for students who miss exams for a disability-related reason.
- Provide accessible technology in their courses including captioned video for deaf and hard of hearing students, web accessibility, and/or accessible course materials. SDS will work with the instructor where immediate access challenges cause barriers for SWD.
- Maintain confidentiality of information regarding disability issues.

- Alter the form of a testing procedure to measure proficiency in course knowledge based on the ability of the student, not the disability. (There may be an exception when the purpose of the test is to measure a particular skill.)
- Refer to SDS students who have requested accommodations but have not yet registered with our office.

**Anyone at Cornell University offering co-curricular programs or activities has the responsibility to:**

- Design the program or activity to ensure full participation and equal opportunity for participants with disabilities to the greatest extent possible.
- Provide contact information for all programs, workshops, services, meetings, and events to be used by program participants to request access accommodations. This contact information must be included on publications that promote the program, meeting, service, or event.
- Provide information about the means of physical access to offices, programs, workshops, services, meetings, or events if access routes are not fully wheelchair accessible. This information must be included on websites and print materials.
- Develop a relocation plan for programs, workshops, services, meetings, or events that are conducted in inaccessible locations and be prepared to change to a fully accessible location if requested by a participant (with adequate advanced notice).

**Students with disabilities at Cornell University have the right to:**

- Equal access to courses, programs, services, and activities offered through the university.
- Request reasonable accommodations where a disability may pose a barrier to equal access.
- Learn and to receive reasonable accommodations and academic adjustments in an effort to diminish the effect of the disability on academic functioning.
- Determine who will receive disability-related materials within and outside the university.
- All other rights and privileges available to other students at Cornell University.

**Students with disabilities at Cornell University have the responsibility to:**

- Meet qualifications and maintain essential institutional standards for courses, programs, and activities.
- Self-identify as an individual with a disability when an accommodation is needed and seek information, counsel, and assistance as necessary in a timely fashion.
- Demonstrate and/or provide documentation (from an appropriate professional) on how the disability limits participation in courses, programs, services, and activities.
- Follow university procedures for obtaining reasonable accommodations, academic adjustments, and/or auxiliary aids and services.

## **TEMPORARY DISABILITIES**

Federal law (Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990) was written with the intent of protecting people with disabilities from discrimination and clearly states that students with documented disabilities must be provided with the reasonable accommodations required to provide equal access in programs and activities. Generally, temporary, non-chronic impairments are not disabilities because they do not substantially limit major life activities. However, some impairments that last for fewer than six months may still be substantially limiting and require accommodation.

Under New York State Law, individuals with temporary disabilities are afforded accommodations as needed on a short-term basis. Typical accommodations for a temporary disability as a result of, for example, a broken arm, would include more time on tests or a scribe. A student may be late or miss class and need assistance. SDS can provide some adaptive equipment and support in assisting students with temporary disabilities.

Transportation for students with temporary mobility disabilities is provided by Student Disability Services in the form of free TCAT bus passes and the CU Lift service, which provides rides between campus buildings and campus housing units.

## **INSTRUCTIONAL SUPPORT FOR ALL STUDENTS WITH DISABILITIES**

### **Syllabus Statement**

An instructor can help normalize the accommodation process by making an announcement at the first class meeting and by including a statement on the syllabus inviting students with disabilities to meet during office hours to discuss accommodation needs. The wording of the statement can vary to meet the needs of the individual class but should include the following three pieces of information:

- An invitation to any student with a documented disability to meet, in a confidential environment, to discuss his or her need for academic adjustments with the faculty member and to work out the logistics of the accommodations. This discussion should lead to an understanding about how the academic adjustments will fit into the curriculum and the development of a plan to provide the accommodations.
- Notification that students must present requests for accommodation in a timely manner. Faculty members can require students to make accommodation requests at the beginning of the semester but need to be flexible in certain cases. Some students may be diagnosed with a disabling condition in the middle of a semester, or administrative delays may impede the processing of necessary paperwork.
- A statement encouraging students to register with Student Disability Services, if they haven't done so previously, for disability verification and determination of reasonable accommodations.

Here is a sample syllabus statement:

*Note to students with disabilities: If you have a disability-related need for reasonable academic adjustments in this course, provide the (Instructor, TA, Course Coordinator) with an accommodation notification letter from Student Disability Services. Students are expected to give two weeks' notice of the need for accommodations. If you need immediate accommodations or physical access, please arrange to meet with (Instructor, TA, Course Coordinator) within the first two class meetings.*

## **Textbooks, Course Packs, Syllabi, Videos**

At the time that students pre-register for classes, SDS starts converting print materials into alternative formats for students who have visual impairments or learning disabilities. Therefore, it is helpful if faculty have the syllabus and course reading list ready four weeks prior to the beginning of classes so alternative formats of the materials can be prepared if necessary. This includes having compiled course packs and, when possible, procuring videos. All print and audio materials require conversion to accessible formats in order to be usable by students with various disabilities.

## **Recommendations for All Courses**

There are instructional choices that faculty can make to render courses more accessible to students with varying learning styles and abilities. These may also diminish the need to make significant changes as students with disabilities request accommodations.

### ***General Recommendations***

- Have a detailed syllabus available during the course enrollment period. Students may need to determine if a course is a good fit with their strengths and abilities, and SDS may need to arrange accommodations in advance.
- Announce reading assignments well in advance for students who are using alternative formats for print materials.
- Give assignments in both verbal and written format.
- Make all web-enhanced elements of the course accessible.
- When creating course reserves, keep the font size of the reserve document as close as possible to that of the original document. Good copies of material make alternative text conversion much easier.
- Inform your students about the learning resources available to them on campus.
  - The Learning Strategies Center (LSC) is a resource for undergraduates who seek support in various disciplines. The LSC offers courses in study skills and supplemental instruction in several courses. The LSC has a statistics and reading improvement lab in 420 CCC.
  - The Knight Institute provides students with workshops and tutoring in writing skills. They can be reached by telephone at 255-2280 or by email at [knight\\_institute@cornell.edu](mailto:knight_institute@cornell.edu).
- Encourage students to use office hours to clarify course material.

### ***Applying Universal Design Principles***

- Use the web to post a general outline in advance of each class.

- Consider providing class notes in an accessible format, such as Microsoft Word.
- Teach in a multi-modality/multi-sensory format to reach all learning styles. Combine visual and auditory modalities when presenting lecture material and then create experiential learning through group work and hands-on application of the material.
- Start each lecture with an outline of material to be covered. At the conclusion of class, briefly summarize key points.
- Put new vocabulary on the blackboard.
- Allow students to record lectures.
- Provide an adequate opportunity for questions and answers including during review sessions.
- Consider audio recording the lectures and making them available after the class session.
- Caption all video content.

### ***Evaluation***

- Provide sample questions, practice exams, and information about the exam format. Provide examples of well-answered exam questions.
- Provide examples of “good” writing for the course and discipline. Give feedback in writing that students can incorporate into future assignments.
- When appropriate, allow the use of calculators, paper, and dictionaries.

### ***How to Accommodate Various Academic Activities***

For more in-depth resources regarding best practices for accommodations in various academic settings such as field work, group discussions, science labs, etc., please visit DO-IT’s Faculty Room (<http://www.washington.edu/doi/Faculty/Resources>). DO-IT (Disabilities, Opportunities, Internetworking, and Technology) serves to increase the successful participation of individuals with disabilities in challenging academic programs and careers such as those in science, engineering, mathematics, and technology.

## **SERVICE DOGS**

Some students with disabilities work as part of a service dog team, where both the handler and the dog have extensive training allowing them to navigate safely inside buildings and outdoors. For more information on how best to interact with working dogs, please refer to the etiquette guide in Section V (p. 49) or visit *Guide Dogs of America* at <http://www.guidedogsofamerica.org>. If a student with a service dog is enrolled in one of your classes, you might consider sharing the interaction recommendations with your class at the beginning of the semester.

## **Section III: Information about Specific Disabilities**

## **ASPERGER'S SYNDROME**

Asperger's Syndrome is often referred to as High Functioning Autism. Individuals with Asperger's often have unusually strong, narrow interests and above-average to superior intellect. Because of limited ability to perceive social subtexts and to respond appropriately, they typically have difficulty with social interactions. They have a narrow range of facial and vocal expressions and are most comfortable with predictable routine; subsequently they may be quite disturbed by changes in familiar and expected routines.

