

Understanding College Students with Disabilities

A Resource Guide for Faculty and Staff

Services for Students with Disabilities



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**If you need this information in an alternate format, please contact Services for Students with Disabilities:
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Understanding College Students with Disabilities: A Resource Guide for Faculty and Staff (2002) is an abbreviated and updated version of the College Students with Disabilities: A Resource for Faculty and Staff Handbook. This manual is intended to acquaint faculty and staff with the procedures for ensuring access to Virginia Tech for students with disabilities. This resource highlights legal mandates, procedures for providing accommodations, characteristics of common disabilities, best practices, referral procedures, and additional resources. We hope this second edition will prove helpful in serving all students. The complete version of this resource guide is available on the Services for Students with Disabilities website: <http://www.ssd.vt.edu>

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Introduction

As we enter the 21st Century, higher education for students with disabilities has reached a crossroads. Although federal and state legislation has improved access to postsecondary education, there are escalating challenges relating to the provision of accommodations for students with disabilities. Since 1990, there has been an approximate 90% increase in the number of colleges/universities, technical institutions, community colleges, and vocational technical centers offering opportunities for persons with disabilities to continue their education (Brinckerhoff, Shaw, & McGuire, 1992, 1993; Bursuck & Rose, 1992; Pierangelo & Crane, 1997). However, the increases in enrollment of students with disabilities are creating institutional challenges relating to the provision of modifications and accommodations. Accommodations for students with disabilities are the critical elements that create and foster an inclusive learning environment.

In 1978, slightly less than 3% of first-time, full-time college freshmen reported having a disability. By the fall of 2000, this number had increased to 6% at four-year institutions in the United States. Learning disabilities has been the fastest growing disability category for college students growing from 15% in 1978 to 41% in 2000 (Henderson, 2001). Ten years ago, "partially sighted or blind" was the most common disability reported. Today Attention Deficit Hyperactivity (AD/HD), learning disabilities, and psychological disorders are the most prevalent disabilities diagnosed among college students.

Admission to Virginia Tech is based on requirements outlined in the application for admission in the undergraduate and graduate catalogs. Admission decisions are made without regard to disabilities. All applications to the university are reviewed through the same admissions procedure. Moreover, Virginia Tech is committed to ensuring that all qualified students with disabilities have the opportunity to pursue a postsecondary education without barriers to equal access of instruction and services. The purpose of this resource guide is to provide Virginia Tech's faculty and staff with practical information and suggestions that will help create an inclusive learning environment for students with disabilities.

Legal Aspects

The obligations to accommodate students with disabilities extend beyond moral responsibilities and our University's commitment to provide equal access to higher education. There are also legal imperatives. Section 504 of the Rehabilitation Act of 1973 (revised), The Virginians with Disabilities Act of 1985, and the Americans with Disabilities Act of 1990 require active participation by the University on behalf of students with disabilities.

Section 504 of the Rehabilitation Act of 1973 (revised)

Virginia Tech, a public institution that receives federal assistance, is legally bound to prohibit discrimination under Section 504 of the Rehabilitation Act. This act states, "No otherwise qualified individual with disabilities... shall solely by reason of his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance."

Provisions of Section 504

As a public institution of higher education, the University is legally bound to prohibit discrimination in the recruitment, the admissions, and the educational processes of students with disabilities. Under the provisions of Section 504, Virginia Tech may not:

- ◆ Limit the number of otherwise qualified students with disabilities admitted
- ◆ Make pre-admission inquiries as to whether an applicant has a disability
- ◆ Exclude an otherwise qualified student with a disability from any course of study
- ◆ Provide less financial assistance to students with disabilities
- ◆ Counsel students with disabilities into more restrictive career paths
- ◆ Measure student achievement using modes that discriminate against a student with a disability
- ◆ Establish rules and policies that have the effect of limiting participation of students with disabilities in educational programs or activities

Americans with Disabilities Act (ADA)

The Americans with Disabilities Act of 1990 is a civil rights legislation that extends Section 504 to all activities of state and local governments, including those that do not receive federal financial assistance. The ADA strengthened and expanded the provisions of Section 504 through a broader definition of disability and by allowing private parties to bring lawsuits to enforce their rights under Title II.

Definition

An individual with a disability is a person who:

- ◆ Has a physical or mental impairment that substantially limits a "major life activity," or
- ◆ Has a record of an impairment, or
- ◆ Is regarded as having an impairment.

Provisions of the ADA

Title I	Nondiscrimination in Employment
Title II	Nondiscrimination in Public Services and Public Transportation
Title III	Nondiscrimination in Public Accommodations and Services Operated by Private Entities
Title IV	Accessibility of Telecommunications
Title V	Miscellaneous Provisions

To comply with these mandates, Virginia Tech must assure that all educational programs and services offered to students also be made available to students with disabilities. Academic ability must be the sole basis for participation in postsecondary education. To accomplish this goal, both physical and program access must be provided. This means more than the removal of architectural barriers and the provision of auxiliary services. It means that reasonable accommodations must be made in the instructional process to ensure full educational opportunity. In providing these accommodations, it is not required that such supports produce identical results or levels of achievement for persons with and without disabilities, but rather that persons with disabilities have an equal opportunity to achieve the same results or levels of achievement in the most integrated setting. This principle applies to all teaching strategies and procedures, as well as to instructional and departmental policies.

