# Reasonable Accommodations





A Faculty Guide to Teaching Students with Disabilities



#### **CUNY Council on Student Disability Issues (COSDI)**

City University of New York Central Office of Student Affairs 555 West 57<sup>th</sup> Street, Suite 1401 New York, NY. 10019

Published October 2014

## **Table of Contents**

Foreword	5
Introduction	7
The Law	9
Disability Categories	11
Teaching Students with Disabilities	12
Universal Design in Learning	15
University-Wide Accessibility Projects	18
Technology in the Classroom and for Online Courses	23
Alternative Text for Students with Disabilities	27
Learning Disabilities	28
Attention Deficit/Hyperactivity Disorders (AD/HD)	32
Neurological Disabilities	36
Traumatic Brain Injury (TBI)	38
Autism Spectrum Disorder/ Asperger's Syndrome	40
Psychological Disorders	43
Mobility Disabilities	46
Visual Disability	49
Deaf and Hard-of-Hearing	52
Speech Disorders	56

Health Impairments	58
Sample Syllabus Statements	60
Disability Etiquette	61
Emergency Procedures	62
Additional Disability-Related Terminology	66
Additional Resources	71
Acknowledgments	72
COSDI Directory	73

#### **Foreword**

Students with disabilities have turned to The City University of New York (CUNY) in unprecedented numbers for the promise of a remarkable education. In response, CUNY is empowered and affirmed by the guarantees of Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (ADAAA) of 2008. Indeed, during the past two decades, the enrollment of CUNY students with disabilities has more than tripled. Providing equal access and opportunities to students with disabilities is one of CUNY's highest priorities.



Frank D. Sanchez, Vice Chancellor for Student Affairs, CUNY

CUNY has been a pioneer in the development of leading-edge, high-quality programs, which provide access and ensure students with disabilities have the same opportunities as all other CUNY students. Many of these programs have been recognized regionally and nationally as model programs in postsecondary disability services. CUNY's Assistive Technology Services (CATS) Project provides students with disabilities with innovative technology access solutions. CUNY's Project REACH works closely with faculty and staff to improve the University's readiness to meet the needs of its burgeoning population of students on the autism spectrum. CUNY LEADS provides intensive career readiness services to assist students with disabilities in making successful transitions to the world of work following graduation.

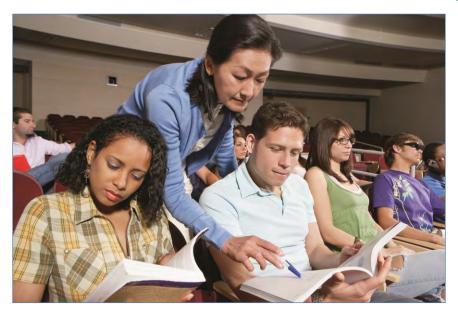
The hallmark of CUNY's commitment to equal access is its campus Offices of Disability Resources & Services, and the dedicated, highly skilled professionals who lead them.

CUNY's world-class faculty is the University's most critical resource in our efforts to accommodate students with disabilities. Our student-centered faculty are crucial to CUNY's efforts to "level the playing field" for students with disabilities, while maintaining the rigor of its academic standards and intended learning outcomes.

The University is proud of our faculty's enduring commitment to facilitating equal access for students with disabilities and we are confident that these efforts will continue as the University proudly issues this update of *Reasonable Accommodations: A Faculty Guide to Teaching College Students with Disabilities*.

Frank D. Sanchez Vice Chancellor for Student Affairs City University of New York





#### Introduction

The City University of New York (CUNY) prides itself on serving an impressively diverse community of students with disabilities, approximately 10,000 of whom are served annually throughout the University. This breadth of service does not take into consideration the hundreds, perhaps thousands, of students who choose not to disclose their disability status or who have temporary disabilities.

Access for students with disabilities means more than the removal of architectural barriers and the provision of auxiliary services. Reasonable accommodations must also be made in the instructional process to ensure a full educational opportunity. This principle applies to all teaching strategies and modes, including online and other electronic modes of instruction as well as to institutional and departmental policies. The means of achieving these ideals involve an understanding of disability and the myriad tools available to both students and educators for meeting the educational needs of students with disabilities.

Reasonable Accommodations: A Faculty Guide to Teaching College Students with Disabilities was last published in 2009 by CUNY's



Council on Student Disability Issues (COSDI) to assist faculty in successfully carrying out their central role in relation to the University's commitment to providing access to students with disabilities. In this updated version faculty will find the latest information about various types of disabilities, the functional limitations of students with these disabilities, recommended accommodations, and helpful suggestions on how to successfully meet students' needs in the classroom and other college settings.

To help find relevant information quickly, we have identified and addressed each important topic in a separate chapter. For further access, we have included a list of sources and resources after each chapter and a glossary of disability-related terminology at the end of the booklet.

We have also added the COSDI directory (CUNY's offices of disability services) in the appendices. We encourage you to contact and consult with the network of professionals who regularly provide guidance and help resolve problems associated with implementing accommodations.

The offices of disability services throughout CUNY play a significant role in assisting students and faculty in the development of accessible academic programs. But without your support, which is essential for the creation of an environment that values and welcomes diversity, our work would be incomplete.

CUNY Council on Student Disability Issues (COSDI)

#### The Law



The Americans with Disabilities Act (ADA) of 1990, along with the Amendments Act of 2008, which was signed into law on September 25, 2008 and became effective January 1, 2009, prohibit discrimination on the basis of disability in employment, state and local government, public

accommodations, commercial facilities, transportation, and telecommunications. Section 504 of the Federal Rehabilitation Act of 1973 states: "[n]o otherwise qualified person with a disability in the United States... shall, solely on the basis of disability, be denied access to, or the benefits of, or be subjected to discrimination under any program or activity provided by any institution receiving federal financial assistance"...

An individual with a disability is defined by the ADA as

"... a person who has a physical or mental impairment that limits one or more major life activities, ....."