### **Common Characteristics**

Students with Asperger's Syndrome may exhibit some of the following behaviors in general social interaction as well as in the classroom:

- Poor eye contact
- Inappropriate social interaction
- Very literal and concrete thinking patterns
- Limited voice intonation and/or volume
- Impulsivity
- Sensitivity to sensory stimuli (bright light, touch, sounds)

Students may:

- Attempt to monopolize conversation
- Become tangential in answering questions
- Exhibit distracting behavior in long classes
- Engage in self-stimulating behavior (rocking, tapping, playing with "stress toys")
- Be argumentative

### **Applying Universal Design Principles**

- Provide a syllabus with clear explanations of course objectives and specific due-dates for assignments.
- Allow breaks during class, particularly for movement.
- Redirect responses to bring student to point of answer.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

### **Typical Accommodations**

- Extended time for in-class assignments
- Note-takers if distraction is a problem for the student
- One-one-one meetings with the student to clarify assignments
- Written instructions

- Computer use, especially word processing for writing
- Accommodation for work/assignments dependent on groups (usually accommodated with an assignment for the individual student)
- Advanced notice and preparation when changes are anticipated
- Exam modifications
  - Extended time
  - Reduced-distraction test environment
  - Use of a computer for essay exams

## **ATTENTION DEFICIT/HYPERACTIVITY DISORDER (ADHD)**

Attention Deficit/Hyperactivity Disorder is a chronic and impairing condition that is prevalent in 5% of adults. Some symptoms of ADHD include difficulty paying attention, procrastination, frequently losing or misplacing important items, restlessness, and interrupting others when speaking. These symptoms are manifested in academic, employment, and social situations. Not all students with ADHD exhibit the same symptoms, but in an academic setting ADHD is generally characterized by careless mistakes and disorganized work, difficulty concentrating on and completing tasks, forgetting the content of reading or conversations, and being easily bored. In social situations, inattention may be apparent from frequent shifts in conversation, poor listening comprehension, and not following the sequential details or rules of games and other activities.

### **Applying Universal Design Principles**

- Provide a syllabus with clear explanations of course objectives and specific due-dates for assignments.
- For large projects or long papers, break down the task into smaller parts.
- Give verbal reminders in class of deadlines regarding homework assignments and upcoming exams.
- Provide an outline of each lecture at the start of class.
- When possible, start each lecture with a summary of material to be covered and conclude each lecture with a summary of major points addressed.
- Students with ADHD may start to “drift” during class. A varied format may help to keep their attention.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

### **Typical Accommodations**

- Extended time for in-class assignments
- Use of speech-to-text software
- Alternative print formats
- Textbooks on tape
- Tape recording lectures
- Note-takers
- Exam modifications
  - Extended time
  - Reduced-distraction test environment
  - Use of a computer for essay exams

## **Strategies for Student Success**

- Use of a day planner
- Writing down all assignments
- Taking notes in class; rewriting notes after class
- Breaking tasks down into manageable components
- Setting reasonable goals and using a checklist to keep track of progress
- Use of an audio recorder for lectures and studying
- Working on projects with someone who has strong organizational skills
- Getting feedback on social behavior from a trusted friend

## **LEARNING DISABILITIES (LD)**

The National Joint Committee on Learning Disabilities defines a Specific Learning Disability as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

These disorders are intrinsic to individuals, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perceptions, and social integration may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other disabilities, they are not the result of those conditions or influences.

A learning disability is persistent and pervasive throughout an individual's life, although the manifestations of the condition may change. The condition has a significant effect on learning but is not an indicator of intelligence. LD can often cause inconsistent academic performance and may only require accommodation in specific classes or may alternatively have a global effect on academic functioning.

A learning disability is unique to the individual and can be manifested in a variety of ways. Therefore, accommodations for a student with a specific learning disability must be tailored to the individual. Determining accommodations is not an exact process but is based on the functional limitations identified in the student's psycho-educational evaluation. SDS counselors may re-evaluate accommodations with the student and faculty as the semester progresses, as not all needs may be evident until the class gets underway.

## **Applying Universal Design Principles**

### ***Classroom Instruction***

- Provide information about textbooks and readings in advance so that students can start reading before the semester begins or have information converted to electronic text for use with screen-reading technology.
- Provide an outline at the beginning of lecture and summarize key points at the end. Identify key terms during the lecture.
- When talking, be mindful of speed and audibility.
- Present instructions and assignments both orally and in written form.
- When writing notes on the board, state them orally as well.
- Provide handouts and use visual aids such as graphs and charts to accompany verbal explanation.
- Explain your thought process in solving a problem and demonstrate how to check a problem for accuracy.

- Allow the student to tape-record lectures.
- Assist the student with finding an effective note-taker from the class.
- Break information into small steps when teaching many new tasks in one lesson (state objectives, review previous lesson, summarize periodically). Connect new concepts to previously-learned material.
- Allow time for clarification of directions and essential information.
- Provide thought questions to guide students through dense reading.
- Connect readings to lecture and course objectives.
- Connect readings to students' prior knowledge, real-life examples, and stories.
- Provide opportunities for class discussion of readings. Encourage students to summarize, make predictions, and explore multiple interpretations of text. Allow time for clarification and questions about readings.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

### ***Assignments and Exams***

- Provide examples of well-written papers, cases, and lab reports and explain why they are well written.
- Provide opportunities for students to submit early drafts of papers or reports for feedback.
- Provide feedback in writing so it can be saved by the student for incorporation into future assignments.
- Provide deadlines for stages of the writing process to discourage last minute work and to encourage a well-constructed essay.
- Encourage students to get started with the writing process by recording their thoughts into a tape recorder or making an outline or graphic organizer.
- Post solutions to problems on a class website.
- Suggest effective study strategies for the discipline.
- Provide study guides or review sheets for exams.
- Relieve or modify the pressure of timed responses (both oral and written).
- Avoid closely-worded multiple-choice exams, which often do not allow students to demonstrate course knowledge.
- If applicable, allow students to have formula sheets during exams.

### **Typical Accommodations**

- Alternative print formats
- Written materials provided in electronic-text format
- Tape recording of classroom lectures
- Note-takers

- Exam modifications
  - Extended time
  - Reduced-distraction test environment
  - Use of a computer for essay exams
  - Scribe
  - Alternative to Scantron forms

## **Specific Areas that May be Affected by LD**

### ***Written and Spoken Language***

The student may have difficulty with spelling (e.g., mixing up letters) or with speaking (e.g., reversing words or phrases). The vocabulary used may be less sophisticated than expected for college level work. The student may have difficulty monitoring his or her writing for errors in spelling, grammar, word order, word endings, subject-verb agreement, punctuation, and paragraph formation. Handwriting can be poorly formed or illegible with letters and words unevenly spaced on the page. Students with writing disabilities sometimes use a mixture of printed and cursive writing and upper- and lower-case letters in the same document.

#### ***Reading***

Reading involves the skills of decoding and comprehension; students with reading disabilities may have difficulty with one or both of these skills. Decoding involves recognizing phonemic units as words. Comprehension involves attaching meaning to words. A limitation in either area will result in a reading process that is extremely labored. Students with comprehension difficulties will often need to read a passage several times before they are able to attach meaning.

#### ***Writing***

Students with a learning disability affecting written expression have problems communicating effectively through writing. Whether these difficulties are related to dyslexia or to the physical act of printing or writing (dysgraphia), the outcome is likely to be written work that appears careless. Sentences are sometimes incomplete, with essential words and phrases missing. The organization of the paper can be choppy, jumping from one idea to the next and back again. The student may write more simply or with less content than would be expected from his or her understanding of the subject matter.

Some of the difficulties these students experience with in-class essays and essay exams may be mitigated by the use of a computer or word processor with spell check, grammar check, and cut-and-paste capabilities. A student with written language disabilities may also benefit from working with a tutor at the Knight Institute for Writing or with a writing tutor from the Learning Strategies Center.

#### ***Oral Language – Expression***

Some students are eloquent writers yet have extreme difficulty formulating an immediate verbal response to a question. They may appear socially inept as they are unable to gather and express their ideas amidst the fast pace of active dialogue. During oral presentations, their thoughts may come out jumbled and chaotic and they may use many filler words, such as, “uh,” “er,” and “um,” as they struggle to

express themselves. Reading aloud in class and taking oral quizzes and tests can be stressful and embarrassing.

If oral expression is not a fundamental requirement of the course being taught, you may allow a student to complete an oral assignment using a different format. Some students may benefit from videotaping their presentation for viewing or delivering their presentation to the instructor privately.

