



G R I F F I N T E C H N I C A L  
— C O L L E G E —

## Guidelines for Accommodating Students with Disabilities

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## Further Reading

The Griffin Technical College Library has developed a collection of materials on learning and physical disability education and the Universal Design for Learning methodology. Resources that have been used extensively in the preparation of this manual are listed below.

Bowe, Frank G. Universal Design in Education: Teaching Nontraditional Students. (Westport, CT: Bergin and Garvey, 2000).

Rose, David H. and Anne Meyer. Teaching Every Student in the Digital Age: Universal Design for Learning. (New York: Association for Supervision and Curriculum Development, 2002). [<http://www.cast.org/teachingeverystudent/>]

San Diego State University, Center for Distance Learning. A Model for Applying the Concept of Universal Design for Learning. [http://interwork.sdsu.edu/courses/distance/higher-ed/mod4/rev\\_charts.html#body](http://interwork.sdsu.edu/courses/distance/higher-ed/mod4/rev_charts.html#body)

# **1. General Policies and Procedures**

## **A. Introduction**

The recent passage of the Americans with Disabilities Act (ADA) brings the issue of disability access to the forefront at institutions of higher education. The requirements of the ADA are very similar to those outlined in Section 504 of the Rehabilitation Act of 1973, as amended, but the ADA is more comprehensive and it applies to both public and private institutions regardless of whether or not the institutions receive federal financial assistance.

Griffin Technical College is obligated to make reasonable accommodations in programs and activities to provide equal access to qualified persons with disabilities. A qualified person with a disability is a person who can satisfy "the academic and technical standards requisite to admission or participation in the recipient's education program or activity. Traditionally, many people with disabilities have been denied educational and social opportunities due to architectural and attitudinal barriers. Griffin Technical College is committed to breaking these barriers and assuring equal access to all students as outlined in the Americans with Disabilities Act of 1990.

A recent survey found that one out of ten college students self-reported having a disability. Many colleges have begun to develop policies and practices to improve educational opportunity for people with disabilities. While removing architectural barriers is of great importance, such changes improve program access only for people with limited mobility. The ADA requires programs to move beyond these obvious improvements and to address the needs of all people with disabilities, including those that are highly individualized.

## **B. Statement of Accommodation**

Griffin Technical College complies with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Students with disabilities who seek academic accommodations must first take appropriate documentation to the Office of Student Services located in the Academic Building. It is the responsibility of Student Services to assess the documentation of each student requesting academic accommodations based on disability.

When the documentation substantiates a disability, Student Services staff decides which academic accommodations "level the playing field" for that student. The student will then be given an "Accommodation Request Form" stating the nature of the approved accommodations.

Any student, requesting academic accommodations from an instructor, should present their "Accommodation Request Form". Until you receive this form, you are under no obligation to provide accommodations to the student.

When you receive the "Accommodation Request Form", you can be assured that the student has presented Student Services with proper documentation and that accommodations listed are appropriate for the individual student. If you have any questions, please call Student Services and ask to speak to the staff person who signed the form or the Vice President.

### ***C. Departmental Responsibilities***

Programs are required to move beyond the obvious needs of people with mobility impairments and begin to address the highly individualized needs of the entire disabled population. Since there is no single all-encompassing description of a "disabled person," programs must address access needs on an individual basis. Listed below are suggestions to improve access for people with various types and degrees of disabilities.

Consider using or modifying these statements for program announcements, newsletters, brochures and other communications:

#### General

Access provided for people with disabilities. Call (office, person) by (date) for specific requests.

The Griffin Technical College (insert program or department name) is committed to providing access for all people with disabilities and will provide accommodations if notified.

#### Comprehensive Statements

This program follows the regulations outlined in the Americans with Disabilities Act. Call (office, person) for information about architectural access and to arrange for sign language interpreters, assistive listening devices, large print, audio, or Braille.

Please call (office, person) to request the following: sign language interpreter, assistive listening device, large print, audio, or Braille.

#### Inaccessible Buildings

Alternate access will be arranged for people with limited mobility. Call (office, person) by (date) for specific requests.

### Partially Accessible Buildings

Wheelchair access is located at (entrance). Parking available in (parking areas).

### Programs and Events

To request a sign language interpreter or assistive listening device, call (office, person) by (date). (This statement not only welcomes deaf individuals to your event, but also sets a realistic time frame for interpreter service requests.)

### Written Materials

This document is available in large print, audiocassette, or Braille. For information, contact the editor.

For large print, audiocassette or Braille version call (office, person).

### Syllabus Statement

If you have a disability and would like to request classroom accommodations, please see me (Instructor) after class to make an appointment during office hours.

### ***D. Available Assistive Technology***

The Learning Resources Department has assistive technology devices available for use by Griffin Technical College students with disabilities. The Director of Learning Resources can also help in locating instructional materials in alternate formats.

For more information contact:

Director of Learning Resources  
Library/Academic Building  
(770) 229-3442

### ***E. Testing Accommodations***

When testing accommodations are indicated (i.e. extended test time, testing in a distraction-reduced environment, etc.), you will be asked to fill out a request form. It is the student's responsibility to bring the form to Student Services at least 24 hours before the first scheduled exam date.