Accommodation Of Students, Employees, and Applicants With Disabilities

Virginia Tech is committed to ensuring that all qualified individuals with disabilities have the opportunity to take part in educational and employment programs and services on an equal basis. The aim is to provide this opportunity in an integrated setting that fosters independence and meets the guidelines of the ADA and the Rehabilitation Act of 1973.

Reasonable accommodations are made on an individual and flexible basis. Appropriate services may include 1) support, counseling, and information; 2) academic assistance services; 3) referral services;

(Accommodation Of Students, Employees, and Applicants With Disabilities, continued)

4) environmental modifications. However, it is the responsibility of individuals with disabilities to make their needs known and to provide documentation of a disability. It is the responsibility of the faculty or supervisor to comply with accommodation requests made by appropriate university offices. Appeals of requests may be made through procedures stated in Policy 4075 (for applicants and employees) and in the Services for Students with Disabilities Handbook for Students with Disabilities (for students).

Virginia Tech ensures equitable access through the ADA Coordinator, Personnel Services 231-9331 (V), 231-6258 (TTY); Office for Equal Opportunity 231-7500 (V), 231-9460 (TTY); Services for Students with Disabilities 231-3788 (V), 231-1740 (TTY); and the ADA Executive Committee.

Confidentiality

The ADA has narrow exceptions for disclosing specific information about a person's disability. Necessary restrictions, accommodations, and emergency first aid or safety precautions can be divulged only when imperative.

- ◆ **Faculty Accommodation Form** – A faculty member receiving the Faculty Accommodation Form from a student should not share that form with other faculty, advisors, department heads, or deans without the expressed permission of the student. Any agreement to share information should be noted in the student's file.
- ◆ **Advising** – Faculty/advisors should not discuss a student's disability with other faculty unless requested in writing by the student. If an advisor divulges a student has a disability, he/she could be liable for slander due to the stigma attached to a disability.
- ◆ **Documentation** – Medical information and other documentation of a disability cannot be kept in regular files. Any confidential information should be given to the student to file with the Services for Students with Disabilities office.
- ◆ **References** – Confidentiality does not end with graduation. Confidential information cannot be disclosed during phone references or letters of reference. During a phone conversation regarding a student reference, one cannot disclose that a student worked with Services for Students with Disabilities. If confidential information is disclosed, then releasing such information could lead to stigmatizing the person and compromising the possibility for employment.
- ◆ **E-Mail** – Electronic mail should never contain identifying information of a student or confidential or disability related information. E-mail is vulnerable to being seen by others.

Making the Transition

College is a time of transition for all students, but even more so for students with disabilities. Their transition from secondary to post-secondary education may include changes in the types of services and accommodations that are available to them. In high school, students with disabilities are guaranteed a free and appropriate public education with the provision of special education services mandated by the Individuals with Disabilities Education Act (IDEA). Established in 1990 and updated in 1997, IDEA guarantees that no person with a disability is rejected for services regardless of the nature, type, or extent of their disabling condition. Furthermore, such services are to ensure that students with disabilities benefit from their educational experience. Special education services provided under IDEA are described in a student's Individualized Education Program (IEP) and Individualized Transition Plan (ITP).

IDEA does not apply to higher education and, therefore, postsecondary institutions are not required to design special academic programs for students with disabilities. However, under Section 504 of the Rehabilitation Act and the Americans with Disabilities Act (ADA), colleges and universities are prohibited from discriminating against a person because of disability. Consequently, they must provide reasonable modifications, accommodations, or auxiliary aids that will enable qualified students to have access to, participate in, and benefit from the full range of educational programs and activities which are offered to all students on campus.

At the post-secondary level, the STUDENT has the responsibility to:

- ◆ Self-identify or disclose their disability to the designated office for disability services
- ◆ Provide verifying documentation to the designated office
- ◆ Obtain assessment and test results and provide them to that office
- ◆ Act as independent adults
- ◆ Arrange their weekly schedules
- ◆ Contact their instructors to discuss accommodations needed for each class
- ◆ Arrange for and obtain their own personal attendants, tutoring, and individually fitted or designed assistive technology devices

Post-secondary institutions are NOT required to:

- ◆ Reduce or waive any of the essential requirements of a course or program
- ◆ Conduct testing and assessment of learning, psychological, or medical disabilities
- ◆ Provide personal attendants
- ◆ Provide personal or private tutors (tutoring services that are normally available to nondisabled students must be accessible to students with disabilities who otherwise qualify for those services)
- ◆ Prepare Individualized Education Plans (IEPs)

Students with disabilities must take the initiative to identify themselves to Services for Students with Disabilities and provide current documentation such as psycho-educational test results, medical documentation, and doctor's statements that verify the disability, describe the extent or severity of the impairment, and provide information regarding the functional impact of the disability. When ALL of this information is provided, the institution can ascertain the need for specific accommodations.

Identifying the Student with a Disability

Determining that a student has a disability may not always be a simple process. Visible disabilities are noticeable through casual observation. Invisible disabilities, such as hearing loss, legal blindness, cardiac conditions, learning disabilities, attention deficit disorder, cancer, diabetes, kidney disease, and psychiatric or seizure disorders are usually not apparent. Multiple disabilities caused by primary conditions such as muscular dystrophy, cerebral palsy, or multiple sclerosis may complicate the accommodation needs of the student. Depending on the nature and progression of the illness or injury, it may be accompanied by a secondary impairment – in mobility, vision, speech, or coordination – which may, in fact, pose greater barriers to the educational setting.