The term "qualified," in post-secondary education, means that the student meets the academic and technical standards required for participation in the class, program, or activity but has a physical and/or mental impairment that limits one or more major life activity, including, but not limited to, caring for one's self, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, and working. Major life activities may also include school-related tasks such as learning, reading, concentrating, thinking, and communicating. Major life activities also include the operation of "major bodily functions," including, but not limited to, functions of the immune system, normal cell growth, and digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions.



Thus, colleges and universities are required to make Reasonable Accommodations in their practices, policies and procedures, and to provide auxiliary aids and services for persons with disabilities, unless to do so would fundamentally alter the nature of the goods, services, facilities, privileges, advantages, and accommodations they offer, or would result in an undue financial or administrative burden on the institution. (http://www.ada.gov/cguide.htm)

The offices of disability services work closely with students to help them understand their rights and responsibilities. Some of those rights are covered by the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99).

The offices of disability services will be unable to discuss a specific student circumstances or record with anyone (including parents or guardians) without that student's express permission.

FERPA however allows schools to disclose **education records**, without consent, to the following parties or under the following conditions (34 CFR § 99.31):

- School officials with legitimate educational interest
- Other schools to which a student is transferring
- Specified officials for audit or evaluation purposes
- Appropriate parties in connection with financial aid to a student
- Organizations conducting certain studies for or on behalf of the school
- Accrediting organizations
- Parties identified in a judicial order or lawfully issued subpoena
- Appropriate officials in cases of health and safety emergencies
- State and local authorities, within a juvenile justice system, pursuant to specific State law

## **Disability Categories**

**Person with a disability** means any person who:

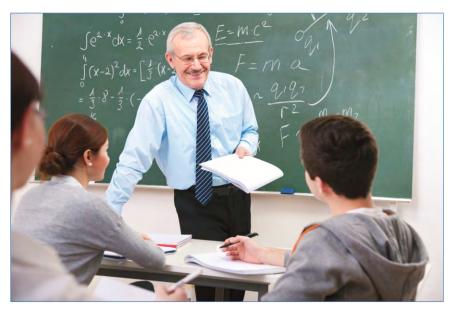
- 1) Has a physical or psychological condition which substantially limits one or more major life activities (including walking, seeing, hearing, speaking, breathing, learning, and working);
- 2) Has a record of such impairment; or
- 3) Is regarded as having such an impairment

(ADA, 42 U.S.C. § 12101, et seq).

Disabilities may be divided into separate categories as seen below. However, some disabilities may be included in more than one category. For example, AD/HD, which can fall under both Neurological and Learning Disabilities. Disability categories include but are not limited to:

- Medical Conditions: e.g., asthma, diabetes, fibromyalgia, HIV-AIDS, cancer, cerebral palsy, epilepsy, traumatic brain injury, multiple sclerosis, muscular dystrophy, lupus, heart disease, Charon's Disease, sickle cell anemia, epilepsy
- **Psychological Conditions:** e.g., anxiety disorder, depression, mania, manic-depression, schizophrenia, recovery from alcoholism and substance abuse, obsessive-compulsive disorder
- **Learning Disabilities:** i.e., an inability to receive, process, store, or respond to information, or to speak, listen, think, read, write, spell, or compute
- **Neurological Impairment:** e.g., attention deficit disorder, attention deficit hyperactivity disorder, brain injury, brain tumor, carpal tunnel syndrome, cerebral palsy, Asperger's Syndrome
- Deaf and Hard of Hearing
- Visually Impaired, Legally Blind, and Blind
- Mobility Impairment: e.g., arthritis, polio, spinal cord injuries, scoliosis, and other conditions that cause mobility difficulties or result in the use of a cane or wheelchair
- **Temporary Disabilities:** i.e., a treatable impairment of mental or physical faculties that may impede the affected person from functioning normally while he or she is under treatment





## **Teaching Students with Disabilities**

Students with disabilities, like all students, bring a unique set of strengths and experiences to college. While many learn in different ways, their differences do not imply inferior capacities. Although some may manage without accommodations, many students count on Reasonable Accommodations, including modifications in the way information is presented, and in methods of testing and evaluation to successfully meet their course requirements. These accommodations are determined and approved by the campus office of disability services in consultation with the student and in the context of a review of the student's history and documentation

Students with disabilities bear the primary responsibility for identifying their disabilities and for requesting the necessary adjustments to the learning environment that necessitate collaborations between the office of disability services and faculty members.

It is the faculty's responsibility to ensure that the accommodations determined and approved by the office of disability services are provided to the student in a timely and responsive manner.

#### **General Considerations**

- Some students with disabilities identify themselves by contacting the office of disability services and/or their instructors before or early in the semester. Others may not.
- Students with disabilities are not obligated to register with campus offices of disability services.
- Some disabilities are noticeable through casual observation and immediately recognizable, for example, by the use of a cane, a wheelchair, or crutches. Other students have what are known as hidden disabilities, which are usually not apparent. These may include learning disabilities, emotional or psychological conditions, or non-obvious medical conditions. Some



- students may present with multiple disabilities.
- If you suspect that a student has a disability, seek guidance from the campus office of disability services. Do not make assumptions about students' abilities or comment on students' "presumed" disabilities if those disabilities are not visible.
- It is crucial that the faculty member includes a statement in the class syllabus (see example) encouraging students with disabilities to arrange accommodations early in the semester.
- Dialogue between students with disabilities and their instructors is essential early in the term, and follow-up meetings are recommended. Faculty should not feel apprehensive about discussing students' needs as they relate to the course. There is no reason to avoid using terms that refer to the disability, such as "blind," "see," or "walk."
- Students using wheelchairs or other assistive devices may encounter
  obstacles or barriers in getting to class on time. Many rely on
  alternate modes of public transportation. Others may have periodic
  or irregular curtailments of functioning, either from their disability
  or from medication. Some flexibility in applying attendance and
  promptness rules to students with mobility and chronic medical
  disabilities would be warranted and helpful.