## 2. Frequently Asked Questions

### What is the ADA?

The Americans with Disabilities Act (ADA) is a comprehensive national mandate designed to eliminate discrimination against individuals with disabilities.

### Who Is Qualified As Disabled?

Disability is defined as a physical or mental impairment that substantially limits one or more major life activities, such as walking, seeing, breathing, working and learning. Examples include orthopedic, visual, speech and hearing impairments, epilepsy, muscular dystrophy, cancer, heart disease, diabetes, emotional illness, learning disabilities and HIV disease.

### How do I know what test accommodations to provide?

Students, approved for test accommodations, should provide you with a letter from Student Services indicating the testing accommodations needed. Test accommodations may include but are not limited to: extended time, low distraction environment or private room, use of a computer, large print, scribe or reader. Specific accommodations are specified in the letter.

### Who is responsible for determining appropriate accommodations?

The Office for Student Services is the office on campus that determines appropriate accommodations. The office bases their decision upon documentation collected from a student with a disability and the student's functional limitations.

### Are all students with disabilities registered with Student Services?

No, it is likely that many students with disabilities have chosen not to be registered with Student Services or they may not have met the eligibility criteria for services. In either instance, faculty members do not need to provide these students with accommodations.

### What would be the best way to inform students in the class that I would like to help in facilitating exam accommodations or any classroom accommodations?

It is important that all faculty members put a statement about accommodations in their syllabus. It should go something like this: "Any student who feels s/he may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact Student Services at 770-

228-7348 to coordinate reasonable accommodations for students with documented disabilities.”

Am I required to provide exam accommodations to students who request it?

Yes you are. The Rehabilitation Act of 1973, Section 504, protects students with disabilities. This law requires that qualified students with disabilities get equal access to an education, and this includes exam accommodations.

A student has asked for accommodations. How do I know the student truly has a disability and needs accommodations?

You may ask the student to provide you with a letter verifying that s/he has a disability. The student, if registered with Student Services, will be given a letter within 24 hours after a request is made. Student Services has on file for every student who is registered with the office and uses services, documentation of the disability.

I have a student in class who told me that s/he has a disability, but since that time has never requested any accommodations. Am I still responsible for accommodations?

No, you are only responsible for reasonable accommodations if requested. In these types of situations, however, it would be appropriate to speak to the student privately to let the student know that you welcome the opportunity to discuss reasonable accommodations if the student is interested.

What are some of the types of exam accommodations available to students with disabilities?

First of all, the exam accommodations are based upon the student’s functional limitations and the documentation of disability that the student has provided Student Services. Some of these accommodations include but are not limited to: extra time for exams (usually 50% extra time but in some cases as much as double time), a reader or scribe (a person who writes answers verbatim), a computer, an enlarged exam, an exam scanned onto a disk and use of computer (student uses voice, enlargement options, or spelling/grammar check), a distraction-reduced space, image enhancements (converting graphs, charts, and other types of images converted into raised-line format), and use of a closed circuit TV to enlarge print.

When I have a deaf student in class, am I required to have an interpreter or real time captioner in the class too? My class is very crowded and also, the students sometimes watch the interpreter instead of me.

There is no question about it. You are required by law to have what is essential for the student to have equal access to an education, and this includes a sign language interpreter or real time captioner.

A student with a disability has asked me for a copy of my notes and overheads. Do I have to give this to the student?

Some students with disabilities have difficulty taking notes. Sometimes faculty notes are only a brief out line of the actual lecture given. These notes may not be too helpful. It is important that you assist the student in getting access to class notes. You may want to help the student find a volunteer note taker in class by making an announcement in class without revealing the student's name. If you have a graduate student in class to assist you and if this person takes notes, these notes may be another option. If you feel your notes are good, sharing your notes would be a third option. Some distance learning faculty have developed website guided notes. This has been extremely helpful to many students who lack the ability to keep up the pace in taking thorough notes. It may also be appropriate for some students to tape a class.

I have a student who is having difficulty in my class. I think this student may have a disability. What should I do to help the student?

Talk privately with the student to discuss your observations. The student may reveal s/he has a disability. If this is the case and the student is registered with Student Services, suggest that the student talk to his/her counselor in this office. The student may also be referred to Student Services for diagnostic testing for a suspected learning disability. Suggest that the student contact Student Services for further information.

Am I required to lower the standards of a required assignment because the student has a disability?

No, the standards should be the same for all students; however, some students with disabilities may exhibit their knowledge, production, and other course expectations differently than their peers. For example, a student with a learning disability in writing may produce an essay exam by using a computer or scribe rather than writing out an answer without the use of accommodations. The quality of the work should be the same.

I have a student with a disability getting behind in his/her schoolwork. This student is missing a number of classes and has not handed in several assignments. Although s/he has taken a midterm and used accommodations, the student's grade is about a D. At this point, the student is not passing the class. Do I have a right to fail a student with a disability?

The student with a disability has the same right to fail as anyone else. Their work should be equivalent their peers. It may be a good idea to discuss your observations with this student just as you would with anyone else in your class who is experiencing difficulty.

I have a student who is blind in my chemistry lab. How is s/he going to participate and be graded in his/her lab work?