Some students with disabilities will identify themselves by contacting Services for Students with Disabilities and their instructors before or during the semester. Others, especially those with “invisible” disabilities, may not self-identify because of shame, their distaste for special support, or their fear of disbelief either about the legitimacy of their problem or the need for accommodation. Such students, in the absence of instructional adjustment, may run into trouble in their college work. In a panic they may self-identify just before an examination and expect instant attention to their needs.

Professors are encouraged to develop a syllabus statement and make an announcement at the beginning of the semester inviting students with disabilities to schedule confidential appointments (refer to section on Syllabus Statements on p. 8). If you suspect that a student has a disability, confidentially discuss your concern with the student and refer the student to Services for Students with Disabilities. You may find such an approach awkward, at least initially, but the end result will be extremely beneficial if the student's condition is made known at the very outset. In whatever manner a disability is identified, it should be professionally verified and discussed with staff of Services for Students with Disabilities. Faculty should avoid making accommodations based on disability without receiving written notification from Services for Students with Disabilities.

Certifying Eligibility for Services

Staff from Services for Students with Disabilities request disability-related documentation from an appropriate licensed professional to certify a student has a disability and to determine reasonable accommodations. The cost of obtaining documentation is borne by the student. If the initial documentation is incomplete or inadequate to determine the extent of the disability and reasonable accommodations, the office has the discretion to require additional documentation.

Students reporting learning or attention difficulties can be interviewed and screened by Services for Students with Disabilities free of charge and are given referrals for comprehensive and diagnostic testing in the community, if a disability is suspected. The student is responsible for testing costs after the initial screening.

Once the appropriate documentation is submitted, staff from Services for Students with Disabilities certify that the student has a disability and registers him or her for services provided through this office. Students who are found to be nondisabled are referred to other campus and community resources for assistance. Pending receipt of documentation, Services for Students with Disabilities reserves the right to deny services or accommodations.

General Strategies for Teaching Students with Disabilities

Each disability is unique and requires specific accommodations. However, there are several accommodations and teaching strategies that will help foster an inclusive learning environment for all students with disabilities:

- ◆ Provide student with course syllabus prior to the semester, if possible
- ◆ Outline class presentations and write key points on the chalkboard or overhead
- ◆ Read aloud material that is written on the chalkboard or transparencies
- ◆ Repeat and summarize segments of class and review what has been discussed overall at the end of class
- ◆ Give reminders, previews, and study guides to provide class structure
- ◆ Break large assignments down to smaller tasks
- ◆ Face the class when speaking
- ◆ Use a variety of teaching styles (i.e. multimedia presentations, collaborative learning, and interactive classroom assignments)
- ◆ Be prepared to provide handouts and examinations in alternate formats if requested (i.e. large print, Braille, and electronic versions)

Syllabus Statements

Students feel more comfortable approaching faculty if they perceive that there is an accepting environment. Examples of the statements that help establish this type of environment might include:

- ◆ "Any student with special needs or circumstances should feel free to meet with me during office hours"
- ◆ "Any student who feels that he or she may need an accommodation because of a disability (learning disability, attention deficit disorder, psychological, physical, etc.), please make an appointment to see me during office hours"
- ◆ "If you need adaptations or accommodations because of a disability (learning disability, attention deficit disorder, psychological, physical, etc.), if you have emergency medical information to share with me, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible. My office location and hours are...."

Overview of Disabilities

Attention Deficit/Hyperactivity Disorder

Attention Deficit/Hyperactivity Disorder (AD/HD) is a condition that can make it difficult for a person to sit still, control behavior, and pay attention. Therefore, it may affect academic achievement, self-esteem, and social and personal relationships. While AD/HD is often diagnosed during childhood, some characteristics go unnoticed or are internalized until later in life. As a result, many students are not diagnosed until college.

Doctors do not know what causes AD/HD, but researchers who study the brain believe that some people with AD/HD do not have enough of certain chemicals, known as neurotransmitters, in their brain to control behavior. It is estimated that as many as 5 out of every 100 children in elementary and secondary school may have AD/HD. Of these children, 50-65% will continue to exhibit symptoms throughout adolescence into adulthood. AD/HD does not always occur alone. About 40% of individuals with AD/HD may also have a learning disability or other conditions such as anxiety, depression, or obsessive-compulsive disorder.

Characteristics of AD/HD

Success in academics often means being able to pay attention and control behavior. These are problem areas for people with AD/HD. Some other characteristics of AD/HD are:

- ◆ Impatient; low frustration tolerance
- ◆ Driven
- ◆ Difficulty with printing or writing skills
- ◆ Inability to recognize common social clues
- ◆ Poor organization; often has piles of stuff
- ◆ Chronic procrastination
- ◆ Inconsistent work performance
- ◆ Test anxiety
- ◆ Mood swings
- ◆ Problems with sleep
- ◆ Tendency towards addiction (food, work, alcohol, etc.)
- ◆ Poor listening skills
- ◆ Short attention span
- ◆ Easily Distracted

Teaching strategies for students with AD/HD

The following have been helpful when working with adults with AD/HD:

- ◆ Make copies of class notes available to the student
- ◆ Illustrate abstract concepts with specific terms, visual structures, charts, graphs, etc.
- ◆ Face the class when speaking
- ◆ Give reminders, previews, and study guides to provide needed structure
- ◆ Break large assignments down into smaller tasks

Psychological Disorders

There are many forms of psychological disorders. The most common types of psychological disorders that are seen at Virginia Tech include:

Mood Disorders

- 1) Depressive Disorders (Major Depression, Dysthymic Disorder)
- 2) Bipolar Disorders (formerly known as manic depressive)

Anxiety Disorders

- 1) Panic Disorder
- 2) Agoraphobia
- 3) Specific Phobias
- 4) Social Phobia
- 5) Obsessive-Compulsive
- 6) Post Traumatic Stress Disorder
- 7) Generalized Anxiety Disorder

Each person experiences these illnesses differently. Many people undergo only a single episode while others endure reoccurring episodes throughout their entire lives.