 A wide range of students with disabilities may be assisted in the classroom by making book lists available prior to the beginning of the term, by speaking directly toward the class, and by writing key lecture points and assignments on the chalk- or white-board.



• Chronic weakness and fatigue characterize some disabilities and medical conditions. A student may exhibit drowsiness, fatigue, impairments of memory, or slowness due to medication side effects. Such curtailments of functioning and interferences with

students' ability to perform, based on disability, should be distinguished from the apathetic behavior it may resemble.

• The objective of academic adjustments is always to accommodate the student's disability, not to dilute scholastic requirements.



## **Universal Design in Learning**

UDL is an educational approach based on the learning sciences with three primary principles: multiple means of representation of information, multiple means of student action and expression, and multiple means of student engagement (http://udloncampus.cast.org). The intent of Universal Design in higher education is to create an educational environment that is readily accessible and usable by as many students as possible without the need for adaptation or specialized design.

For your convenience we have included some commonly used practices in the next few pages. However, for additional guidance on how to create courses and course content in accordance with the principles of Universal Design, please consult your campus disability service professionals and additional resources listed at the end of this chapter.

#### In Instruction

• A statement on a syllabus that invites students to meet with the instructor to discuss learning needs

- 1
- Multiple delivery methods that motivate and engage all learners
- A flexible curriculum that is accessible to all learners
- Examples that appeal to students with a variety of characteristics with respect to race, ethnicity, gender, age, ability, disability, and interest
- Regular, accessible, and effective interactions between students and the instructor
- Allowing students to turn in parts of a large project for feedback before the final project is due
- Class outlines and notes on an accessible website
- Assessing student learning using multiple methods
- Awareness of processes and resources for disability-related accommodations

#### In Services

- Service counters that are at heights accessible from both a seated and standing position
- Staff who are aware of resources and procedures for providing disability-related accommodations
- Pictures in publications and on websites that include students with diverse characteristics with respect to race, age, gender, and disability
- A statement in publications about how to request special assistance, such as a disability-related accommodation
- A student service website that adheres to accessibility standards, and printed materials that are easy to reach from a variety of heights and without furniture blocking access
- Printed publications that are available in alternate formats (e.g., electronic, large print, Braille)

#### In Information Technology

- · Captioned videos
- Alternative text for graphic images on web pages so that individuals who are blind and using text-to-speech technology can access the content



- Procurement policies and procedures that promote the purchase of accessible products
- Adherence to standards for the accessible and usable design of websites
- Comfortable access to computers for both left- and right-handed students
- Software that is compatible with assistive technology
- Computers that are on adjustable-height tables

#### **In Physical Spaces**

- Clear directional signs that have large, high-contrast print
- Restrooms, classrooms, and other facilities that are physically accessible to individuals who use wheelchairs or walkers
- Furniture and fixtures in classrooms that are adjustable in height and allow arrangements for different learning activities and student groupings
- Emergency instructions that are clear and visible and address the needs of individuals with sensory and mobility impairments
- Non-slip walking surfaces

#### Our Sources and Additional Resources:

- The Center for Universal Design in Education: publications, videos, and web resources at http://www.uw.edu/doit/CUDE.
- UDL On Campus: http://udloncampus.cast.org
- http://www.washington.edu/doit/Brochures/Academics/
- http://www.ncsu.edu/ncsu/design/cud/about ud/about ud.htm

## **University-Wide Accessibility Projects**

#### **CUNY Learning Disability Project**

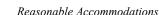
The CUNY Learning Disability (LD) Project, housed at Hostos Community College, is prepared to help CUNY faculty and staff address the needs of students with learning disabilities. The LD Project offers a variety of services, including but not limited to such centralized expertise and continued innovative services as:

- Faculty and staff training
- Centralized professional development on LD issues for student disability services staff
- Faculty workshops via webinar on teaching students with learning disabilities
- Individual case consultation
- Review and explanation of diagnostic documentation
- Assistance with determining appropriate accommodations and support services
- Assistance with appropriate academic appeal processes
- A library of books and audio and video recordings available to assist instructors, staff, and students to understand LD issues and different learning strategies designed to help students with learning disabilities
- → To contact the Learning Disabilities Project, please call 718.518.4304.

#### **CUNY Office of Deaf/Hard of Hearing Services**

The Office of Deaf/Hard of Hearing (HOH) services is charged with partnering with CUNY campuses to help provide services to all students with a moderate to severe hearing loss by:

- Serving in an advisory capacity to all CUNY offices of disability services to ensure optimal services are maintained and to allow for accommodating each student's unique needs in the most cost effective manner
- Recruiting, screening, and referring qualified Sign Language Interpreters to facilitate communication on campuses
- Researching and recommending innovative technologies for use by Deaf/HOH students
- Developing opportunities to engage Deaf/HOH students in campus activities to increase their visibility, and to better acclimate them to life/work experiences
- Collaborating with faculty, staff, and administrators to promote successful integration of Deaf/HOH students into the college experience
- → To contact The CUNY Office of Deaf/Hard of Hearing Services, please call 646.344.7261



#### **CUNY Assistive Technology (CATS)**

The CUNY Assistive Technology (CATS) Project is funded through the auspices of the Council on Student Disability Issues (COSDI) and is based at Queensborough Community College. The CATS team of assistive technology specialists provides a wide range of support services and tools to CUNY campuses ensuring consistent and state of the art assistive technology throughout the University, such as:

- Assistive Technology (AT) installation and maintenance support, budgeting and purchasing guidance, faculty and staff training, and ongoing telephone and on-site technical support
- Research on developments and trends in assistive technology and shared information through "Train the Trainers" workshops
- Hosting an annual Accessibility Conference
- An online collection of assistive technology information through CATSweb
- Recommendations for the design and maintenance of adaptive computer labs
- Accessibility training for online and hybrid courses
- → To contact the CATS Project, please call 718.281.5014 or visit http://catsweb.cuny.edu/.