If possible, assist the student in getting a lab partner or assign a student assistant to work with the student with a disability. In either situation, the student who is blind should direct the assistant to carry out the functions of the lab assignment. If a volunteer lab partner cannot be found, suggest to the student that s/he needs to contact Student Services as soon as possible for assistance in getting a lab partner. The speed in making these arrangements is critical so that the student will not get behind.

Do I have any recourse if I disagree about requested accommodations?

To clarify any disagreement about a requested accommodation, you can first contact Student Services. If there continues to be conflict, you can contact the Griffin Technical College ADA Coordinator.

What are the limitations to accommodating students with disabilities?

Faculty are chiefly responsible for providing academic adjustments to students with disabilities in their classes. Instructors are never asked to lower academic standards or to provide adjustments that are excessive, but they are expected to make reasonable accommodations. If a faculty member does not provide academic adjustments, students with disabilities will be at an academic disadvantage.

### **3. General Considerations for Faculty**

Do not be afraid to make a mistake when meeting and communicating with someone with a disability. Try following the suggestions below. Imagine how you would react if you were in similar situations. Keep in mind that a person who has a disability is a person, and, like you, is entitled to the dignity, consideration respect, and rights you expect for yourself.

Treat adults as adults. Address people with disabilities by their first names only when extending the same familiarity to all others present. (Never patronize people by patting them on the head or shoulder.)

Relax. If you don't know what to do, allow the person who has a disability to put you at ease.

If you offer assistance and the person declines, do not insist. If it is accepted, ask how you can best help, and follow directions. Do not take over. If someone with a disability is accompanied by another individual, address the person with a disability directly rather than speaking through the other person.

#### "People First" Terminology

Place the person before the disability. Say "person with a disability," rather than "disabled person."

Avoid referring to people by the disability they have, i.e., "an epileptic," "blind people". A person is not a condition. Rather, refer to "a person with epilepsy," or "people who are blind."

People are not "bound" or "confined" to wheelchairs. They use them to increase their mobility and enhance their freedom. It is more accurate to say "wheelchair user" or "person who uses a wheelchair."

#### Physical Disabilities

Do not make assumptions about what a person can and cannot do. A person with a physical disability is the best judge of his or her own capabilities.

Do not push a person's wheelchair or grab the arm of someone walking with difficulty, without first asking if you can be of assistance. Personal space includes a person's wheelchair, crutches, or other mobility aid.

Never move someone's crutch, walker, cane, or other mobility aid without permission.

When speaking to a person using a wheelchair for more than a few minutes, try to find a seat for yourself so the two of you are at eye level.

### Visual Disabilities

Identify yourself when you approach a person who is blind. If a new person approaches, introduce him or her.

It is appropriate to touch the person's arm lightly when you speak so that he or she knows you are speaking to him or her.

Face the person and speak directly to him or her. Use a normal tone of voice. Don't leave without saying you are leaving.

If you are offering directions, be as specific as possible, and point out obstacles in the path of travel. Use clock cues ("the door is at 2 o'clock").

Always alert people who are blind or visually impaired to posted information.

Never pet or otherwise distract a guide dog unless the owner has given you permission.

You may offer assistance if it seems needed, but if your offer is declined, do not insist. If your offer is accepted, ask the person how you can best help.

### Hearing Disabilities

Ask the person how he or she prefers to communicate.

If you are speaking through an interpreter, remember that the interpreter may lag a few words behind - especially if there are names or technical terms to be finger spelled - so pause occasionally to allow him or her time to translate completely and accurately.

Talk directly to the person who is deaf or hard of hearing, not to the interpreter. However, although it may seem awkward to you, the person who is deaf or hard of hearing will look at the interpreter and may not make eye contact with you during the conversation.

Before you start to speak, make sure you have the attention of the person you are addressing. A wave, a gentle tap on the shoulder, or other visual or tactile signals are appropriate ways of getting the person's attention.

Speak in a clear, expressive manner. Do not over-enunciate or exaggerate words.

Unless you are specifically requested to do so, do not raise your voice. Speak in a normal tone; do not shout.

To facilitate speech reading, face into the light and keep your hands and other objects away from your mouth.

If the person is speech reading, face the person directly and maintain eye contact. Don't turn your back or walk around while talking. If you look away, the person might assume the conversation is over.

While you are writing a message for someone who is deaf or hard of hearing, don't talk. The person cannot read your note and your lips at the same time. If you do not understand something that is said, ask the person to repeat it or to write it down. The goal is communication; do not pretend to understand if you do not.

If you know any sign language, try using it. It may help you communicate, and it will at least demonstrate your interest in communicating and your willingness to try.

### Speech Disabilities

Talk to people with speech disabilities as you would talk to anyone else. Be friendly; start up a conversation.

Be patient, it may take the person a while to answer.

Give the person your undivided attention.

Ask the person for help in communicating with him or her. If the person uses a communication device such as a manual or electronic communication board, ask the person how best to use it.

Speak in your regular tone of voice.

Tell the person if you do not understand what he or she is trying to say. Ask the person to repeat the message, spell it, tell you in a different way, or write it down. To obtain information quickly, ask short questions that require brief answers or a head nod. However, try not to insult the person's intelligence with oversimplification.

### Cognitive Disabilities

Treat adults with cognitive disabilities as adults.

When speaking to someone who has a cognitive disability, try to be alert to their responses so that you can adjust your method of communication if necessary. For example, some people may benefit from simple, direct sentences or from supplementary visual forms of communication, such as gestures, diagrams, or demonstrations.