### ***Oral Language – Comprehension***

Students who have a disability related to *taking in* oral information may have difficulty listening and taking notes at the same time. The problem may relate to difficulties in differentiating relevant from irrelevant details. This student frantically tries to write down everything being said. Similarly, students with *dysgraphia*, who expend more than the normal focus and energy in actually writing words they are hearing, may fall behind in taking notes and miss examples and nuances of a lecture that aid other students in understanding and memory. The use of adaptive techniques similar to those used for deaf students- note-takers, films, role-playing, captioned videotapes, and other visual materials- may be necessary.

### ***Mathematics***

To be successful in understanding math concepts and in knowing when and how to apply them, the student must have strong language, memory, sequencing, and problem-solving skills. Students who have disabilities in math reasoning and calculation (dyscalculia) may make errors that seem to be “dumb mistakes,” e.g., reversing numbers, miscopying and/or misaligning columns of figures, and making errors when changing operational signs or performing other conversions. Other students experience difficulty remembering and working through the sequence of steps required to solve a problem (so that steps may be repeated, performed out of order, or forgotten altogether). These students may also have problems doing mental calculations, estimating answers, and/or organizing a problem, especially a word problem.

A student’s confidence in his or her ability to be successful at mathematics adds another dimension to learning disabilities. Because math is a cumulative subject with new concepts building on previously acquired information, students who have memory difficulties or who never completely mastered specific math concepts may experience frustration and mounting anxieties. Teaching math requires that a great deal of information be presented in a short period of time. Students with learning disabilities may feel overwhelmed by the pace or believe they understand what is being taught only to later realize they cannot generalize math concepts to homework assignments or test questions. Thus, math anxieties may cause a student to freeze during testing.

Students with math disabilities and anxieties usually benefit from regular and frequent work with a tutor and clarification from the instructor as needed. In some cases, SDS may recommend that the student be allowed to use extended time, a quiet room, and/or scrap paper for quizzes and tests.

### ***Foreign Language***

Students who have disabilities that relate to distinguishing, processing, remembering, and expressing sounds and words may find learning a foreign language problematic. To successfully master a second language a student must be able to:

- Hear and cognitively differentiate between the sound structure of words.
- Comprehend and remember the meanings of words and differing meanings when words are combined.
- Understand rules related to sentence structure and grammar.
- Retrieve information easily.
- Mentally manipulate information to successfully communicate verbally or in writing.

### ***Sequential Memory***

Other students you may work with will have learning disabilities that affect sequential memory tasks such as spelling, mathematics, and following step-by-step instructions. Students in this area benefit from learning how to break down tasks into smaller parts and from gaining clarity on how text authors and instructors organize material for learning. Giving many opportunities for evaluation, such as frequent quizzes, tests, and writing assignments, can help *all* students learn how to successfully organize their study, how to transfer learning from facts to application, and how to determine the level of detailed memorization needed. Tutoring may be required in more problematic areas. In general, the student with a learning disability—and in fact all students—benefit when a multi-modal approach to teaching and learning is used (seeing, hearing, saying, and doing).

### ***Organization and Attention***

Success in college requires a reasonably sophisticated development of skills related to organization, focus and attention, and study. In addition to students with learning disabilities, people with ADHD and Traumatic Brain Injury (TBI) may seem vulnerable or lacking in these skill areas. For instance, you may see from a student's participation in class discussions that he or she has completed the necessary reading and has a good grasp of course material. Yet the same student may misplace papers to be turned in or postpone starting projects so that the final product is rushed and less thorough than you would expect.

The delayed start of papers and projects may relate to poor estimation of how long it will take to complete the task. A student may appear to have reasonable organization and study skills but have difficulty understanding how much detail to focus on during lectures or while reading, writing, and preparing for tests. Some students also have problems screening out sights and sounds in the classroom to maintain focus on the class lecture. These difficulties can increase during longer lecture classes and peak stress times, such as during midterms and finals. ***It is important to note that for these problem areas to be termed as disabling they must meet criteria that go beyond mere developmental immaturity.***

Students who have learning disabilities that affect organization and attention often have difficulty completing open-ended, unstructured, and last-minute assignments. Therefore they, like all students, can benefit from receiving a detailed syllabus that clearly states readings to be completed for each class period and gives due dates and clear descriptions for course papers and projects. Providing students with an outline of material to be covered for each class also helps them learn how to organize their listening, note taking, and studying. Some instructors make such outlines available at

the beginning of each class, printed in a course pack, or available for downloading from the web so that students may devote more class time and attention to understanding concepts and noting examples that aid memory.

## **General Recommendations**

### ***Individual Differences Awareness***

Keep in mind that no two students with learning disabilities are alike. Learning strategies and accommodations that work for one student may not work for another. Likewise, what works in one subject area or class format may not work in another. In general, students with learning disabilities will learn much better when more channels are used in the teaching/learning process—oral, visual, tactile, and kinesthetic.

### ***Conferences with Students***

When a student registers with Student Disability Services to request accommodations from faculty, we recommend that the student meet privately with the instructor to discuss the accommodations needed. This is a good opportunity for students to discuss their learning style and to ask for suggestions from the instructor for studying the course material.

### ***Making a Referral***

If you are working with a student who seems to be struggling in your class but has not indicated that he or she has a learning disability, you may wish to refer the student to Student Disability Services as well as to other learning resources on campus. However, do not assume that the student has a learning disability because they are struggling.

At this time, Cornell University does not have the resources available to diagnose disabilities, which places the responsibility for diagnostic evaluations on the student. SDS is, however, equipped to offer guidance to students as they begin the evaluation process.<sup>2</sup>

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<sup>2</sup> Adapted from University of Michigan with permission.  
<http://www.umich.edu/~sswd/faculty.handbook.6.html>

## **BLINDNESS AND LOW VISION**

Students with blindness have several options for accessing written text. These include the following:

- Recorded material
- A reader
- A computer screen reader that reads text out loud
- Braille documents and books
- Raised line color graphics

To perceive non-textual material, students with blindness might use raised line drawings of diagrams, charts, and illustrations, relief maps, and/or three-dimensional models of physical organs, shapes, and microscopic organisms.

When printed text documents are scanned into a readable electronic format, they can be read by a synthesized voice output device or converted, as needed, into Braille, tactile color graphics, or large print. Students are responsible for requesting conversion of their academic materials each semester.

Converting course materials into alternate media is a labor-intensive and highly detailed process for courses that have a high degree of graphics or mathematical equations. The SDS Alternate Media Specialist will often have to request course materials well in advance of a lecture to have them prepared on time for a student with low vision. Providing course materials with as much advance notice as possible will ensure equitable access for the student.

### **Applying Universal Design Principles**

- Have copies of the syllabus and reading assignments ready four weeks prior to the beginning of classes to assist SDS with converting materials into alternate formats.
- If you know that you will be distributing handouts in class, try to provide them to the student with blindness or low vision ahead of time. This allows the individual to have access to the content by the time class is held.
- Be flexible with deadlines if assignments are held up by the document-conversion process.
- Keep a front row seat open for a student with blindness or low vision. A corner seat is especially convenient for a student with a service dog.
- Pace the presentation of material so that when referring to a textbook or handout, students have time to find the information.
- Repeat aloud what is written on the board or presented on overheads and in handouts.
- When using PowerPoint, read the headings out loud to indicate where in the presentation the class is. When referring to an object on a slide, describe where in the slide it is.
- When working with a blackboard, diagrams, PowerPoint, an overhead projector, or other visual materials, realize that precision in language is essential for the

student with low vision. If you point to the board and say, for example, “The heart is here,” or “there,” the student won’t know where you are indicating. However, if you say, “The heart is in the upper middle of the chest to the left side,” it is more accessible. “The sum of 4 and 7 is 11,” is more accessible than saying, “The sum of this and that is 11.”