#### **Project REACH**

REACH (Resources and Education on Autism as CUNY's Hallmark) is a university-wide project (begun December 2011) that is funded in part by the FAR Fund and coordinated by the Central Office Division of Student Affairs of The City University of New York (CUNY) in association with the Office of the University Dean for Health and Human Services.

The purpose of Project REACH is to enhance CUNY's capacity to support its growing population of college students with autism spectrum disorders (ASD) and to educate faculty and staff through workshops and training about students with ASD.

→ To find out more about Project REACH, please visit http://www.cuny.edu/projectREACH. Questions can be sent to Lisa Pollich at Lisa.Pollich@mail.cuny.edu. **1** 

#### The Media Accessibility Project

This project's mission is to help make audio/visual content accessible to all students. While students with disabilities are the primary beneficiaries of these accommodations, the design and use of accessible course content and materials will benefit all students.

- Provide captioning and transcription of inaccessible audio/visual course materials for use by students with disabilities
- Conduct direct training to the assistive technology staff at CUNY campuses so they may in turn provide captioning services and heighten awareness of the benefits of captioning
- Act as liaison and collaborate with CUNY's instructional designers to raise awareness and provide technical assistance for captioning/transcription
- Increase awareness and application of universal design principles when designing video and audio course content and other services across CUNY
- Establish collaborations across the University to ensure fully accessible audio/visual content
- → To contact the Media Accessibility Project, please call 718.281.5014 or visit http://catsweb.cunv.edu/



## Technology in the Classroom and for Online Courses

#### Online course accessibility

CUNY offers courses through online systems, which offer opportunities and challenges for students with disabilities. Although the asynchronous nature and remote access to these courses can eliminate physical and transportation barriers, the technologies used to create online courses can also hinder access. Following are some suggestions to assist faculty in ensuring that online classes are accessible:

- Reading materials should be available in accessible electronic formats.
- Make sure, whenever scanning print materials that you will post on course websites, to create files that have been recognized as text by optical character recognition software, not simply scanned as images or copies, which will ensure access to blind or other printdisabled students.
- Video and audio recordings should be captioned and or transcripts provided.
- Graphics and images should be labeled with descriptive text tags.
- Use one-on-one discussions with any student needing accommodation to better understand how to provide access to your course.
- Use many of the techniques and recommendations provided throughout this Guide to make your online course accessible to all types of student learners.

While the use of digital and electronic formats allows for greater access to course offerings by students with disabilities, some students may still be excluded when course materials are not designed with the needs of all learners in mind. Examples of problematic course materials are videos that lack *captions* or *audio descriptions*, which exclude viewers with hearing or visual impairments. Many students with learning disabilities can also experience increased comprehension when video-based materials are captioned. This concept of universal design of instructional



materials and practices has thus become an important tool in ensuring that all learners have complete access to course materials.

Keeping the following guidelines in mind when designing, developing, and delivering course content will allow you to address any significant barriers to learning.

#### **Pictures/Descriptions**

- Recognize that some students cannot see pictures in textbooks, on web sites, or on presentation slides. Include a brief description of a picture that you believe serves a vital role for the course curriculum.
- Deliver the description orally, along with the picture on a
  presentation slide, if showing the slide to the class. The description
  should be included as an alternative text for a course-based web
  page.
- Check that any web site with illustrations or pictures that you refer students to provides adequate descriptions for important elements.

#### Video

Like pictures and illustrations, the use of video can present particular challenges to students with visual disabilities. The use of videos in a curricular context should be accompanied by at least:

- Brief descriptions that convey the significance of the visual action, with pertinent dialogue that can give the student sufficient context to derive a meaningful experience.
- Captioning or full transcripts that enable students with hearing disabilities to access the content, which, combined with the visual action, can enable students to fully benefit from the experience of classroom videos

#### **Audio/Captions & Transcripts**

- Audio materials like podcasts, lecture recordings, and other material should be accompanied by synchronized captions or have transcripts available for students with hearing disabilities.
- Videos that feature video descriptive services, an enhancement of narration that describes the visual elements of the movie—the action, characters, locations, costumes and sets—without interfering



with the movie's dialogue or sound effects. This type of enhancement can provide accommodation for students with visual impairments.

#### **Blackboard Features & Access**

Be sure to consult <a href="www.blackboard.com">www.blackboard.com</a> for the latest documentation to see which features are inaccessible to students with disabilities. Keywords such as "accessibility" and "disabilities" will bring up results that will give you the latest information on how to create accessible course content using Blackboard, as well as provide information on features that do not work for users with certain disabilities.

#### **Other Technology Tips**

- When creating PDF files, be sure not to lock them with security features so as to prevent access.
- Whenever possible, convert your course material into formatted text rather than relying on a scanned picture of a printed page.
- When creating presentations and posting them on course web sites for students, convert your presentation to a common format like RTF (Rich Text Format) to allow for better access.
- Ask IT or the office of disability services on campus if software or services are available that make accessibility and conversion of course material to accessible formats easier.
- Students themselves can serve as guides to what they need. Discuss the curriculum as well as the material you plan to use during the course of the semester to ensure that the student has an opportunity to work with you to make any necessary changes.
- Science Labs can present unique challenges for students across a
  wide range of disabilities. From reading instruments to navigating
  through space, these challenges are usually manageable with some
  forethought and planning. This can be done with the approach that
  measuring a student's ability to understand and learn is a primary
  objective.
- Here are some suggestions you can consider when teaching a lab science course.