Characteristics of Psychological Disorders

Characteristics of students with psychological disorders are as unique as the individual. The following early warning signs will be helpful in heightening awareness and may assist in identifying students with psychological disorders:

- ◆ Unable to have a good time
- ◆ Feelings of great loss and pain
- ◆ Difficulty adjusting to change
- ◆ Feeling like a complete failure
- ◆ Changes in eating habits
- ◆ Lack of concentration
- ◆ Unable to feel happy
- ◆ Inability to remember
- ◆ Mood changes
- ◆ Extreme sadness
- ◆ Changes in sleep pattern
- ◆ Weight loss or gain

If the student is on or begins to take medication to control the symptoms of psychological disorders, there is the possibility that some side effects will be noticeable. These can include:

- ◆ Drowsiness
- ◆ Fatigue
- ◆ Thirst
- ◆ Blurred vision
- ◆ Hand tremors

Teaching strategies for students with Psychological Disorders

The following have been helpful strategies for teaching students with psychological disorders:

- ◆ Alternate times to meet with student outside of office hours
- ◆ Assist with choosing classes and instructors
- ◆ Give incomplete grades or late withdrawals in the event of illness-related absence
- ◆ Provide honest feedback privately and confidentially when behavior is inappropriate
- ◆ Discuss alternative and expected behavior
- ◆ Assist with the completion of forms (registration, parking, financial aid)
- ◆ Refer to campus and community resources

Learning Disabilities

A learning disability is a general term that describes specific kinds of learning problems. These problems can cause a person to have trouble learning and using certain skills, the most often of which are reading, writing, listening, speaking, reasoning, and doing math. It is estimated that 1 out of every 5 people in the United States has a learning disability. In colleges and universities, 29 percent of those students who reported any disabilities indicated that they had a learning disability. Learning disabilities vary from person to person. Key features, which define learning disabilities, are:

- Intelligence scores within the normal range
- A significant discrepancy between academic achievement and expected potential
- Not caused by other factors, such as cultural differences, educational opportunities, poverty, or other disabilities
- Often manifested in language-related areas, such as communication, written language, or reading

Researchers believe that learning disabilities are caused by differences in how a person's brain functions and processes information. There are no cures for learning disabilities but students can be taught various ways to compensate for their disability. Students with learning disabilities are NOT intellectually limited and most possess the potential to succeed in higher education.

Characteristics of LD

The following characteristics may be indicative of learning disabilities:

- ◆ Lack of organization for notes and other materials
- ◆ Difficulty scheduling time to complete short- and long-term assignments
- ◆ Difficulty completing tests and in-class assignments without additional time
- ◆ Difficulty following directions
- ◆ Poor reading comprehension
- ◆ Difficulty interpreting charts, graphs, and scientific symbols
- ◆ Poor sentence structure
- ◆ Difficulty concentrating in lectures, especially those that are two to three hours
- ◆ Difficulty with reasoning
- ◆ Difficulty with concepts of time and money

Teaching Strategies for Students with Learning Disabilities

- ◆ Give assignments both orally and in written form to avoid confusion
- ◆ Provide study questions for exams that demonstrate the format as well as the content of the test. Explain what constitutes a good answer and why
- ◆ Allow the use of a calculator
- ◆ Critique early drafts of papers
- ◆ Consider alternative or supplemental assignments to evaluate a student's mastery of the course material. Taped interviews, slide presentations, photographic essays, or handmade models may lead to more accurate evaluations of mastery.
- ◆ Consider an alternative test design. Some students with learning disabilities may find multiple-choice formats confusing. A student with perceptual impairment will have trouble with tests requiring matching items.
- ◆ Give the student prompt, explicit feedback, both written and oral

Mobility and Orthopedic Disabilities

A variety of mobility-related disabilities result from neuro-muscular and orthopedic impairments. These disabilities may be congenital or they may be the result of an accident or illness. Such conditions may include:

- ◆ Spinal cord injury
- ◆ Paralysis
- ◆ Cerebral palsy
- ◆ Severe forms of arthritis
- ◆ Polio/Post polio
- ◆ Muscular Dystrophy
- ◆ Stroke
- ◆ Orthopedic injury/Amputation

Functional abilities and limitations will vary widely. Some individuals experience pain, spasticity, or lack of coordination. Others experience flare-ups (when a student may be absent from class) or periods of remission (when the student seems to have no impairment of functions). Some who use wheelchairs are able to stand but not walk. Others can walk but with the aid of canes, crutches, braces, or walkers. While some wheelchair users may have full use of their arms and hands, others do not. Using a wheelchair may help these individuals conserve energy or move about more quickly.