- Like all students, students with blindness or low vision are responsible for the material covered in class. There are several different methods that can be used to take notes:
  - Recording the lecture
  - Asking a fellow student to use carbonless paper to take notes which are then converted into large print
  - Getting copies of the professor’s notes, if appropriate
  - Using a Braille device or laptop computer
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

## Typical Accommodations

- Alternative print formats
- Magnification devices
- Adjustments in lighting
- Raised lettering
- Tactile cues
- Adaptive computer equipment
- Text conversion
- Recorded lectures
- Lab or library assistants
- Note-takers
- Readers
- Library retrieval
- Transportation around campus
- Exam modifications
  - Extended time
  - Readers
  - Scribes
  - Adaptive equipment including computer screen readers
  - Alternative formats such as Braille or enlarged print

## DEAFNESS AND HARD OF HEARING (HOH)

The causes and degrees of hearing loss vary across the deaf and hard of hearing

community, as do methods of communication. Technology that has been developed to assist hard of hearing individuals by amplifying sounds includes hearing aids, FM systems, and cochlear implants. In the classroom, primary accommodations include the use of Assistive Listening Devices (ALD), sign language interpreting, and real-time captioning. Please refer to the *Information about Assistive Communication* section for further description of these accommodations.

Not all students who are deaf are fluent users of all communication modes used across the deaf community, just as users of spoken language are not fluent in all oral languages. The primary possibilities for communication include sign language, speech, lip reading, and writing.

## Applying Universal Design Principles

- All video content must be captioned.
- Circular seating arrangements offer deaf or HoH students the benefit of seeing all class participants. When desks are arranged in rows, keep front seats open for students who are deaf or hard of hearing and their interpreters.
- If you are in a classroom that provides a microphone for the professor, please use it.
- Try not to speak with your back turned to the class. Be especially mindful of this when writing notes on the board. The deaf student is probably lip reading at least some of what you are saying.
- If an interpreter is present, make sure the student can see both you and the interpreter.
- Speak loudly, clearly, and at a moderate pace. Try not to go too quickly.
- Replace such terms as “here” and “there” with more specific terms such as “on the second line,” “in the left corner,” and “on page \_\_\_.”
- When mentioning a book, always refer to the page number being discussed and indicate where on the page a reference can be found. Leave time for the student who is deaf or HoH to find the place because s/he cannot simultaneously flip to find a page and continue to be aware of what is said.
- If asking a question, give the deaf student a moment to catch up and read the question before answering.
- In discussions, encourage students to raise hands and take turns. This makes it much easier for the interpreter, captionist, and student to identify the speaker.
- Repeat the comments and questions of other students and acknowledge who has made the comment so the deaf or HoH student can focus on the speaker and/or know who has spoken.
- Pause at logical moments in the class to give the captionist and student time to catch up. Remember, the student receiving captioning is reading the lecture rather than listening to it and will almost certainly be a few sentences behind.
- If requested, assist the student with finding an effective note-taker from the class and/or provide the student with copies of your own notes.
- If there is a break in the class, get the deaf or HoH student’s attention before

resuming class.

- Because visual cues are a deaf student's primary means of receiving information, visual aids such as captioned films, overheads, and diagrams are useful instructional tools.
- Write new terminology on the board or present it in a handout. This is helpful both for the deaf or HoH student and for the sign language interpreter or captionist.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

## Typical Accommodations

- Sign language or oral interpreters
- Note-takers
- Captions for films and videos
- Real-time captioning of lecture material
- Transportation around campus
- Exam modifications
  - Extended time
  - The use of a computer for essay exams
  - An interpreter may be needed to interpret test instructions or to interpret the student's questions during an exam.
  - Since English may be a second language for an American Sign Language (ASL) user, an interpreter may be needed for translation.

## Information about Assistive Communication

### *FM Systems*

Students who are deaf or hard of hearing may use an ALD in the classroom to enhance the voice of a speaker. The most common ALD is a personal FM system; the speaker wears a microphone and the student wears a receiving unit. A student using a personal FM system should familiarize you with his or her system before class. Most require you to do little more than attach the lapel mic to your clothing. Amplification devices provide auditory information (code) that cues the student about the spoken word. The student then has to take that code and try to interpret what was said. This technology is a tool to improve hearing but does not provide a level of hearing that is comparable to that of a person without a hearing disability.

### *Sign Language Interpreting*

Sign language interpreters are professionals who facilitate communication between hearing individuals and people who are deaf through the use of sign language. The role of the interpreter is similar to that of a foreign language translator- to bridge the communication gap between two parties.

Sign language interpreters translate spoken English into the visual-spatial languages of

## ASL and Signed English (SE).

An interpreter may also be responsible for “voicing” responses for the student if the student is unable to communicate effectively on his or her own. Sometimes a student’s accommodations will include both captioning and sign language interpreting.

When an interpreter is in the classroom, speak directly to the student rather than to the interpreter. You can speak at a normal speed, noting that there may be a lag time between the spoken message and the interpretation.

### ***Real-Time Captioning***

Cornell SDS offers two kinds of real-time speech-to-text output: C-Print and CART. In both systems, the captionist types in shorthand, and the C-Print or CART software expands the shorthand into a full transcript that the student reads on a laptop computer. C-print provides meaning-for-meaning transcription and CART provides word-for-word transcription. CART and C-Print’s different keyboards and software have an impact on the student user’s experience.

#### *Meaning-for-Meaning versus Word-for-Word Captioning*

Using a full computer keyboard, C-print software is designed to enable the captionist to convey the key concepts and terminology of the speaker’s statements. The CART provider uses a stenographer’s machine and is able to create an exact transcript of the speaker’s statements. The difference might look like this:

C-Print “What’s at stake is the 4,000 FAA furloughed workers, along with tens of thousands of others...construction and airport support workers who are going without a paycheck.”

CART “Of course, what’s at stake here as you guys mentioned is these 4,000 FAA workers who have been furloughed, along with tens of thousands of other workers...construction workers, airport support workers who are going without a paycheck.”<sup>3</sup>

#### *Keeping Pace with Speech*

The average Words Per Minute (WPM) spoken in English is 150, and the range is from 130 to 250 WPM. An advanced typist using a standard QWERTY keyboard types 120 WPM.

C-Print captionists use standard QWERTY keyboarding. To keep pace and provide meaning-for-meaning notes, C-Print captionists depend on a robust C-Print dictionary to reduce keystrokes.

#### *How Captionists Engage with Required Course Materials*

Captionists use course materials to familiarize themselves with the general concepts of the topic so they can quickly recognize and remember spoken content during captioning. They also build a course-specific dictionary of terms and phrases that will be spoken in the classroom.

Helping captionists identify which materials you will draw from directly in your

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<sup>3</sup> Americans Off to Work. CNN, Aired August 4, 2011. Access date August 11, 2011. <http://transcripts.cnn.com/TRANSCRIPTS/1108/04/1tm.01.html>

lectures helps them to provide as close to word-for-word captioning as possible.

For example, while students need to read an article to gain a greater command of the topic, if content from that article is not *voiced* during your lecture, a captionist's reading of that article has not served the student. This is why your class notes, PowerPoint slides, and lecture outlines focus captionist preparation to only the most relevant content for that lecture. While new terms can be added on the fly, doing so slows down the real-time stream.

### *Material Support*

Giving the SDS Captioning Team (C-Team) access to course materials greatly facilitates a positive classroom experience for your student. Any material you share is considered *proprietary* and *confidential*.

### **Course Syllabus**

Captionists use a syllabus differently than students do. The SDS C-Team uses the syllabus to schedule the team's workload and to determine which C-Team captionist is best suited for your course. The syllabus may change during the course of the semester, but even a draft is useful.

### **Desk Copies of Required Texts**

Captionists greatly appreciate the use of available desk copies for the semester's duration.

### **Lecture Outlines, Notes, and Presentations**

Many lectures never refer to the concepts or key terms in the readings. Your class notes, PowerPoint slides, and lecture outlines focus captionist preparation to only the most relevant content for that lecture, which improves the student's academic experience.

The student may also need access to class notes, since it is very difficult for a student to read a continuous script of class activity and also take effective notes. If you have class notes, please advise your captionist. If not, the student or SDS may ask for your help in identifying potential note-takers from the class. SDS will compensate one student per class for performing this function.

### **Audio or Video Material**

Most audiovisual materials are too fast to caption effectively in the classroom. Advanced notice allows SDS time to create captioned video or audio transcripts. See the next section, *Equal Access to Audiovisual (AV) Materials*, for more information.

### **Blackboard Access**

Add captionists to your Blackboard class list to give them full access to class communications and resources.

### **Student Presentations and Written Materials Read Aloud in Class**

When reading directly from text or a script, speakers tend to use a speed far beyond the ability of a captionist to keep up. Having a hard copy of what is read will ensure that the student receives a verbatim quotation in his or her final transcript, rather than a paraphrased "meaning-for-meaning" summary. Consider requesting that students bring copies of their oral presentations for the SDS student. Also, let the captionist know ahead of time if any particular textual passage will be read aloud in class.