#### **Our Sources and Additional Resources:**

- Universal Design—The process of embedding choice for all students in the things we design: http://www.universaldesign.com/
- CUNY Assistive Technology Services: http://catsweb.cuny.edu/
- W3C: Quality Assurance Tips for Webmasters: http://www.w3.org/QA/Tips/altAttribute
- W3C: Web Content Accessibility Guidelines: http://www.w3.org/TR/WAI-WEBCONTENT/ - gl-provideequivalents
- Microsoft Office: http://office.microsoft.com/en-us/wordhelp/create-accessible-pdfs-HA102478227.aspx
- Creating Accessible Adobe PDF Files: https://www.adobe.com/enterprise/accessibility/pdfs/acro6\_pg\_ue.p df
- Making Science Labs Accessible to Students with Disabilities: http://www.washington.edu/doit/Brochures/Academics/science\_lab. html
- Alternate Format Materials Handbook for Postsecondary Disability Service Providers in New York State (NYSDCS): http://www.tc3.edu/bcl/altformhandbook/
- Making Accessible PDFs (Ohio State University Web Accessibility Center): http://wac.osu.edu/pdf/scan/PDFfromScanner.pdf
- Teaching Online (University of Central Florida): http://teach.ucf.edu/resources/creating-accessible-course-content/

### Alternative Text for Students with Disabilities

Under various federal and New York State laws and regulations any student who is deemed to be "print disabled" as a consequence of a learning, visual, or other physical disability is entitled to receive copies of any printed instructional materials in any of a variety of accessible alternate formats from the publishers of those instructional materials. These alternate formats can include electronically scanned versions of textbooks, or HTML, PDF, or Microsoft Word formatted documents.

#### Instructional material is defined as:

- Printed instructional material, including the text of the material, sidebars, the table of contents, chapter headings, subheadings, footnotes, pictures, illustrations, graphs, charts, indexes, glossaries, and bibliographies.
- Supplementary non-printed instructional materials, including all
  materials, regardless of original format (CD-ROM, DVD, web
  pages, video and audio tapes, etc.), with the goal that all
  electronic materials will meet guidelines and standards required
  by §508 of the Rehabilitation Act.
- → For background and additional details regarding §508, please visit http://www.access-board.gov/sec508/508standards.htm

Students should contact the disability services office on their campus for assistance obtaining these alternate formatted materials prior to the start of the semester.

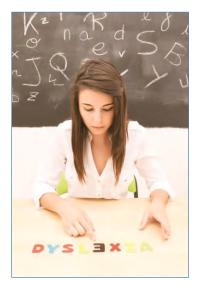
Faculty can expedite this process by posting information about required textbooks or other course materials prior to the beginning of the semester, on Blackboard, any course Web site, and on CUNYfirst.

## **Learning Disabilities**

A learning disability (LD) is any of a diverse group of conditions, of

presumed neurological origin, that cause significant difficulties in auditory, visual, and/or spatial perception. Included are disorders that impair such functions as reading (dyslexia), writing (dysgraphia), and mathematical calculation (dyscalculia).

Each category exhibits a wide variation of behavioral patterns. In general, a variety of instructional modes enhance learning for LD students by allowing them to master material that may be inaccessible in one particular form. In other words, using multiple instructional techniques increases the likelihood that students with LD will succeed in college.



#### **Functional Limitations**

- Memory and sequencing difficulties that may impede the students' execution of complicated directions
- Difficulty integrating information presented orally, hindering students' ability to follow the sequence and organization of a lecture
- Slow reading speed, which makes comprehension a difficulty for students with LD, particularly when dealing with large quantities of text
- Difficulty taking notes caused by difficulty writing and assimilating, remembering, and organizing the material while listening to lectures
- Difficulty talking, responding, or reading in front of groups, though many students with LD are highly articulate
- Poor coordination, or trouble judging distance or differentiating between left and right



- Problems during laboratory classes with new equipment, exact measurement, and multi-step procedures that may demand skills that are hard for LD students to acquire
- Perceptual deficiencies that may cause students with LD to lack social skills or have difficulty sustaining focused attention

#### **Accommodations**



- Priority Registration
- Alternate location and/or extended time on exams
- A less distracting environment for testing
- Questions and directions read aloud for examinations
- Substitute answer sheets, especially computer forms
- Use of dictionary, calculator, computer spell checker, and proofreader
- A note-taker, reader and/or scribe
- Use of audio recorder or laptop computer in classroom
- Course substitution for nonessential course requirements in the major
- Extended time for in-class assignments to correct spelling, punctuation, and grammar
- Alternative test format (e.g., large fonts, Braille, oral presentation, multiple choice in place of short essay questions, slide presentations, photographic essays, or hand-made models)

#### **Teaching Strategies**

- State the day's objectives at the beginning of the class
- Paraphrase key points from the reading and lectures
- Provide examples (and identify things that are not examples)
- Provide written directions
- Vary your teaching methods (lecture, discussion, small groups)



- Provide step-by-step directions for class projects, bullet those directions, and give at least 2 weeks' notice of due dates
- Select well-organized textbooks with subheadings, clear explanations and instructions, and appropriate examples
- Print out and/or digitize copies of overheads and make them available to students
- Review material regularly
- Encourage study groups
- Provide pre-reading questions for each reading assignment or group of related assignments
- Identify key points in the readings and lectures
- Do not penalize students for spelling, organizational, or handwriting errors on timed examinations
- Allow students to use laptop computers for essay exams if they prefer to do so
- Provide written instructions for classwork and assignments, emphasizing exactly what you want students to do, and go over the instructions orally in class
- Write out the stages students need to follow to complete an assignment
- Provide adequate time for students to complete an assignment. Two
  weeks is good for a standard college paper; four weeks is the
  minimum for a paper requiring library research
- Teach students to brainstorm and organize ideas. In most cases, informal outlines are more helpful than formal outlines because the latter can seem so detailed and formulaic that many students fail to do them or spend most of the time allocated working on the perfect outline and never complete the paper
- Read drafts and give students written and oral feedback
- Encourage students to read their work out loud, use tape recorders
  to record their brainstorming, and/or record an oral draft of their
  papers. Some voice recognition software is both affordable and
  user-friendly, so students who find this method helpful might
  consider exploring this type of software
- Encourage the use of computers at all stages of the learning process.
- Encourage students to attend regular tutoring sessions, and encourage tutors to focus on organization