Use language that is concrete rather than abstract. Be specific, without being too simplistic. Using humor is fine, but do not interpret a lack of response as rudeness. Some people may not grasp the meaning of sarcasm or other subtleties of language.

People with brain injuries may have short-term memory deficits and may repeat themselves or require information to be repeated.

People with auditory perceptual problems may need to have directions repeated, and may take notes to help them remember directions or the sequence of tasks.

They may benefit from watching a task demonstrated.

People with perceptual or "sensory overload" problems may become disoriented or confused if there is too much to absorb at once. Provide information gradually and clearly. Reduce background noise if possible.

Repeat information using different wording or a different communication approach if necessary. Allow time for the information to be fully understood.

Don't pretend to understand if you do not. Ask the person to repeat what was said.

In conversation, people with mental retardation may respond slowly, so give them time. Be patient, flexible, and supportive.

Some people who have a cognitive disability may be easily distracted. Try not to interpret distraction as rudeness.

Do not expect all people to be able to read well. Some people may not read at all.

## **4. Types of Disabilities with Considerations/Strategies**

### **A. *Health-related Disabilities***

#### **Considerations**

Students affected by health-related disabilities differ from those with other disabilities because health related disabilities are often unstable. A person's condition therefore, varies along with the need for and type of reasonable accommodations.

Some common accommodations for students with health related disabilities include:

- Conveniently located parking
- Note takers
- Extended time to complete a task
- Priority registration
- Exam modifications

#### **Instructional Strategies**

Health related disabilities often require instructional strategies similar to those listed for other disabilities. The use of such strategies will depend on how the disability is manifested. If a faculty member would like more information about instructional strategies for students with health-related disabilities, he/she should contact the Student Affairs Office.

### **B. *Hearing Impairments***

#### **Considerations**

In general, there are three types of hearing loss:

- Conductive loss affects the sound-conducting paths of the outer and middle ear. The degree of loss can be decreased through the use of a hearing aid or by surgery. People with conductive loss might speak softly, hear better in noisy surroundings than people with normal hearing, and might experience ringing in their ears.
- Sensorineural loss affects the inner ear and the auditory nerve and can range from mild to profound. People with sensorineural loss might speak

- loudly, experience greater high-frequency loss, have difficulty distinguishing consonant sounds, and not hear well in noisy environments.
- Mixed loss results from both a conductive and sensorineural loss.

Given the close relationship between oral language and hearing, students with hearing loss might also have speech impairments. One's age at the time of the loss determines whether one is prelingually deaf (hearing loss before oral language acquisition) or adventitiously deaf (normal hearing during language acquisition). Those born deaf or who become deaf as very young children might have more limited speech development.

The inability to hear does not affect an individual's native intelligence or the physical ability to produce sounds.

Some deaf students are skilled lip-readers, but many are not. Many speech sounds have identical mouth movements, which can make lip-reading particularly difficult. For example "p," "b," and "m," look exactly alike on the lips, and many sounds (vowels, for example) are produced without using clearly differentiated lip movements.

Make sure you have a deaf student's attention before speaking. A light touch on the shoulder, a wave, or other visual signal will help.

Look directly at a person with a hearing loss during a conversation, even when an interpreter is present. Speak clearly without shouting. If you have problems being understood, rephrase your thoughts. Writing is also a good way to clarify.

Make sure that your face is clearly visible. Keep your hands away from your face and mouth while speaking. Sitting with your back to a window, gum chewing, cigarette smoking, pencil biting, and similar obstructions of the lips can also interfere with the effectiveness of communication.

Common accommodations for deaf or hard-of-hearing students include:

- Sign language or oral interpreters
- Assistive Listening Devices
- TTY
- Volume control telephones
- Signaling devices (e.g., a flashing light to alert individuals to a door knock or ringing telephone)
- Priority registration
- Note takers
- Captions for films and videos
- Real-time captioning of lecture material
- Modes of Communication

Not all deaf students are fluent users of all of the communication modes used across the deaf community, just as users of spoken language are not fluent in all oral languages. For example, not all deaf students lip-read; many use sign language, but there are several types of sign language systems. American Sign Language (ASL) is a natural, visual language having its own syntax and grammatical structure. Finger spelling is the use of the manual alphabet to form words. Pidgin Sign English (PSE) combines aspects of ASL and English and is used in educational situations often combined with speech. Nearly every spoken language has an accompanying sign language.

In addition to sign language and lip-reading, deaf students also use sign and oral language interpreters. These are professionals who assist deaf or hard-of-hearing persons with understanding communications not received aurally. Interpreters also assist hearing persons with understanding messages communicated by deaf or hard-of-hearing individuals. Sign language interpreters use highly developed language and finger spelling skills; oral interpreters silently form words on their lips for speech reading. Interpreters also voice, when requested. Interpreters will translate all information in a given situation including instructor's comments, class discussion, and environmental sounds.

### **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- Circular seating arrangements offer deaf or hard-of-hearing students the best advantage for 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.
- Repeat the comments and questions of other students, especially those from the back rows; acknowledge who has made the comment so the deaf or hard-of-hearing student can focus on the speaker.
- When appropriate, ask for a hearing volunteer to team up with a deaf or hard-of-hearing student for in-class assignments.
- Assist the student with finding an effective note taker from the class.
- If possible, provide transcripts of audio information.
- Face the class while speaking; if an interpreter is present, make sure the student can see both you and the interpreter.