Characteristics and Limitations of Mobility and Orthopedic Disabilities

- ◆ Loss of balance or coordination
- ◆ Difficulty with speech
- ◆ Limited concentration
- ◆ Loss of organizational and reasoning skills
- ◆ Absent or missed classes
- ◆ Drowsiness/fatigue
- ◆ Leaving class early and/or unexpectedly
- ◆ Reduction in physical stamina and endurance

Teaching Strategies for Students with Mobility and Orthopedic Disabilities

- ◆ Be lenient with arrival time, especially in inclement weather
- ◆ Classes should be scheduled physically close to one another and with extra time in between for getting from class to class
- ◆ Allow the student to determine the most ideal seating location so s/he can see, hear, and, if possible, touch as much of the presented material as possible
- ◆ Be considerate of the extra time it might take for a student with a disability to speak or act
- ◆ Make sure the classroom layout is accessible and free from obstruction
- ◆ Internships, student teaching, and assistantships may require advance preparation to ensure the site is barrier-free and that accessible transportation is available

Traumatic Brain Injury

Traumatic Brain Injury (TBI) is an acquired injury to the brain caused by external physical force, resulting in a total or partial functional disability or psychosocial impairment, or both, which can adversely affect educational, social, or daily performance.

TBI can cause changes in one or more of these functional areas:

- Thinking and reasoning
- Understanding words
- Remembering things
- Paying attention
- Solving problems
- Thinking abstractly
- Behaving
- Talking
- Walking and other physical activities
- Seeing and/or hearing

TBI is the leading cause of death and disability in children and adolescents in the United States. The most frequent causes of TBI are related to motor vehicle crashes, falls, sports, and abuse or assault.

Students with brain injuries are becoming increasingly more prevalent on college campuses. As a result of TBI, the student can be affected physically, cognitively, and/or psychosocially. Any or all of these impairments may be present to different degrees.

Characteristics of TBI

- ◆ Memory loss
- ◆ Distractibility
- ◆ Short attention span
- ◆ Low threshold for frustration
- ◆ Inability to deal with abstract and figurative concepts
- ◆ Reduced stamina

Teaching Strategies for Students with TBI

- ◆ Repetition and consistency
- ◆ Demonstration of new tasks
- ◆ Provision of examples to illustrate new ideas and concepts
- ◆ Frequent breaks during class
- ◆ Strategies for increasing memory
- ◆ Frequent assessment of skill acquisition

Deaf and Hard of Hearing

Deaf describes individuals whose hearing loss is extreme. The term "deaf" is defined by the Individuals with Disabilities Education Act (IDEA) as "a hearing impairment, which is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance." Postsecondary Education Programs Network (PEPNet) classifies the degree of hearing loss as severe to profound if over 60 decibels. Persons who are deaf may hear sounds such as a lawn mower or a jet at 1,000 feet, but cannot hear speech. Sound has no meaning for ordinary life purposes. They often adapt visually through sign language and possibly lip reading.

Hard-of-hearing refers to an individual whose audition is deficient but remains somewhat functional. Individuals who are hard-of-hearing have enough residual hearing that, with the use of a hearing aid, are able to process human speech. PEPNet classifies the degree of hearing loss as mild to moderate if less than 60 decibels. Persons who are hard of hearing can hear some sounds and may be able to hear speech if it is amplified, although clarity and understandability is dependent on the individual. They often adapt technologically through the use of hearing aids (which amplify all sounds), assistive listening devices (which amplify only the speaker's voice), or through the use of various forms of captioning.

Characteristics of Students who are Deaf or Hard of Hearing

Persons who are deaf or hard of hearing vary widely in their hearing and language abilities depending on: age of onset, type of hearing loss, and residual hearing. It is very difficult to list characteristics due to the individual nature of hearing loss, language development, and communication mode. Some of the following characteristics may apply to one student and not to another. A student who is deaf or hard of hearing:

- ◆ Has a communication mode specific to him or her and may include: sign language interpreters, speech, lip reading, and/or written/text communication
- ◆ May or may not use American Sign Language. English may be the student's second language with American Sign Language as the primary language.
- ◆ May or may not use his or her voice
- ◆ May or may not use hearing aids or assistive listening devices, and the degree of clarity or understandability resulting from the use of these aids varies
- ◆ May or may not be a skilled lip reader, but only 30 to 40 percent of spoken English is distinguishable on the mouth and lips under the best of condition
- ◆ May have difficulties with speech, reading, and writing skills given the close relationship between language development and hearing
- ◆ Relies on visual information and cues (speech reading and facial expressions of the professor, handouts, blackboard/overheads/PowerPoint, sign language interpreters or captioned lectures, captioned media, etc). The student will find it difficult to take in visual information simultaneously from different sources.
- ◆ Can access all of the information visually from one source when captioned media is used. If the media is not captioned, the student must alternate between looking at the interpreter or the captionist's laptop and the media screen. Much information can be lost in this process.
- ◆ Will experience a delay in receiving spoken information when using sign language interpreters or real-time captioning and is often left out of class discussions due to this time lag.

Communicating with Students who are Deaf or Hard of Hearing

- ◆ Make sure you have a deaf student's attention before speaking.
- ◆ Address the person by name to initiate communication.
- ◆ Speak slowly and clearly when the student is relying on lip-reading. Try to enunciate each word and use shorter sentences which are easier to process than longer ones. Look directly at the student when speaking and avoid any obstructions to the mouth area.
- ◆ Maintain eye contact and speak directly to the student and not to the interpreter or captionist, if present.
- ◆ Use facial expressions, gestures, and body language to convey the message
- ◆ Smoking, chewing gum, and facial hair add to the difficulty of lip reading
- ◆ Keep sentences short. Messages may need to be reworded.

(Communicating with Students who are Deaf or Hard of Hearing, continued)

- ◆ Use open-ended questions which must be answered by more than "yes" or "no." Do not assume that the message was understood even with a student's head nod. Open-ended questions help determine if your information has been communicated correctly or misunderstood, necessitating clarification.
- ◆ Do not hesitate to communicate with the student in writing when conveying important scheduling information. Written instructions will avoid mix-ups about assignments, exam dates, changes in normal class schedules or special instructions.