#### Our Sources and Additional Resources:

- National Center for Learning Disabilities: http://www.ncld.org/parents-child-disabilities/teens/planning-college-success-for-students-with-learning-disabilities
- Center for Universal Design in Instruction: http://www.washington.edu/doit/CUDE/
- Applying Universal Design for Instruction to online and blended courses: http://www.cped.uconn.edu/udi-online.html
- Access to post-secondary education through Universal Design learning (Colorado State University): http://accessproject.colostate.edu/udl/
- Awareness of Chronic Health Conditions (New Brunswick Department of Education): http://www.gnb.ca/0000/publications/curric/awarchronichealth.pdf
- Pedagogical strategies for teachers of Learning Disabled students: http://www.users.drew.edu/~sjamieso/LDpedagogy.htm

## Attention Deficit/Hyperactivity Disorders (AD/HD)

Attention Deficit/Hyperactivity Disorders are among the most common neurological disorders that can affect children, adolescents, and adults. AD/HD is a medical term that is not synonymous with Learning Disabilities. Students with AD/HD may or may not have specific



accompanying Learning Disabilities. Although these students have symptoms of both inattention and hyperactivity-impulsivity, there are some students in whom one or the other is predominant.

#### **Functional Limitations**

- Difficulty with time management
- Inadequate organizational skills, procrastination
- Low self-esteem
- Difficulty keeping current with assignments
- Problems in personal relationships and mood stability that affect academic performance
- Distractibility and difficulty focusing
- Impulse control
- Auditory processing problems
- Problems with reading comprehension and memory
- Inadequate note-taking or writing skills
- Lack of perseverance
- Sleep problems

#### **Behaviors: Inattention**

- Fails to give close attention to details or makes careless mistakes in schoolwork or other related activities, resulting in work that is often messy and performed carelessly and without considered thought
- Has difficulty sustaining attention in tasks
- Does not seem to listen when spoken to directly
- Does not follow through on instructions and fails to finish schoolwork, chores, or duties due to inattention and not due to a failure to understand instructions
- Has difficulty organizing tasks and activities
- Avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort; e.g., homework or paperwork
- Loses things necessary for tasks or activities e.g., school assignments notes, books, or tools
- Is easily distracted by extraneous stimuli that are usually and easily ignored by others; e.g., a car honking, a background conversation
- Fidgets or is always "on the go"
- Has difficulty regulating attention
- Blurts out answers before questions have been completed
- Forgetful in daily activities; e.g., missing appointments

#### **Behaviors: Hyperactivity**

- Fidgets with hands or feet or squirms in seat or is often "on the go"
- Has difficulty engaging in group activities
- Often talks excessively

#### **Behaviors: Impulsivity**

- Blurts out answers before questions have been completed
- Has difficulty waiting their turn
- Interrupts or walks in on others

#### **Accommodations**

- A note-taker or audio recorder
- Calculator (with or without voice synthesizer)
- Small classes (when available)
- Clear and concise directions (if possible in written form)
- Extended time to complete reading and writing assignments
- Least distractive environment for testing
- Extended time on exams
- Alternative exam format

#### **Teaching Strategies**

- Recognize the issue of compliance versus comprehension, and be able to distinguish between these two types of behavior
- Supplement oral instructions with visual reinforcement, such that the student can frequently check that they are following instructions (e.g., write the assignment on the board, photocopy printed instructions, use an overhead, or have matched instructions on tape)
- Modify tests if necessary (e.g., provide extra time, or divide the test into two parts to be completed at different times during the day)
- Modify assignments, if necessary (e.g., assign fewer questions in math, use contracts for longer assignments)
- Consider where the student with AD/HD is seated. A quiet seat in close proximity to the instructor may help the student to stay on task
- Work with the student to develop social interaction skills (e.g., interpreting non-verbal communication cues)
- Prepare the student for transitions or unusual events by explaining the situation and describing appropriate behavior in advance
- Address essential academic and behavioral expectations in the class syllabus
- Outline class presentations and provide written list of key terms and points



- 1
- Repeat and summarize segments of each presentation and review it in its entirety
- Paraphrase abstract concepts in specific terms and illustrate them with examples
- Provide concrete examples, personal experiences, hands-on models, and helpful visual materials as charts and graphs
- Make required book lists available prior to the first day of class to allow students to begin their reading early and/or to obtain text in an alternate format
- Keep all instructions concise and reinforce them with brief cue words
- Repeat or re-word complicated directions
- Use color codes or supplementary symbols to help students overcome perceptual problems
- Orient students to the class laboratory and equipment.
- Label equipment, tools, and material
- Use cue cards or labels designating each step of a procedure
- Allow students to use computers with speech output, spellcheck, and/or grammar check

#### **Our Sources and Additional Resources:**

- National Center for Learning Disabilities: http://www.ncld.org/
- Center for Universal Design in Instruction: http://www.washington.edu/doit/CUDE/
- Applying Universal Design for Instruction to online and blended course: http://www.cped.uconn.edu/udi-online.html
- Access to post-secondary education through universal design learning (Colorado State University): http://accessproject.colostate.edu/udl/
- Awareness of Chronic Health Conditions (New Brunswick DOE): http://www.gnb.ca/0000/publications/curric/awarchronichealth.pdf

## **Neurological Disabilities**

1

Neurological Disorders are diseases of the central and peripheral nervous systems, which are the brain, spinal cord, cranial nerves, peripheral nerves, nerve roots, autonomic nervous system, neuromuscular junction, and muscles. There are more than 600 diseases of the nervous system such as brain tumors, epilepsy, Parkinson's disease, Asperger's Syndrome (Autism Spectrum Disorder), Cerebral Palsy, stroke and many more, which give rise to a number of symptoms. These symptoms may include weakness, headaches, numbness, tremor, memory loss, pain, confusion, altered levels of consciousness, poor coordination, loss of sensation, paralysis, and seizures.