- If there is a break in the class, get the deaf or hard-of-hearing student's attention before resuming class.
- Because visual information is a deaf student's primary means of receiving information, visual aids such as films, overheads, and diagrams are useful instructional tools.
- Be flexible: allow a deaf student to work with audiovisual material independently and for a longer period of time.
- When in doubt about how to assist the student, ask him/her.
- 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).

### Sign Language Interpreting

Interpreters are professionals who facilitate communication between hearing individuals and people who are deaf or hard-of-hearing. The role of the interpreter is similar to that of a foreign language translator: to bridge the communication gap between two parties.

### Requesting an Interpreter

Deaf or hard-of-hearing students should request interpreters from Student Services when they register for classes. In the unlikely event that a student shows up for the first day of class without an interpreter, the student should be referred to Student Services where he/she can schedule for an interpreter.

### Guidelines for Working with Interpreters

Interpreters are bound by the code of ethics developed by the National Registry of Interpreters for the Deaf, which specifies that interpreters are to serve as communication intermediaries who are not otherwise involved; thus, when an interpreter is present:

- Speak directly to the deaf or hard-of-hearing person rather than to the interpreter, and avoid using phrases such as "tell him" or "ask her."
- Relax and talk normally, noting that there may be a lag time between the spoken message and the interpretation.
- When referring to objects or written information, allow time for the translation to take place.
- Replace terms such as "here" and "there" with more specific terms such as "on the second line" and "in the left corner."

In a conference room or class environment, the deaf student and interpreter will work out seating arrangements, with the interpreter usually located near the speaker. Inform the interpreter in advance if there is an audiovisual element in a presentation so arrangements can be made for lighting and positioning. Be sensitive to sessions that extend longer than one hour. The interpreter may require a short break to maintain proficiency in interpreting.

### Assistive Listening Devices (ALDs)

Hard-of-hearing students 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. Students may borrow an FM system from the Library.

### Closed Captioning

An increasing number of educational videotapes as well as television broadcasts are being "closed captioned" for deaf and hard-of-hearing viewers. Closed captions are similar to subtitles in foreign language films: captions appear at the bottom of the screen so the viewer may follow narration and dialogue. A closed captioning decoder is needed to display the usually hidden captions. Television monitors manufactured after July 1993, have built-in decoders that can be activated through the remote control. Instructors can determine whether or not looking at the video container, which usually contains a short statement about captioning or carries the initials "CC", captions videos or a Q-like symbol. In the event that closed captioning is not available, a sign language interpreter or real-time captioning can interpret the video, as is done during lectures or recitations. To prepare, the interpreter might request from the instructor the opportunity to view the video in advance.

## **C. *Learning Disabilities and Attention Deficit/Hyperactivity Disorder***

### **Considerations**

Learning disability and attention deficit/hyperactivity disorder are not disorders that a student "grows out of." It is a permanent disorder that has a significant effect on learning but is not an indicator of intelligence. LD and ADHD can often cause inconsistent academic performance and may only require accommodation in specific classes or they may have a global effect on academic functioning.

Common accommodations for students with LD and ADHD include:

- Alternative print formats
- Reduced distraction test environments
- Computer access for essay exams

- Textbooks on tape
- Taped lectures
- Note takers
- Exam modifications
- Priority registration
- Tutoring and study skills training

## **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- Instructions should be presented both in written and oral formats.
- Assist the student with finding an effective note taker from the class.
- Allow the student to tape-record lectures.
- Clearly define course requirements, the dates of exams, and when assignments are due; provide advance notice of any changes.
- Provide handouts and visual aids.
- Use more than one way to demonstrate or explain information.
- Have copies of the course reading list ready two to three weeks prior to the beginning of classes so taped textbooks can be ordered.
- Break information into small steps when teaching many new tasks in one lesson (state objectives, review previous lesson, summarize periodically).
- Allow time for clarification of directions and essential information.
- Provide study guides or review sheets for exams.
- Provide assistance with proofreading written work.
- Stress organization and ideas rather than mechanics when grading in-class writing assignments.
- Allow the use of spell check and grammar-assistive devices.
- When in doubt about how to assist the student, ask him/her.
- Allow the student the same anonymity as other students (i.e., avoid pointing out the student or the alternative

### ***D. Mobility Impairments***

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

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

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

Below are brief descriptions of other causes of mobility impairments:

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

**Arthritis** is the inflammation of the body's joints, causing pain, swelling, and difficulty in body movement.

**Back disorders** can limit a student's ability to sit, stand, walk, bend, or carry objects. They include, but are not limited to, degenerative disk disease, scoliosis, and herniated disks.

**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.

**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.

Common accommodations for students with mobility impairments include:

- Priority registration
- Note takers
- Accessible classroom/location/furniture
- Alternative ways of completing assignments
- Lab or library assistants
- Assistive computer technology
- Exam modifications
- Conveniently located parking

## **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- If the current classroom is inaccessible, 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.
- Arrange early for field trips and ensure that accommodations will be in place on the given day (e.g., transportation, site accessibility).
- 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 impairment.
- When in doubt about how to assist the student, ask him/her or Disability Services.
- 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).