## Equitable Access to Audiovisual (AV) Materials

**NOTE:** It is extremely important to notify a student's captionist/interpreter as soon as an in-class audio or video presentation has been planned.

In-classroom captioning or sign-language interpreting of AV material is not sufficient to allow students who are deaf or hard of hearing equitable access to the material. Captioning and interpreting cannot keep pace with the audio on most AV material, and it is difficult for a student to simultaneously follow a video and watch an interpreter or read captions on a separate screen. In addition, reading lips is more difficult from a screen so even students who use lip-reading to follow a conversation will likely require captions when watching films or television. Therefore closed captions (video) and transcriptions or lyrics (audio only) are vital to a student's understanding of the material.

Closed captions are similar to subtitles in foreign language films. Captions appear at the bottom of the screen so the viewer can follow narration and dialogue. The main difference between subtitles and closed captions is that closed captions include not only dialogue but also non-dialogue audio information such as sound effects and speaker identification.

### ***Finding Captioned Videos***

#### *Online Videos*

- PBS Nova has full episodes online with closed captions available (QuickTime only): <http://video.pbs.org/program/nova/>
- Another good online resource is Project Read On: <http://www.projectreadon.com/>
- Check YouTube videos first to see if they are captioned (very few are). After searching on YouTube.com for a video, limit the search results by clicking on the "Filter" drop-down menu and choosing "CC (closed caption)." Double-check that the captions are in English before using them in class.
- Overstream is a website where volunteers caption YouTube and other online videos. This content does not necessarily overlap with YouTube, so check both websites: <http://www.overstream.net/>

#### *Videos Available through Cornell or Partner Libraries*

To search for captioned media, go to the Cornell Library website and perform an advanced search. In the keyword field, enter "video recordings for the hearing impaired" or "closed caption?" Using a "?" in the keyword field tells WorldCat to seek entries with any number of additional characters after the word "caption," such as captioning, captioned, captions. Then select "Visual Material" as the format.

### ***Equipment for Showing Closed Captioned Video in the Classroom***

Many video projectors used in Cornell classrooms do not have closed captioning decoders built into them. However, many classrooms do have overhead projectors that

display what is shown on a laptop screen. Common media programs, such as iTunes and Windows Media Player, can be set up to show captions while playing a DVD. A closed captioned VHS video can be displayed on a separate TV/VCR. Any TV available from Cornell should have a closed captioning decoder built in.

If you have any questions or concerns, speak to the Classroom Technical Support representative who supports the building. S/he can also provide training on how to use the equipment.

### ***If Captioned AV Materials are Unavailable***

In the event that a closed captioned version is not available in the library holdings, first:

- Check with the regional public library.
- Talk to the subject appropriate Cornell library (allow plenty of lead time) and request its purchase.

If these attempts are unsuccessful, Student Disability Services can provide either a captioned version (DVD or digital versions) or a transcript (VHS or Film) depending on the amount of lead time given.

### ***Requesting Captioned Video from Student Disability Services***

Captioning videos is labor-intensive, so please make any captioning requests as early as possible, at a minimum, 48 hours before the video will be shown in class. Last-minute requests may not be accommodated. Providing a transcript of the video to be shown will greatly expedite the captioning process.

### ***Requesting a Transcript for VHS, Film, or Audio from Student Disability Services***

Student Disability Services can provide a transcript for a student to use in place of captions. This is a less than ideal solution, but it is still preferable to attempting in-class captioning of AV materials. SDS will first attempt to locate an existing transcript, so please provide any relevant information including the full title, the series name (if applicable), the director's name, the production or distribution company's name, and the release date.

If a transcript cannot be obtained, SDS will create a transcript of the media being used. Because creating a transcript is an extremely time-consuming process, it is vital to provide this information and/or the AV materials to SDS as early as possible.

## CHRONIC MEDICAL CONDITIONS

Health-related disabilities are conditions affecting one or more of the body's systems. These include the respiratory, immunological, neurological, and circulatory systems. Students affected by health-related disabilities differ from those with other disabilities because their conditions are not static. As the condition changes, so too may the need for accommodations.

### Types of Health-Related Disabilities

There are many kinds of health-related disabilities, which vary significantly in their effects and symptoms. Below is a non-exhaustive list and brief descriptions of some of the more common medical conditions experienced by students at Cornell.

Arthritis	Diabetes Mellitus	Neuromuscular Disorders
Cardiovascular Conditions	HIV/AIDS	Seizure Disorders
Cerebral Palsy	Lyme Disease	Sickle Cell
Chemical Dependency	Lupus Erythematosus	Traumatic Brain Injury
Chronic Fatigue Disorders	Multiple Sclerosis	

**Arthritis** is inflammation of the body's joints, which causes pain, swelling, and difficulty in body movement. Students with arthritis may have difficulty taking notes, walking to class, or writing exams for long periods of time.

**Cardiovascular conditions** can cause fatigue, sleeplessness, dizziness, and shortness of breath. Students with cardiovascular conditions may require transportation to class in order to reduce the symptoms of fatigue.

**Cerebral Palsy** is the result of damage to the brain prior to or shortly after birth. It can prevent or inhibit walking and cause a lack of muscle coordination, spasms, and speech difficulty. Students with cerebral palsy may need to use computers or adaptive equipment for writing and may have difficulty with mobility issues.

**Chemical Dependency** is considered a disabling condition when it is documented that a person has received treatment for a drug or alcohol addiction and is not currently abusing. Chemical dependency can cause permanent cognitive impairments.

**Chronic Fatigue Syndrome** is an autoimmune disorder that causes extreme fatigue, loss of appetite, and depression. Physical or emotional stress may adversely affect a person with this condition. Students may miss class more frequently because of illness. In class, students may need seats with cushions and/or testing accommodations because frequent breaks are needed to help manage fatigue.

**Diabetes Mellitus** causes a person to lose the ability to regulate blood sugar. People with diabetes often need to follow a strict diet and may require insulin injections. During a diabetic reaction, a person may experience confusion, sudden personality changes, or loss of consciousness. In extreme cases, diabetes can also cause vision loss, cardiovascular disease, kidney failure, stroke, or necessitate the amputation of limbs. Students may need to have food and drink in class and/or leave class to take blood sugar measurements.

**HIV/AIDS:** HIV is the human immunodeficiency virus. It is the virus that can lead to acquired immune deficiency syndrome, or AIDS. HIV damages a person's body by destroying specific blood cells, called CD4+ T cells, which are crucial in helping the body fight diseases.

**Lyme Disease** is a condition that can cause paralysis, fatigue, fever, dermatitis, sleeping problems, memory dysfunction, cognitive difficulties, and depression.

**Lupus Erythematosus** can cause inflammatory lesions, neurological problems, extreme fatigue, persistent flu-like symptoms, impaired cognitive ability, connective tissue dysfunction, and mobility impairments. Lupus most often affects young women.

**Multiple Sclerosis (MS)** is a progressive neurological condition with a variety of symptoms, such as loss of strength, numbness, vision impairments, tremors, and depression. The intensity of MS symptoms can vary. A person can be extremely fatigued one day and very strong the next day. Extreme temperatures can adversely affect a person with MS. Students may miss class more frequently, need enlarged print handouts, and require additional time to complete assignments.

**Neuromuscular disorders** include a variety of diseases, such as muscular dystrophy, multiple sclerosis, and ataxia that result in degeneration and atrophy of muscle or nerve tissues.

**Seizure disorders** cause a person to experience a loss of consciousness. Episodes, or seizures, vary from *petit mal*, or short absence, seizures to the less common *grand mal* seizures. Seizures are frequently controlled by medications and are most often not emergency situations. Students with seizure conditions may miss class the day after a seizure. They also may need testing accommodations because medications affect cognitive processing and seizures affect memory.

**Sickle Cell Anemia** is caused by an abnormal type of hemoglobin. Symptoms include breathlessness, abdominal pain, fatigue, and low vision. Students with Sickle Cell Anemia will frequently miss class for home or hospital treatment of the symptoms.

**Traumatic Brain Injury (TBI)** occurs when a sudden trauma causes damage to the brain. Symptoms of a TBI can be mild, moderate, or severe depending on the extent of the damage to the brain. The range of symptoms include headache, confusion, lightheadedness, dizziness, blurred vision or tired eyes, ringing in the ears, bad taste in the mouth, fatigue or lethargy, a change in sleep patterns, behavioral or mood changes, and trouble with memory, concentration, attention, or thinking. Resting the brain is essential to recovering from a TBI.