#### **Functional Limitations**

- Often experience fatigue (physical, cognitive, and emotional exhaustion)
- May have difficulties with concentration and completion of tasks or assignments
- May experience pain
- May likely have to take medication (with possible side effects that may affect concentration and memory)
- May be more susceptible to stress, and illnesses that can be exacerbated by times of stress
- May miss lectures due to medical appointments, illness, or time in the hospital
- May have mobility or postural difficulties with walking, climbing stairs, or remaining in one position for long periods of time
- May have difficulty with writing and other fine motor activities (including computer use)
- May have difficulty with oral communication
- May have poor organizational skills
- May have problems with abstract thinking and concepts
- May have a poor ability to communicate needs
- May be unable to hold or manipulate laboratory tools

#### **Accommodations**

- Alternative tests
- Extended time on exams
- Distraction-reduced testing space
- Reduced course load
- Extended time on assignments
- Short breaks during exams or in class
- Access to class notes, a note-taker, laptop, or use of an audio recorder for lectures

# **Teaching Strategies**

- Provide lecture notes in advance to help reduce the amount of handwriting or typing students may need to do, allowing them to concentrate on the material being delivered
- Prioritize reading lists, enabling students to engage more easily with pertinent course texts
- When advising students, suggest a class schedule that gives students sufficient time to move between teaching venues
- Avoid last minute location changes, and provide advance notice for students to make necessary arrangements if needed
- Be mindful of keeping classroom and meeting areas clear, to reduce the likelihood of accidents
- Allow students a break in long lectures
- Avoid drawing attention to students who may need to leave class
- Accommodate students who may need to sit in certain learning situations (e.g. in labs)

### **Our Sources and Additional Resources:**

 DO-IT (Disabilities, Opportunities, Internetworking, and Technology) Home: The Faculty Room (University of Washington) http://www.washington.edu/doit/faculty/strategies

# **Traumatic Brain Injury (TBI)**

1

TBI is also known as intracranial injury, and is any type of injury that results in trauma to the scalp, skull, or brain and classified as a head injury. The terms "traumatic brain injury" and "head injury" are used interchangeably. This broad classification includes brain hemorrhages, vascular injuries, cranial nerve injuries, and other neuronal injuries. These classifications depend on whether the injury is an open head injury where the skull was broken, or not, as in closed head injury. Traumatic Brain Injury focuses on the nature of the injury and on its effects.

#### **Functional Limitations**

- Attention impairment difficulty paying attention
- Cognitive impairment difficulty making decisions, etc.
- Language impairment speech confabulation, aphasia, etc.
- Memory impairment short or long term memory problems
- Conduct disorder anger management problem, irrational behavior disturbances, etc.
- Motor disorder neurological-based motor skills
- An impairment from other neurological dysfunctions

### **Accommodations**

- Alternate tests
- Extended time on exams
- Distraction-reduced testing space
- Short break during exams
- Reduced course load
- Extended time on assignments
- Access to class notes, a note-taker, or use of a tape recorder for lectures

# **Teaching Strategies**

- Provide preferential seating if possible (close to the instructor)
- Provide frequent repetition of important tasks
- Provide verbal and written instruction during class
- Shorten assignments and/or divide assignments into parts
- Give short, frequent quizzes, rather than all-inclusive exams
- Accompany homework with written instructions
- Allow additional time to complete in-class assignments
- Provide students with instructor's notes or help students obtain quality notes from other students
- Provide student with an outline of the instructor's lecture or study guide
- Avoid placing students in high-pressure situations, such as reading aloud in front of the class.

- Definition of Brain Injury A Starting Point: http://tbilaw.com/definition-of-brain-injury.html
- Head injury: Wikipedia, the free encyclopedia: en.wikipedia.org/wiki/Traumatic brain injury
- "Head Injury: Description": Seattle Children's Hospital: http://traumatic-brain-injury.net/
- Accommodations Guide for Students with Brain Injury: Department of Physical Medicine and Rehabilitation Virginia Commonwealth University:
  - http://www.pmr.vcu.edu

# Autism Spectrum Disorder/ Asperger's Syndrome

Some neurological disorders, such as Autism Spectrum Disorder (ASD), are more prominent among college students than others. Within this category, CUNY is seeing an increasing number of students with Autism Spectrum Disorder (originally diagnosed as Asperger's Syndrome).

People with ASD tend to have communication deficits, such as responding inappropriately in conversations, misreading nonverbal interactions, or having difficulty building friendships appropriate to their age. In addition, people with ASD may be overly dependent on routines, highly sensitive to changes in their environment, or intensely focused on inappropriate items. The symptoms of people with ASD fall on a continuum, with some individuals showing mild symptoms and others having much more severe symptoms.

Students with ASD may develop many practical skills, and though they often cannot tolerate the whirl of everyday life, they are capable of living full lives and making important contributions to their living environment.

#### **Functional Limitations**

- Poor non-verbal communication e.g., reduced facial expression, monotonous intonation, and limited and inappropriate gestures
- Poor comprehension of other people's verbal and non-verbal expressions
- Poor organizational skills
- Clumsiness and poor coordination
- A preference for repetitive activities, a strong attachment to certain possessions, and distress at a change of whereabouts
- Problems with abstract thinking and concepts

#### **Behaviors**

- Peculiarities of eye gaze, such as inability to make eye contact and read visual cues
- Inattention to the listener's needs; clumsy communication and interpersonal interaction
- Pedantic and perseverative speech (e.g., repeating words and phrases over and over)
- Unusual language characteristics e.g., exaggerated length of utterances, embedded sentences, or locked in wording
- Over-focus on precision
- Written text consisting of continuous, unduly prolonged declarations or statements
- Special interests and skills are usually dependent on excellent rote memory

# **Accommodations**

- Alternate tests
- Extended time on exams
- Distraction-reduced testing space
- Reduced course load
- Extended time on assignments
- Access to class notes, a note-taker, or use of a tape recorder for lectures