Tips for Working with an Interpreter or Captionist

- ◆ Remember the interpreter's/captionist's role is to facilitate communication. It is inappropriate to address the interpreter/captionist directly.
- ◆ Maintain eye contact with the person who is deaf, not the interpreter/captionist
- ◆ Allow the interpreter/captionist to be positioned near you. This will allow the person who is deaf to watch the interpreter/captionist and your expressions.
- ◆ Keep lines of sight free for visual access to information. In class, the interpreter will attempt to stand or sit in direct line with you, the student, and any visual aids.
- ◆ Do not request that the interpreter/captionist keep anything from the person who is deaf. Interpreters and captionists are bound by a Code of Ethics, which requires all communication be conveyed, whether it be signed or spoken. This includes any phone calls or comments you make in the presence of a person who is deaf.
- ◆ Speak in normal tones using complete sentences and speak clearly. Interpreters/captionists work a few words behind the speaker, and should be allowed sufficient time to finish the speaker's sentences.
- ◆ Allow for a brief pause to give the interpreter/captionist time to finish before the next topic or speaker begins.
- ◆ Encourage all students in class to wait until they are recognized before speaking. The interpreter/captionist can only convey one message at a time after indicating the speaker. It is important that only one person speak at a time.
- ◆ Schedule a break halfway through the class if it is more than 75 minutes to allow the interpreter/captionist time to rest. Constant hand and arm movements can become very tiring. Receiving information visually without breaks can be tiring and cause eye fatigue for the student.
- ◆ Provide the interpreter/captionist with a copy of any reading material, including textbooks, outlines, notes, lists of new technical terms, and printed transcripts of audio and audio-visual material. Interpreters/captionists must review material in advance to be effective.
- ◆ Plan to meet with the interpreter/captionist prior to the beginning of class to explain what will be covered.
- ◆ Make sure there is enough light to illuminate the interpreter if the lights are dimmed during a video or slide presentation.

Vision Impairments

Vision impairments include a broad spectrum of conditions that range from low vision to total blindness.

- **Legal Blindness** – is defined by the Social Security Administration (2002) as vision that cannot be corrected to better than 20/200 in the better eye. It also refers to those having a visual field of 20 degrees or less, even with corrective lenses. It is important to note that many people who are legally blind still have some sight, may be able to read large print, and get around without support (guide dog, cane, or sighted guide).
- **Partial Sight (low vision)** – refers to people who have a visual acuity greater than 20/200 but not exceeding 20/70. Individuals who are partially sighted may rely on residual vision with the use of adaptive equipment.

Whatever the degree of impairment, visually impaired students should be expected to participate in classroom activities, such as discussions, note taking, and group work. To record notes, some use devices such as portable or computerized braille or laptop computers. Students may encounter limitations in laboratory classes, field trips, and internships but, with planning and adaptive equipment, their difficulties can be minimized.

Characteristics of Vision Impairments

- ◆ Difficulty adjusting to glare
- ◆ Difficulty adjusting to lighting changes
- ◆ Difficulty walking through crowded areas
- ◆ Difficulty seeing details (writings on chalk boards, class handouts, etc.)

Teaching Students with Vision Impairments

- ◆ Allow time for the student to become oriented to the room or open space and to the locations of materials, furniture, and equipment before class
- ◆ Provide reading lists or syllabi in advance to allow time for arrangements such as taping or brailleing of texts
- ◆ Assist the student in finding readers, note takers, or tutors as necessary, or team the student with a sighted classmate or laboratory assistant in cooperation with the Dean of Students Office
- ◆ Reserve front seats for low vision students. If a guide dog is used, it will be highly disciplined and require little space.
- ◆ Refer the student to the Special Services Facility in Newman Library for adapted equipment and computers
- ◆ Face the class when speaking
- ◆ Convey in spoken words whatever you put on the chalkboard and whatever other visual cues or graphic materials you may use
- ◆ Permit lectures to be taped and/or provide copies of lecture notes where appropriate
- ◆ Use tactile models or expanded auditory descriptions to enhance the description of experiments and projects
- ◆ Prepare print materials in alternate formats (i.e., Braille, disk or tape, or large print) depending on the specific needs of the student. Discuss font size and type with student to make your handout materials accessible
- ◆ Be flexible with assignment deadlines
- ◆ Plan field trips and such projects as internships well in advance and alert field supervisors to whatever adaptations may be needed
- ◆ Consider an alternate assignment if a specific task is impossible for the student to carry out
- ◆ Allow use of personal digital assistants (PDAs)
- ◆ Allow use of portable closed-circuit television (CCTVs)
- ◆ Allow use of talking calculators
- ◆ Use white dry board instead of blackboards

Medical Disabilities

Medical disabilities can affect students by significantly impairing their energy level, memory, mobility, speech, vision, or muscular coordination (e.g., heart condition, sickle cell anemia, hemophilia, arthritis, asthma, diabetes, respiratory disorders, seizure disorder, cancer, kidney problems, severe chronic pain, AIDS).