### ***E. Psychiatric/Psychological Disorders***

Students with psychiatric disabilities have experienced significant emotional issues that generally have chronic symptoms and have been treated professionally. With appropriate treatment, often combining medications, psychotherapy, and support, the majority of psychiatric disorders can be controlled. The National Institute of Mental Health estimates that one in five people in the United States have some form of psychiatric disability, but only one in five persons with a diagnosable psychiatric disorder ever seeks treatment due to the strong stigmatization involved.

Below are brief descriptions of some common psychiatric disabilities.

**Depression** is a major disorder that can begin at any age. Major depression may be characterized by a depressed mood most of each day, a lack of pleasure in most activities, thoughts of suicide, sleep problems, and feelings of worthlessness or guilt.

**Bipolar disorder** (manic depressive disorder) causes a person to experience periods of mania and depression. In the manic phase, a person might experience inflated self-esteem and a decreased need to sleep.

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

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

## **Considerations**

Trauma is not the sole cause of psychiatric disabilities; genetics may play a role. Psychiatric disabilities affect people of any age, gender, income group, and intellectual level. Disruptive behavior is not an attribute of most people with psychiatric disabilities.

Eighty to ninety percent of people with depression experience relief from symptoms through medication, therapy, or a combination of the two. Depression is a variable condition that may fluctuate during a person's lifetime.

Common accommodations for students with psychiatric disabilities include:

- Reduced distraction test environment
- Extended time on tests
- Taped lectures
- Occasional Extension of due dates
- Occasional Exception to absentee/tardiness policy

## **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- Spend extra time with the student, when able, and assist the student with planning and time management.
- Allow the student to tape-record lectures.
- Assist the student with finding an effective note taker (when such accommodation is stated on Student Accommodation Form).

- Clearly define course requirements, the dates of exams, and when assignments are due; provide advance notice of any changes.
- When in doubt about how to assist the student, ask him/her or Disability services.
- 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)

## ***F. Traumatic Brain Injury***

Though not always visible and sometimes seemingly minor, brain injuries are complex. It can cause physical, cognitive, social, and vocational changes that affect an individual for a short period of time or permanently. Depending on the extent and location of the injury, symptoms caused by a brain injury vary widely. Some common results are seizures, loss of balance or coordination, difficulty with speech, limited concentration, memory loss, and loss of organizational and reasoning skills.

### **Considerations**

A traditional intelligence test is not an accurate assessment of cognitive recovery after a brain injury and bears little relationship to the mental processes required for everyday functioning. For example, students with brain injuries might perform well on brief, structured and artificial tasks, but have significant deficits in learning, memory, and executive functions. Recovery from a brain injury can be inconsistent. A student might take one step forward, two back, do nothing for a while, and then unexpectedly make a series of gains. A "plateau" is not evidence that functional improvement has ended.

Common accommodations for students with brain injuries include:

- Exam modifications
- Time extensions
- Taped lectures
- Instructions presented in more than one way
- Note takers
- Priority registration
- Study skills training or tutoring
- Alternative print formats.

## **Instructional Strategies**

Brain injuries often require instructional strategies similar to those listed for other disabilities. The use of such strategies will depend on the manifestation of the disability. If a faculty member would like more information about instructional strategies for students with brain injuries, he/she should contact the Office of Disability Services

### **G. *Visual Impairments***

Approximately 500,000 Americans have vision impairments to the extent that they are considered "legally blind." There are three degrees of vision loss:

- Visual acuity of 20/200 - the legally blind person can see at 20 feet what the average sighted person can see at 200.
- Low vision - limited or diminished vision that cannot be corrected with standard lenses
- Partial sight - the field of vision is impaired because of an illness, a degenerative syndrome, or trauma.

Only two percent of the people with vision impairments are totally blind; most blind people have some amount of usable vision.

### **Considerations**

Some students with vision loss use canes or guide dogs for mobility purposes; however, many navigate without them. Like anybody, students with vision impairments appreciate being asked if help is needed before it is given. Ask a student if he/she would like some help and then wait for a response before acting.

Words and phrases that refer to sight, such as "I'll see you later," are commonly used expressions and usually go unnoticed unless a speaker is particularly self-conscious. Students with vision loss can still "see" what is meant by such expressions.

When talking with or greeting a student with a vision impairment, speak in a normal voice; most people with vision impairments do not have a hearing impairment. Speak to the student, not through a third party or companion, and use the student's name when directing the conversation to him/her.

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 vision-impaired student's perspective.

When guiding a student (into a room, for example), offer your arm and let him/her take it rather than pulling the person's sleeve.

If a student has a harnessed guide dog, it is working and should not be petted.

Common accommodations for students with vision impairments include:

- Alternative print formats
- Magnification devices
- Bright incandescent lighting
- Raised lettering
- Tactile cues
- Adaptive computer equipment
- Readers/assistive technology for exams
- Text conversion
- Priority registration
- Taped lectures

### **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- Have copies of the syllabus, reading assignments, and tests ready two to three weeks prior to distribution so documents are available for taping or Braille transcription.
- Provide vision-impaired students with materials in alternative formats at the same time the materials are given to the rest of the class. (Contact Disability Services to make such arrangements)
- Repeat aloud what is written on the board or presented on overheads and in handouts.
- Pace the presentation of material: if referring to a textbook or handout, allow time for students to find the information.
- Allow students to tape-record lectures.
- When appropriate, ask for a sighted volunteer to team up with a student with vision impairment for in-class assignments.
- Keep a front row seat open for a student with vision impairment. A corner seat is especially convenient for a student with a guide dog.