## Applying Universal Design Principles

- Design course websites that include a complete syllabus (posted during the registration period), daily class notes, and streaming video of lectures.
- Provide multiple ways of demonstrating learning: take home exams, papers, group work, presentations, etc.
- Allow breaks during class, particularly for movement.
- Keep a front row or aisle seat open for the student.

- Present instructions in both written and oral formats.
- Allow the student to tape-record lectures.
- Assist the student with finding an effective note-taker from the class.
- Provide study sheets or review guides for exams.
- Be flexible with deadlines, class attendance, and make-up exams.
- Spend extra time with the student, when necessary, and assist the student with planning and time management.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him or her.

## **Typical Accommodations**

- Priority scheduling to work around treatment regimens, personal care needs, medication schedules, and variations in energy level and pain
- Ability to take a lighter than average course load without losing the benefits of being a full-time student
- Flexibility in scheduling classes and exams
- Flexibility with absence policy
- Exam modifications
  - Breaks
  - Reduced-distraction test environment
  - Use of a computer
- Conveniently located parking or transportation assistance
- Note-takers
- Extended time to complete a task
- Instructor assistance outside of the classroom
- Snacks and/or access to a refrigerator
- Ability to take frequent breaks
- Appropriate seating arrangements
- Assistive technology that decreases the impact of the disability
- Residence hall assignment appropriate to the individual's specific situation

## MOBILITY DISABILITIES

Mobility disabilities range in severity from limitations on stamina to paralysis. Some mobility disabilities are caused by conditions present at birth while others are the result of illness or physical injury. Injuries cause different types of mobility disabilities, depending on what area of the body is affected.

### Types of Mobility Disabilities

**Amputation** is the removal of one or more limbs, and is sometimes caused by trauma or another condition.

**Paraplegia** is paralysis of the lower extremities and lower trunk caused by an injury to the midback. Students often use a manual wheelchair and have full movement of arms and hands.

**Quadriplegia** is paralysis of the upper and lower extremities and trunk caused by a neck injury. Students with quadriplegia have limited or no use of their arms and hands and often use electric wheelchairs.

### Additional Information

#### *Wheelchairs*

A person who uses a wheelchair is not “confined” to it, but rather uses it to get around, much as many of us walk. Wheelchairs come in a variety of sizes and styles and with various optional attachments. They can be manual or motorized. If students are unable to propel themselves a significant distance manually, they will use an electric wheelchair or scooter.

#### *Personal Space*

Individuals’ wheelchairs and other mobility devices are essentially extensions of their bodies. Unless you are a close friend of the individual, it is not appropriate to lean or hang on the chair. Never move someone’s wheelchair without asking their permission.

#### *Relative Height*

When speaking with a person in a wheelchair or with short stature, consider kneeling or squatting so that you are at the person’s eye level. This eliminates the need for the person in the wheelchair to tilt their heads back awkwardly for extended periods of time.

#### *Transportation*

For students with mobility impairments, transportation is provided by Student Disability Services in the form of free TCAT bus passes and the CU Lift service, which provides rides between campus buildings and campus housing units.

### Applying Universal Design Principles

- If necessary, arrange for a room change before the term begins.
- If possible, try not to seat wheelchair users in the back row. Move a desk or rearrange seating at a table so the student is part of regular classroom seating.

- Make sure accommodations are in place for in-class written work (e.g., allowing the student to use a scribe, to use assistive computer technology, or to complete the assignment outside of class).
- Be flexible with deadlines. Assignments that require library work or access to sites off campus will consume more time for a student with a mobility disability.
- Make arrangements early for field trips and ensure that accommodations will be in place on the given day (e.g., transportation, site accessibility).
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him/her.

### ***Physical Education***

Classes in kinesiology and recreation can almost always be modified so that the student in a wheelchair can participate. Classmates are usually more than willing to assist if necessary. Some students who use wheelchairs do not get enough physical exercise in daily activity, so it is particularly important that they be encouraged, as well as provided the opportunity, to participate.

### **Typical Accommodations**

- Note-takers
- Accessible classroom/location/furniture
- Alternative ways of completing assignments
- Lab or library assistants
- Assistive computer technology
  - Screen-reading software
  - Voice-activated software
- Conveniently located parking or transportation assistance
- Exam modifications
  - Extended time
  - A scribe
  - Use of assistive technology

## PSYCHOLOGICAL DISABILITIES

Students with psychological disabilities experience chronic symptoms and have been treated professionally. Trauma is not the sole cause of psychological disabilities. Rather, genetics may play a role. With appropriate treatment, which often combines medications, psychotherapy, and support, the majority of psychological disabilities can be controlled. Disruptive behavior is not an attribute of most people with psychological disabilities.

Psychological disabilities can affect people of any age, gender, income group, and intellectual level. The National Institute of Mental Health estimates that one in five people in the United States has some form of psychological disability, but only one in five persons with a diagnosable disorder ever seeks treatment due to the strong stigmatization involved.

### Common Psychological Disabilities

Below is a non-exhaustive list and brief descriptions of some of the more common psychological disabilities experienced by students at Cornell.

Anxiety Disorders  
Bipolar Disorder

Depression  
Eating Disorders

Obsessive Compulsive Disorder  
Schizophrenia  
Tourette's Syndrome

**Anxiety Disorders** can disrupt a person's ability to concentrate and cause hyperventilation, a racing heart, chest pains, dizziness, panic, and extreme fear.

**Bipolar Disorder (Manic Depressive Disorder)** causes a person to experience intense emotional states that occur in distinct mood episodes. In the manic phase, a person might experience an overexcited state. The depressed phase is marked by extreme sadness and hopelessness.

**Depression** is a major disorder that can begin at any age. Chronic depression may be characterized by a depressed mood for much of each day, a lack of pleasure in most activities, thoughts of suicide, sleep problems, and feelings of worthlessness or guilt. Depression is a variable condition that may fluctuate during a person's lifetime. Eighty to ninety percent of people with depression experience relief from symptoms through medication, psychotherapy, or a combination of the two.

**Eating Disorders** are illnesses that cause serious disturbances to one's everyday diet, such as eating extremely small amounts of food or severely overeating. Common eating disorders include anorexia nervosa, bulimia nervosa, and binge-eating disorder. Eating disorders affect both men and women. An eating disorder can be treated with adequate nutrition, reducing excessive exercise, and psychotherapy.

**Obsessive Compulsive Disorder (OCD)** is an anxiety disorder in which people have unwanted and repeated thoughts, feelings, ideas, or sensations (obsessions) that make them feel driven to do something (compulsions). This condition can significantly interfere with everyday living. OCD can be treated with medication and therapy.

**Schizophrenia** can cause a person to experience, at some point in the illness, delusions and hallucinations.

**Tourette's Syndrome (TS)** is a neurological disorder characterized by repetitive involuntary movements and vocalizations called tics.

## **Applying Universal Design Principles**

- Spend extra time with the student, when necessary, and assist the student with planning and time management.
- Clearly define course requirements, the dates of exams, and when assignments are due; provide advance notice of any changes.
- Allow the student to tape-record lectures.
- Assist the student with finding an effective note-taker.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him/her.

## **Typical Accommodations**

- Taped lectures
- Exam modifications
  - Extended time
  - Reduced-distraction test environment

## SPEECH AND LANGUAGE DISORDERS<sup>4</sup>

The term “Speech and Language Disorders” refers to problems in communication and related areas such as oral motor function. These delays and disorders range from simple sound substitutions to the inability to understand or use language or use the oral-motor mechanism for functional speech. Speech and language disorders have many causes including hearing loss, cerebral palsy, learning disabilities, and traumatic brain injuries.

**Speech disorders** refer to difficulties producing speech sounds or problems with voice quality. They might be characterized by an interruption in the flow or rhythm of speech, such as stuttering. Speech disorders may be problems with the way sounds are formed, called articulation or phonological disorders, or they may be difficulties with the pitch, volume, or quality of the voice. There may be a combination of several problems. A student may say “see” when they mean “ski” or they may have trouble using other sounds like “l” or “r.”