In some cases, the degree of impairment may vary from one day to the next because of the nature of the medical condition, medication received, or therapy. Some conditions deteriorate year by year, resulting in emotional consequences for the student. Some students may be absent from their classes as a direct result of their disabilities and may require a flexible attendance policy (which should be arranged as soon as possible). Other students may need accommodations found elsewhere in this manual while some will need no accommodations at all. The following descriptions will assist you in working with the students in this category:

AIDS

Acquired Immune Deficiency Syndrome (AIDS) is caused by a virus that destroys the body's immune system. This condition leaves the person vulnerable to infections and cancers that can be avoided when the immune system is working normally. The virus is transmitted primarily through the exchange of bodily fluids. There is no evidence to date that it is transmitted through casual contact.

Manifestations of AIDS are varied, depending on the particular infections or diseases the individual develops. Extreme fatigue is a common symptom. Classroom adaptations will likewise vary.

Students with AIDS may be afraid to reveal their condition because of the social stigma, fear, and/or misunderstanding surrounding this illness. Therefore, it is extremely important that confidentiality be strictly observed. If the topic should arise in class, faculty should deal openly and non-judgmentally with the issue, fostering an atmosphere of understanding.

Classroom accommodations will depend upon the student's medical condition, which can range from no accommodations to possibly working at home for periods of time.

Arthritis (Rheumatoid)

Arthritis affects people of every age, including children. Rheumatoid arthritis is the most common and is a total body (systemic) disease characterized chiefly by inflammation of the synovial joints (e.g., shoulder, elbow, wrist, knee, hip, ankle, and small joints).

Muscle weakness, reduction in muscle size, loss of joint movement, and pain with movement characterize the effects of arthritis and how it limits a person's activities. What is important to remember is that each person is affected differently and the condition varies from one day to the next.

Students with rheumatoid arthritis may need note takers, permission to tape record lectures, and alternative testing measures (not the standard written format). If students can write, they may need extended time on tests.

Cancer

Cancer can occur in almost any organ system of the body, thus the particular disabling effects will vary greatly from one person to the other. Some people experience visual problems, lack of balance and coordination, joint pain, backache, headache, abdominal pain, drowsiness, lethargy, difficulty in breathing and swallowing, weakness, bleeding, and/or anemia.

The primary treatments for cancer are radiation therapy, chemotherapy, and surgery, which may engender additional effects. Therapeutic treatment can cause violent nausea, drowsiness, fatigue, loss of academic functioning, and absences from class. Surgery can result in amputation, paralysis, sensory deficits, and language and memory problems. Specific accommodations will depend upon the person's condition and reaction to treatment.

Carpal Tunnel Syndrome

Carpal Tunnel Syndrome (CTS) is a condition caused by repetitive motion that can cause pain, tingling, numbness, and weakness in the fingers and thumb. CTS can begin suddenly or gradually. It often affects both hands, and if not treated, can lead to permanent nerve and muscle damage in the hands. CTS can occur at any age. In non-work related cases, CTS usually affects persons in their 50s. In work related cases, it can appear between the ages of 20 and 40. This condition is more common in women than in men. Students with CTS may need notetakers, scribes for tests, or someone to type for research reports.

Cerebral Palsy

Cerebral Palsy (CP) is caused by an injury to the motor center of the brain, which may have occurred before, during, or shortly after birth. Manifestations may include involuntary muscle contractions, rigidity, spasms, poor coordination, poor balance, or poor spatial relations. Visual, auditory, speech, hand-function, and mobility problems might occur.

Students with CP are all unique. For appropriate classroom accommodations, refer to the sections on speech, visual impairments, and/or mobility and orthopedic impairments.

Chronic Fatigue Syndrome

Chronic Fatigue Syndrome is known by many names such as CFIDS, CFS, chronic Epstein-Barr virus, the "yuppie" flu, and many other names. It is a complex illness characterized by incapacitating fatigue, neurological problems, and many other symptoms. The symptoms may include low-grade fever, sore throat, painful lymph nodes, muscle weakness, aching, and sleep disturbance as well as vision, attention, and cognitive problems. Student accommodations will vary depending upon the specific symptoms.

Fibromyalgia

Fibromyalgia is an arthritis-related condition that causes widespread pain in the muscles and tendons at specific "tender points" throughout the body. Other symptoms include chronic fatigue and non-restful sleep. Stress, anxiety, and fatigue make this condition worse.

In addition to medical treatment, other treatments that have been used include meditation, visualization, relaxation techniques, stress management, biofeedback, yoga and stretching exercises, and counseling.

Symptoms for fibromyalgia will vary greatly depending on one's personal conditions. Accommodations will be dependent upon the manifestation of each individual condition.

Lupus

Lupus is a chronic, autoimmune disease which causes inflammation of various parts of the body, especially the skin, joints, blood, and kidneys. The immune complexes that build up in the tissues can cause inflammation, injury to tissues, and pain. The symptoms vary with each person, but may include achy joints, fever, prolonged or extreme fatigue, arthritis, skin rashes, pleurisy, photosensitivity, hair loss, seizures, or mouth or nose ulcers. For most people, lupus is a mild disease affecting only a few organs.

(Lupus, continued)

For others it may cause serious and even life-threatening problems. For the vast majority of people with lupus, effective treatment can minimize symptoms, reduce inflammation, and maintain normal bodily functions. Accommodations will be made on an individual basis.

Multiple Sclerosis

Multiple Sclerosis (MS) is a progressive disease of the central nervous system, characterized by a decline of muscle control. Symptoms range from mild to severe and may include blurred or double vision, legal blindness, tremors, weakness or numbness in limbs, unsteady gait, paralysis, slurred speech, or cognitive dysfunction. The age of onset usually occurs between 20 and 40; therefore, students are likely to have difficulty adjusting to their condition.