- Make arrangements early for field trips and ensure that accommodations will be in place on the given day (e.g., transportation, site accessibility).
- Be flexible with deadlines if the document conversion process holds up assignments.
- When in doubt about how to assist the student, ask him/her or Disability Services.
- 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).
- Make available a detailed course syllabus prior to registration.
- Announce reading assignments well in advance for students who are using taped materials or other alternative formats. It takes four to six weeks to tape-record the average textbook.
- Start each lecture with an outline of material to be covered. At the conclusion of class, briefly summarize key points.
- Teach in a multi-modality 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.
- Provide an adequate opportunity for questions and answers including review sessions.

## 5. Universal Design for Learning

Universal Design for Learning (UDL) is a curriculum design methodology that is built on the Universal Design principles in modern architecture. There are three basic principles to UDL:

Principle 1: To support recognition learning, provide multiple, flexible methods of presentation

Principle 2: To support strategic learning, provide multiple, flexible methods of expression and apprenticeship.

Principle 3: To support affective learning, provide multiple, flexible options for engagement.

UDL provides a methodology of course design that will ensure the greatest number of students have complete access to the material being taught. UDL relies on research in how the brain learns to develop a wide range of choices in teaching styles and delivery methods. Having choices allows the student and instructor to work together to overcome any physical and mental disabilities that are barriers to student achievement.

It is important to remember that UDL is not just “another teaching method.” UDL attempts to incorporate the best teaching methods in a preemptive way. UDL methods should not be a burden for an instructor, but a way for the instructor to develop a better course that helps everyone.

Many UDL methods and strategies cannot only break down barriers for disabled students. They can also ease the learning of traditional students who may be frustrated by traditional teaching methods or learn more rapidly with a different style. In his book, *Universal Design in Education: Teaching Nontraditional Students*, Frank G. Bowe identifies eight strategies that can help in implementation of UDL:

1. Become aware of your own culture's teachings and how those affect you as an educator.
2. Provide students with options for demonstrating knowledge and skills.
3. Offer instruction, and accept student work, at a distance.
4. Alert students to availability of digitized texts (e-books).
5. Offer students information in redundant media.
6. Provide the support students need to improve accuracy and speed.
7. Translate important materials to other languages as needed by your students.
8. Choose physically accessible locations for your classes.

The Department of Learning Resources can help you select and develop your course materials to allow the greatest accessibility possible. In order to get started with UDL you as an instructor should reevaluate your course syllabus keeping the following ideas in mind.

**Set Clear Goals:** When setting learning goals for a course make sure that the goals can be achieved through different methods. For instance, an English course that requires only a traditional written essay may be too restrictive for students with physical or learning disabilities. Consider other writing assignments such as reading journals, personal diaries, or creation of web pages as alternatives to traditional essay formats.

**Individualize Instruction:** Design your course to use a wide variety of resource materials. The traditional textbook can be supplemented or sometimes even replaced by CD-ROM programs, electronic text, books-on-tape, video presentations, and web-based tools. This will allow your students with disabilities the greatest number of options for learning.

**Build In Alternate Assessment Methods:** Assessment of student learning not only helps the instructor, but also allows the student to have a degree of control over their own progress. Include methods of student assessment that go beyond the traditional quiz or written test. Allow those students who need it to take the test orally, through the computer, or through presentation of learned skills.

The following are examples of teaching strategies that have been developed using research into cognitive networks using Universal Design for Learning:

To support diverse recognition networks:

- Provide multiple examples
- Highlight critical features
- Provide multiple media and formats
- Support background context

To support diverse strategic networks:

- Provide flexible models of skilled performance
- Provide opportunities to practice with supports
- Provide ongoing, relevant feedback
- Offer flexible opportunities for demonstrating skill

To support diverse affective networks:

- Offer choices of content and tools
- Offer adjustable levels of challenge
- Offer choices of rewards
- Offer choices of learning context

## 6. Web Design for Accessibility

Accessibility is for everyone. Although there are legal mandates requiring institutions of higher education to make educational materials accessible (e.g., the Americans with Disabilities Act and Section 508 of the Rehabilitation Act), accessibility is fundamentally just good web page design. Here are two examples of how accessibility benefits everyone:

- Computers can read the text on a screen but images, graphs, and charts are meaningless to persons without vision, those who run their browsers with the images turned off, and persons using PDAs (personal data assistants) and cellular telephones. Redundancy increases the likelihood that everyone will understand the information. Text descriptions of graphs and charts (needed by persons without vision) can help all students understand difficult concepts.
- Captioning video, needed by persons who are deaf, also helps students with learning disabilities by presenting text visually. It also assures that important information is clearly conveyed to all students, including those for whom English is a second language and those who are connecting to the Web over slow, telephone connections.