**Language disorders** are impairments in the ability to understand and/or use words in context, both verbally and nonverbally. Some characteristics of language disorders include improper use of words and their meanings, inability to express ideas, inappropriate grammatical patterns, reduced vocabulary, and inability to follow directions. One or a combination of these characteristics may occur in students who are affected by language learning disabilities or developmental language delay.

Although you may be uncomfortable listening to someone with a speech and language disorder, remember that “your discomfort is not their discomfort.” Make sure you let individuals with speech disorders speak for themselves. Do not finish sentences for them or assume you know what they are going to say.

At the same time, understand that a student with a communication disorder may be self-conscious and hesitant to participate in class. Try to pace discussion so that there is ample time and opportunity to participate.

### Applying Universal Design Principles

- Let the student speak for him or herself, allowing for the time needed to do so.
- When speaking with a student whose speech is difficult to understand, don’t hesitate to ask for clarification, using writing when necessary.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative arrangements to the rest of the class).
- When in doubt about how to assist the student, ask him/her.

### Typical Accommodations

Oral presentations may be a concern for students with speech impairments and their instructors. It is recommended that instructors openly discuss these concerns with the

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<sup>4</sup> Gregoria Barazandeh, “Disability Fact Sheet Handbook” at UC Irvine  
[http://www.disability.uci.edu/disability\\_handbook/Speech%20and%20Language/fact\\_sheet.html](http://www.disability.uci.edu/disability_handbook/Speech%20and%20Language/fact_sheet.html) Reprinted with permission.

student and come up with adjustments to oral assignments, if needed. Listed below are several possibilities for alterations.

- Modifications of oral assignments including the use of a computer with a voice synthesizer or permitting the student to present directly to the faculty member in his or her office.
- Allowing substitutions for oral class reports when the oral report is not fundamental to the class.
- Assigning group projects that allow the student to participate in a reduced capacity in the oral presentation.

## **Section IV: Information about Disability Accommodations**

## **NOTE-TAKING**

In some cases, SDS determines that class notes are an effective and reasonable accommodation for students. If the class is covered by the TakeNote service, SDS will provide the student with a voucher to enroll. If TakeNote is not available, the student with the disability should attempt to find another student who is willing to share his or her notes. However, if a volunteer cannot be found, the student may request assistance from the instructor or contact SDS to facilitate hiring a note-taker. Note-takers are paid at an hourly rate. SDS will pay one note-taker per class, so it is important that students discuss this accommodation with their SDS counselor and professors to ensure that the note-taking service is coordinated for each class. Student note-takers must complete the employment appointment process and be added to the payroll system before they can begin taking notes. This process is completed in the SDS office.

## **TRANSPORTATION**

Transportation assistance is available through SDS to students with temporary or permanent mobility disabilities. The accommodations available include free bus passes, the approval of accessible parking permits, which are then purchased by the student from Commuter and Parking Services, or the use of CULift, the Cornell paratransit service that provides scheduled on-campus rides for classes and extra-curricular activities. In some cases, students may utilize a combination of these services to meet their mobility needs. If you believe a student would benefit from transportation assistance, please encourage him or her to meet with the Transportation Coordinator in the SDS office.

### ***Bus Passes***

For most students with mobility disabilities, bus passes provide enough flexibility for getting around campus. SDS will provide short-term or long-term passes at no charge to the student. These passes allow students to take TCAT buses anywhere on campus, as well as throughout the Ithaca area, seven days a week.

### ***Accessible Parking***

Students who live off campus and have cars may find accessible parking an appropriate option. Students must register with SDS and provide disability documentation to SDS.

### ***CULift***

The CULift is an on-campus transportation service. SDS works in conjunction with Red Runner Courier Service to offer the CULift service free of charge to students who need rides from their on- or near- campus housing to campus buildings and peripheral parking lots. CULift rides may supplement the use of the TCAT bus system.

## **STUDENT LIFE**

Cornell is obligated to provide equal opportunity to participate in its programs, services, events, and meetings. SDS is responsible for the cost and arrangement of accommodations in extracurricular programs, services, and activities for matriculated Cornell students. Accommodations are also provided by SDS for extramural students and employees taking courses for academic credit. The academic department or unit is

responsible for the access needs of visitors and guests to its programs and services. The Medical Leaves Administration in Human Resources addresses the access needs of faculty and staff in the workplace.

Listed below are aspects of student life for which students most frequently request accommodations.

### ***Residential Life***

Housing placements are provided for students whose disabilities have an impact on their access to residential facilities. The SDS office makes a recommendation to the Housing office in advance of the general room selection process. Students requesting disability accommodations for housing must submit disability documentation in accordance with SDS guidelines.

### ***Cornell Dining***

The campus dining facilities that are operated by Cornell Dining utilize a food labeling system that designates common food allergens. The dining halls offer a wide selection of choices to satisfy a broad range of dietary needs. SDS and Cornell Dining provide reasonable accommodations for students with disabilities regarding individual dietary concerns. However, certain campus dining locations are independently owned and operated and do not offer similar dietary accommodations.

### ***New Student Orientation***

The access needs of students and families attending New Student Orientation should be addressed in advance to the greatest extent possible. SDS has a Request for Disability Services Form available on the New Students website so that all undergraduate, graduate, and professional students have the necessary information to request disability services and become familiar with Cornell's disability procedures well in advance of arriving on campus. This form also includes a deadline for requesting accommodations for placement exams.

### ***Student Employment***

Persons with disabilities face a high rate of unemployment and underemployment. Work experience is critical to a student's future success, and students with disabilities should be encouraged and mentored in the workplace. SDS will provide workplace accommodations for students employed at Cornell. When considering a student for an employment position, the employer must follow EEOC regulations regarding inquiry of a disability. There is information on the Cornell Human Resources website that provides guidance on pre-employment inquiries of persons with disabilities at: [www.hr.cornell.edu/managers/onboarding/unlawful\\_inquiries.html](http://www.hr.cornell.edu/managers/onboarding/unlawful_inquiries.html)

### ***Study Abroad***

There are many opportunities for Cornell undergraduates to study, travel, or volunteer abroad. Students should take into account the impact of their disability and investigate the kinds of disability services available in the countries and programs under consideration. The rights of people with disabilities differ greatly by country. Many recognize disability rights, and many Study Abroad programs have well-developed disability accommodation procedures, but this is not true for all programs. The need for accessible facilities, support services, medications, and treatment are all factors that

should be considered. The SDS and Cornell Abroad office will work with students to address these issues. The SDS website has a list of resources for information about travel abroad for persons with disabilities at:

<http://sds.cornell.edu/Resources/StudyAbroad.html>

### ***Physical Education (PE)***

There are many types of classes available to fulfill the PE requirement. The office of Physical Education has a certified adaptive PE instructor who can modify most PE classes for individuals with disabilities. Students who are concerned about meeting their PE requirement should meet with their SDS counselor early in their first year at Cornell.

### ***Swim Test Requirement***

The office of Physical Education will provide accommodations for students who have disabilities that affect their ability to complete the swim test requirement in its standard administration. Typical accommodations include an individualized administration of the swim test and a non-chlorinated swimming environment. Students requesting accommodations for the swim test should register with SDS.

### ***Commencement***

The SDS office arranges accommodations for students participating in Commencement activities. The Commencement Office has well-developed procedures in place for addressing the access needs of parents and guests.

### ***Emergency Evacuation***

SDS has a procedure in place to develop Emergency Evacuation Plans with students. Appropriate Cornell personnel are consulted (including Building Coordinators, Residence Hall Directors, CU Police, and EH&S) to develop plans for evacuating buildings and addressing emergencies. Confidential information about persons with specific evacuation concerns can be stored on a secure website used by First Responders.

### ***Inclement Weather***

The SDS office assists students who face difficulty with travel around campus during the winter months. With the Voluntary Inclement Weather Questionnaire, students can submit their class schedule and travel routine on campus to the SDS office. The SDS staff then conveys this information to the Building Care and Grounds Department staff so that paths of travel can be cleared of snow and ice (to the greatest extent possible) for students with disabilities.

### ***Admissions***

The University cannot make inquiries about the disability status of a prospective student. However, Cornell must provide equitable access in the Admissions process for prospective students and their families, such as accessible tours, sign language interpreters for information sessions, access to internet forms and information, and overnight stays in residence halls in accessible rooms. Students who inquire about disability services available at Cornell should be referred to the SDS office.