The course of MS is highly unpredictable. Periodic remission may last from a few days to several months. Striking inconsistencies in performance are not unusual. For the appropriate classroom accommodations, refer to the section(s) on speech, vision impairments, mobility, and hand-function disabilities.

Muscular Dystrophy

Muscular Dystrophy refers to a group of hereditary, progressive disorders that most often occur in young people, producing degeneration of voluntary muscles of the trunk and lower extremities. The atrophy of the muscles results in chronic weakness and fatigue and may cause respiratory or cardiac problems. Walking, if possible, is slow and appears uncoordinated. Manipulation of materials in class may be difficult. Refer to the section on mobility and hand-function impairments for appropriate accommodations.

Seizure Disorder

Students with epilepsy and other seizure disorders are sometimes reluctant to divulge their conditions because they fear being misunderstood or stigmatized. Myths about this disorder include it being a form of mental illness or it is contagious and untreatable. These misconceptions have arisen because the ultimate causes remain uncertain. There is evidence that hereditary factors may be involved and that brain injuries and tumors, occurring at any age, may give rise to seizures. What is known is that seizures result from imbalances in the electrical activity of the brain.

Three distinct types of seizures exist:

- **Petit Mal** means small seizure and is characterized by eye blinking or staring. It begins abruptly with a sudden dimming of consciousness and may last only a few seconds. Whatever the person is doing is suspended for a moment but resumed again as soon as the seizure is over. Often, because of its briefness, the seizure may go unnoticed by the individual as well as by others.
- **Psychomotor** seizures range from mild to severe and may include staring, mental confusion, uncoordinated and random movement, incoherent speech, and behavior outbursts, followed by immediate recovery. These seizures may last from two minutes to a half hour. The person may have no recollection of what happened but may experience fatigue.
- **Grand Mal** seizures may be moderate to severe and may be characterized by generalized contractions of muscles, twitching, and limb jerking. A few minutes of such movements may be followed by unconsciousness, sleep, or extreme fatigue.

Students with seizure disorders are often under preventative medication, which may cause drowsiness and temporary memory problems. Such medication makes it unlikely that a seizure will occur in class.

In The Event of a Grand Mal Seizure, Follow This Procedure:

- ◆ Keep calm. Although its manifestations may be intense, the seizure is generally not painful to the individual
- ◆ Remove nearby objects that may injure the student during the seizure
- ◆ Help lower the person to the floor and place cushioning under his/her head
- ◆ Turn the head to the side, so that breathing is not obstructed
- ◆ Loosen tight clothing
- ◆ Do not force anything between the teeth
- ◆ Do not try to restrain bodily movement

After a seizure, faculty should deal forthrightly with the concerns of the class in an effort to forestall whatever negative attitudes may develop toward the student.

Other Disabilities

Substance Abuse

Substance abuse is a condition of psychological and/or psychological dependence on any of a variety of chemicals, such as illegal drugs, some prescription drugs, and alcohol. Individuals who are recovering from drug or alcohol abuse or who are in treatment programs to assist their recovery are covered by federal anti-discrimination legislation and are eligible for college services for students with disabilities.

These students may experience psychological problems such as depression, anxiety, or very low self-esteem. They may exhibit poor behavioral control, and if they are using medication as part of their treatment, they may experience undesirable side effects.

Refer students showing symptoms of substance abuse to Student Health Services, University Counseling Center, or Services for Students with Disabilities.

Discuss cases of inappropriate classroom behavior with the student in a private setting.

Tourette's Syndrome

Tourette's Syndrome is a neurological disorder characterized by involuntary movements and vocalizations that occur repeatedly in the same manner. The following are more detailed characteristics: involuntary blinking of eyes, head jerking, flailing arms, throat clearing, peculiar noises, and ritualistic behaviors. The movement (tic) is involuntary and as irresistible as a sneeze.

Typically tics increase as a result of tension or stress and decrease with relaxation or concentration on an absorbing task. The student's movement and noises can be annoying or even somewhat disturbing to the class. Remember, these tics are occurring involuntarily so do not react with anger or annoyance.

The severity of symptoms ranges from very mild (barely noticeable) to severe and disabling. Other symptoms may include obsessive-compulsiveness, attention deficit disorder, or a learning disability. Classroom accommodations will vary with the condition. Untimed tests in a private room may be necessary. The student can then focus all energy on the test instead of on suppressing the tics. Permission for the student to leave the classroom when tics become overwhelming may help.

If the behavior is just poor behavior and not the result of the Tourette's Syndrome, it should not be tolerated. Speak to the student in private about his or her behavior and y classroom expectations.

Autism

Autism and Pervasive Developmental Disorder (PDD) are neurological disabilities that affect social interaction, communication, and restrict activities and interests. Persons with more advanced language skills may tend to focus on a small range of topics and have difficulty with abstract concepts. Those with autism often have difficulty with changes in routine or familiar surroundings. The classroom environment should be structured so that the program is consistent and predictable. Students with Autism learn better and are less confused when information is presented visually as well as verbally.

Resources at Virginia Tech

Services for Students with Disabilities

150 Henderson Hall
(540) 231-3788 (Voice) / (540) 231-1740 (TTY)

Special Services Facility

Newman Library
(540) 231-3937

ADA Coordinator

170B, Personnel Services (0318)
(540) 231-7784 (Voice) / (540) 231-6258 (TTY)

Office For Equal Opportunity

336 Burruss Hall (0216)
(540) 231-7500 (Voice) / (540) 231-9460 (TTY)

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