Pages that are accessible are well organized and therefore more usable by all. Accessible pages render properly on a wide variety of user interfaces, they are easier to navigate, and they convey information in a consistent, logical manner. Moreover, changes in how we view the Web are occurring. Web pages are now being displayed on PDAs and even cellular telephones. For pages to appear properly in all these environments, they must be well designed. Although it is possible to only touch the surface on web page design and accessibility in this manual, below are some common problems, solutions, and suggested resources that will help.

### ***Essential Elements***

#### Graphics and Multimedia

Persons with visual impairments use screen readers to read web pages (a common screen readers is called JAWS – Job Access With Speech). The simplest way to understand what a user experiences when visiting a page through a screen reader is to think of that person listening to a baseball game over the radio. The game cannot be seen, so the user must rely on the announcer for a description of the action. You are that announcer describing the game. Of course, screen readers are more literal than an announcer, because they read every word (and sometimes punctuation), and, like the radio, they have

one big drawback: they cannot read pictures. This is where the author/announcer is heavily challenged to provide content. It's up to you to give meaningful descriptions of images for your audience. Here are some general guidelines to follow:

- Describe the images in text (often called an "alt-tag"). Give a text equivalent for all images, including icons. All the commercial web page authoring tools (e.g., FrontPage, Dreamweaver, Netscape Composer) make this easy. When adding an image with these and similar products, look for a box to insert alternative text to insert your alt-tag.
- Multimedia presentations, such as video clips with audio tracks, need transcripts or captioning to describe important information. In addition, poor quality sound tracks are common when recording lectures or speeches in live settings, and lip reading is impossible in jerky downloaded videos. The best way to ensure this type of information is perceived accurately is to provide alternative text.
- Image maps (images divided into areas that link to another page) need redundant text for each link, which should be added either above or below the image map.
- When all else fails, develop a text only page, but make sure this page is updated to correspond to the multimedia dependent page.

### Layout and Presentation

- Unless you only have one page on your web site, your viewers will have to navigate your web. Make your navigation simple and consistent from page to page. Don't make your viewers learn a new way to navigate on every page or you'll lose them. It is recommended that you keep your links to a few specific words and to use the typical blue, underlined text for links. This helps readers (both visual and computer) scan the page for links. Avoid phrases like "click here," which tells viewers nothing about what will happen when they "click here."
- When designing your page, make sure the background and text contrast well. This seems like a no-brainer, but many of us have seen web pages with red text on a black background, or light blue on yellow. Don't use only the size, the color, or the formatting of text alone to convey important information. Information conveyed this way may render differently on different monitors and with different browsers, and of course color is meaningless to persons with the inability to see color. Test your pages by photocopying them, especially several times. Can you still read them?
- Let the user control the page. That is, don't initiate actions automatically that can't be stopped. For example, avoid pop-up windows. Pop-up windows have become so common that they are more likely to make people angry than to help you get your message across.
- Language and writing style should be clear and simple (ever hear this before?). For example, break large blocks of information into smaller sections for easier reading. Most people also find that a narrow column of

- text is easier to read than text all the way across the page. Use only a single column of text whenever possible; it's easier to scan.
- Browsers have the ability to display text in different languages, so screen readers need to know the language used on your page. In addition, search engines will find your site quicker and categorize it better if you identify in the header the “natural” (that is, human) language (e.g., English or Chinese).

### Tables

- Tables are a useful way to visually convey relationships, but they can also be used to lay out the page. Strict accessibility guidelines say to never use tables for layout, but this is probably the most widely violated guideline. If a table is used to layout text on the page, lay it out so it will make sense when read from left to right (referred to as “linearized”).
- If you use tables for data, summarize the table to aid reader comprehension. It helps all students to know the high points of a table. There are certain formatting guidelines for data tables, which are too specific to go into in this fact sheet, but one simple suggestion is to identify the headers (first cells) in the rows and columns. Screen readers to identify important information can use header information.

### Frames, Forms, Applets and Scripts

- These features are becoming more frequent. The basic rule of thumb is that some of these features are not supported well by older browsers and screen readers. Until the software catches up with the programming, provide alternative pages and ways to move through the screen without using a mouse.

### Validate Your Pages

- Validation refers to checking your page for accessibility errors. Fortunately, there are two free services to help you: Bobby and A-Prompt. Each checks and compares individual pages for either Section 508 of the Rehabilitation Act or WAI (Web Accessibility Initiative) errors. Note that Bobby is also available for download, for a fee. The download is not needed unless you wish to check all the pages on a web site. Below is detailed information on each of these validation tools.
- Bobby (<http://www.cast.org/bobby>) will check your pages once they are posted to the Web. It will compare your pages to both Section 508 and the WAI guidelines. The Bobby web site will ask you for your web page address, automatically check the page for accessibility problems, and then link you to solutions from Section 508 or the WAI. The free version will not, however, be able to check pages that are password protected, such as

GVTC Blackboard pages, because these pages cannot be accessed. Some html knowledge is required.

- A-Prompt (<http://aprompt.snow.utoronto.ca/>) will validate your page and provide menus with solutions. Download A-Prompt from the University of Toronto then run it on pages that are saved to your computer. Because the pages are saved “locally,” A-Prompt can check your password protected pages before you post them to the Web or to Blackboard. Much less knowledge of HTML is required because A-Prompt walks you through many of the steps, although HTML knowledge is needed for some repairs.