# **Section V: Communicating with People with Disabilities**

## SUGGESTIONS FOR MEETING PEOPLE WITH DISABILITIES<sup>5</sup>

- Most people with disabilities will not hesitate to ask for needed help and will be specific as to how it should be given; for example, a person who is blind usually prefers to take your arm rather than to have you hold his or hers. Offer assistance as you would to anyone else, for example, to push a wheelchair or to guide a person who is blind. The person will indicate whether or not the help is needed, and “No, thank you,” must be respected.
- Always talk directly to a person with a disability rather than to the person who may be accompanying him or her. Never talk about a person with a disability to the person he or she is with as if the person does not exist. This includes an interpreter for a person who is deaf.
- Do not avoid using words like *blind* or *deaf* when associating with people with these disabilities. People with disabilities are aware of their disabilities and do not need to be shielded from the facts.
- When talking for any length of time to a person who uses a wheelchair, it is better to sit down in order to be at the same eye level. It is very tiring for a person to look up for a long time.
- Federal and state laws are in place to make new construction accessible to people with disabilities, but it is important to be aware of the architectural barriers in your building and to consider accessibility when you plan meetings with students.
- Lip reading by persons who are deaf can be aided by being sure that the light is on your face and not behind you, and by taking all obstructions such as pipes, cigarettes, or gum out of the mouth, keeping the lips flexible, and speaking slowly. Additional communication could include body language, pantomime and gestures of all kinds, and written communication if necessary.

### Speaking About People with Disabilities

Your portrayal of individuals with disabilities can enhance their dignity and promote positive attitudes about their abilities. Let your descriptive words emphasize the person’s worth and abilities, not the disabling condition. Avoid references, phrases, and words that suggest restrictions, limitations, or boundaries because these phrases tend to carry stereotypes and contribute to discriminating attitudes. Even if a person with disabilities refers to him or herself in particular ways, using phrases like “confined to a wheelchair” reflects poor judgment on the part of the speaker or writer.

Refer to the person first rather than the disability. The phrase “people with disabilities” is preferred, for instance, over “the disabled” which tends to emphasize disability and to create the image of an unusual and homogeneous group. Here are some examples of people-first language:

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<sup>5</sup>Adapted from: *Serving Disabled People: An Informational Handbook for Libraries* by Ruth Velleman

***Affirmative phrases***

- Person who is blind; person with low vision
- Person who is deaf; person who is hard of hearing
- Person who has multiple sclerosis
- Person with epilepsy; person with a seizure disorder
- Person who uses a wheelchair
- Person who is unable to speak

***Negative phrases***

- The blind
- Suffers a hearing loss
- Afflicted by MS
- Epileptic
- Wheelchair-bound; confined to a wheelchair
- Dumb; mute
- Courageous (implies the person is a hero or martyr)

If you feel awkward about how to refer to a person with disability, it may be best to ask the person.

## **Suggestions for Interacting with Students with Blindness or Low Vision**

- Some students with vision loss use canes or service dogs for mobility purposes; however, many navigate without them. Like anybody, students with low vision appreciate being asked if help is needed before it is given. Ask a student if s/he would like some help and then wait for a response before acting.
- When entering a room, identify yourself to the student. When giving directions, say “left” or “right,” “step up” or “step down.” Convert directions to the student’s perspective.
- When guiding a student (into a room, for example), offer your arm and let him or her take it rather than pulling the person’s sleeve. If a person with blindness uses a sighted guide, s/he generally holds the elbow of the guide.

## **Etiquette for Interacting with Service Dogs**

- Don’t touch, pet or feed a service dog while it is wearing a working harness. Do allow the dog to concentrate and perform for the safety of the handler.
- Don’t call the dog by name. Do understand that, for safety reasons, some blind or low vision people will not reveal their service dog’s name to a stranger.
- Don’t give the dog commands. Do allow the handler to do so.
- Don’t try to take control in situations unfamiliar to the dog or the handler. Do assist the handler upon his or her request, and always ask before you attempt to help.
- Don’t walk on the dog’s left side as it may become distracted or confused. Do walk on the handler’s right side, several paces behind him or her.
- Don’t attempt to grab or steer the handler while the dog is guiding him or her, and do not attempt to hold the dog’s harness. Do ask if the handler needs your assistance and, if so, offer your left arm.
- Don’t allow people to tease or abuse the dog. Do allow the dog to rest undisturbed and concentrate on its job.

- Don't allow pets or other dogs to challenge or intimidate a service dog. Do allow them to meet when all animals can be carefully supervised.
- Don't pat the dog on the head. Do stroke the dog on the shoulder area—but only with the handler's approval.
- When speaking to the service dog's handler, do address the person and not the dog.
- Sometimes a service dog will make a mistake, and a correction is necessary to keep up the training. This could be a verbal reprimand or a leash correction. Handlers have been taught the proper and humane training techniques to maintain their dogs' working standards. You may not always hear it, but service dogs get loads of praise when they do the right things.

## **Section VI: Resources**

## Campus Partners

Disability Representatives serve as liaisons between Student Disability Services and the schools/colleges and various campus offices regarding disability issues. They assist faculty and staff with the coordination of some accommodations and provide information to students and colleagues about SDS. Collaboration between the Disability Representatives and SDS results in improved access in a supportive community for students with disabilities. A list of the disability representatives can be found at: [http://sds.cornell.edu/Resources/Disability\\_Reps.htm](http://sds.cornell.edu/Resources/Disability_Reps.htm)

SDS works with many offices and programs on campus to ensure equitable access. An important component of determining appropriate reasonable accommodations is to discuss the requirements of a program, the nature of a service, and the reason for a policy or procedure with those responsible. SDS regularly collaborates with partners in Campus Life about dining and housing issues, with Gannett care managers, crisis managers, building coordinators, and advising staff.

**Disability Laws:** <http://www.ada.gov/>

**Section 504 of the Rehabilitation Act of 1973**

**The Americans with Disabilities Act of 1990**

**The Americans with Disabilities Act of 1990, as amended in 2008**

## For Students

### **Student Disability Services**

420 Computing & Communications Center  
(607) 254-4545; [sds\\_cu@cornell.edu](mailto:sds_cu@cornell.edu)

### **Mathematics Support Center**

256 Malott Hall  
(607) 255-4658

### **John S. Knight Institute for Writing in the Disciplines**

101 McGraw Hall  
(607) 255-4061

[http://www.arts.cornell.edu/knight\\_institute/walkin/walkin.htm](http://www.arts.cornell.edu/knight_institute/walkin/walkin.htm)

### **Learning Strategies Center**

420 Computing & Communications Center  
(607) 255-6310

<http://lsc.sas.cornell.edu>

### **Mobility International, National Clearinghouse on Disability and Exchange**

<http://www.miusa.org/ncde>

## Cornell University – Faculty Information

### **Disabilities, Opportunities, Internetworking, and Technology (DO-IT)**

DO-IT Faculty Room

<http://www.washington.edu/doi/Faculty/>

## Captioning Videos

### AccessIT

NAD: A Promising Practice in Streaming Captioned Educational Video

<http://www.washington.edu/accessit/articles?214>

### Captioned Media Program

<http://www.dcmp.org/Default.aspx?AspxAutoDetectCookieSupport=1>

## Universal Design

### Disability Information and Resources

<http://www.makoa.org/accessable-design.htm>

### Disabilities, Opportunities, Internetworking, and Technology (DO-IT)

Applications of Universal Design

<http://www.washington.edu/doi/Resources/udesign.html>

## Web Accessibility

### Cornell University

A Web Accessibility Primer: Usability for Everyone

<http://www.it.cornell.edu/policies/accessibility/resources.cfm>

### DO-IT

Accessible Web Design

<http://www.washington.edu/doi/Resources/web-design.html>

### The Trace Research & Development Center, University of Wisconsin

Designing More Useable Websites

<http://trace.wisc.edu/world/web/#awsg>

### National Center on Accessible Information Technology in Education

AccessIT Homepage

<http://www.washington.edu/accessit/index.php>

### Equal Access to Software and Information (EASI)

Barrier-free E-Learning Course Information

<http://easi.cc/>

### WEB Accessibility in Mind (WEBAIM)

<http://webaim.org/intro/>

## Workplace Accessibility

### Cornell University Medical Leaves Administration

Addressing the access needs of Cornell faculty and staff

<http://www.cornell.edu/disability/faculty-staff.cfm>

### Cornell University ILR School Employment and Disability Institute

<http://www.ilr.cornell.edu/edi/index.cfm>

### Job Accommodation Network

<http://askjan.org/>