# **Teaching Strategies**

- Prepare the student for all changes in routine and/or environment
- Use verbal cues, clear visual demonstrations, and physical cues
- Avoid abstract ideas when possible; when abstract ideas are necessary, use visual cues as an aid
- Understand that an increase in unusual or difficult behaviors probably indicates an increase in stress, in which case ask the student if would he or she like to talk with you
- Don't take misbehavior personally



- Avoid nicknames such as Pal, Buddy, Wise Guy, etc.; idioms ("save your breath," "jump the gun," "second thoughts," etc.); double meanings, sarcasm, and teasing
- Be as concrete as possible, avoiding vague questions like, "Why did
  you do that?" Avoid complex essay-type questions, since students
  will rarely know when they have said enough or if they are properly
  addressing the core of the question
- Break tasks down into smaller steps, or present them in more than one way i.e., visually, verbally, and physically
- Avoid verbal overload
- Be aware that for some individuals what might seem like ordinary classroom auditory and visual input can, in fact, represent perceptual extremes of too much or too little
- Use writing if a student uses repetitive verbal arguments and/or questions, requesting she write down the argumentative statement or question, and then writing your reply. Or try writing her argument and/or question yourself, and then asking the student to write a logical reply

- National Institute of Neurological Disorders and Stroke (NINDS)
   Asperger Syndrome Fact Sheet:
   http://www.ninds.nih.gov/disorders/asperger/detail asperger.htm
- Asperger Syndrome: http://www.autismspeaks.org/what-autism/asperger-syndrome
- DO-IT Home (University of Washington): http://www.washington.edu/doit/faculty/strategies
- Awareness of Students with Diverse Learning Needs, What the Teacher Needs to Know, Volume 1
- http://www.bced.gov.bc.ca/specialed/awareness/11.htm
   http://www.gnb.ca/0000/publications/curric/awarchronichealth.pdf

# **Psychological Disorders**





Psychological disorders refer to a wide range of mental impairments characterized by debilitating behaviors that persist for more than several months and significantly restrict the performance of one or more major life activities. Examples of psychological disorders include major depression, bipolar disorder (also see Neurological Disorder), anxiety disorders, schizophrenia, and personality disorders (EEOC, 1997). A student with a psychological disability may have one or more diagnoses.

### **Functional Limitations**

In most situations, students with psychological disabilities will not show outward signs of the disability. Nevertheless, psychological disorders are disabling and pose many challenges to effective academic performance. Fear of stigma makes some students reluctant to self-disclose, even when they are experiencing academic difficulties. Students may experience various difficulties that include but are not limited to:

- Chronic fatigue or pain
- Sleep problems
- Undesirable side effects of medications
- Maintaining stamina throughout the day or from week to week
- High levels of anxiety or depression, or extreme mood swings
- Severe test anxiety
- Problems concentrating, understanding, or remembering
- Problems managing assignments, prioritizing tasks, and meeting deadlines
- Difficulty interacting appropriately with others, including participating in group work or approaching instructors

- 1
- Difficulty understanding and correctly interpreting criticism or poor grades
- Problems coping with unexpected changes, such as changes in assignments, due dates, classrooms, or instructors
- Difficulty screening out environmental stimuli (sounds, sights, or odors) that interfere with concentration
- Feeling misunderstood, ignored, invalidated, or stigmatized
- Difficulty articulating needs

#### **Accommodations**

Accommodation needs of students with psychological disabilities vary greatly by individual and academic activity. Typical accommodations for a student with a psychological disability may include:

- Prearranged or frequent breaks
- Preferential seating, especially near the door to allow leaving class for breaks
- Beverages permitted in class
- Use of audio recorder/note-taker
- Early availability of syllabus and textbooks
- Exams in alternate format (e.g., from multiple choice to essay, oral presentation, role-play, or portfolio)
- Use of assistive technology
- Extended time on exams
- Exams in a separate location

# **Teaching Strategies**

- Establish a welcoming climate.
- Establish standards of classroom behavior for all students. Be consistent, caring, and firm in holding all students to the established standards
- Address essential academic expectations the first day of class, and repeat them often
- Employ Universal Design for Education strategies to build flexibility into the course. Allow students to learn and show what they have learned in a manner that is suitable to them



- Engage students in continuing dialogue to help minimize problems.
- Speak with the student privately when dealing with a problem, so as not to embarrass the student in front of peers
- Brainstorm solutions with students. Be prepared to listen and to involve students in finding solutions to their problems
- Ask students to repeat back to you what was agreed on.
- Be patient and non-judgmental; avoid sarcasm
- Embrace diversity to include students with psychological disabilities
- If you sense that discussion with the student may not be effective, refer the student to the office of disability services

- U.S. Equal Employment Opportunity Commission (EEOC) Enforcement Guidance on the Americans with Disabilities Act and Psychiatric Disabilities:
  - http://www.eeoc.gov/policy/docs/psych.html
- Center for Applied Special Technology: http://www.cast.org/index.html
- DO-IT Home (University of Washington): http://www.washington.edu/doit/Faculty/
- Working with College Students who have Psychological Disorders (Texas A&M University System Disability Training Network): http://dtn.tamu.edu/pdf/ts-psychdisorders.pdf
- Center for Psychiatric Rehabilitation: How-to Tips for Educators: http://cpr.bu.edu/resources/reasonable-accommodations/how-to-tips-for-educators
- National Alliance for the Mentally Ill (NAMI): http://www.nami.org/
- Fast Facts for Faculty: Invisible Disabilities in the University (The Ohio State University Partnership Grant): http://ada.osu.edu/resources/fastfacts/Invisible Disabilities.htm

# **Mobility Disabilities**





Many types of orthopedic or neuromuscular disabilities can impact mobility. These disabilities include but are not limited to amputation, paralysis, cerebral palsy, stroke, multiple sclerosis, muscular dystrophy, arthritis, and spinal cord injury. Mobility disabilities range from lower body disabilities, which may require use of canes, walkers, or wheelchairs, to upper body disabilities, which may include limited or no

use of the upper extremities and hands. Mobility disabilities can be permanent or temporary. (DO-IT 2004)

#### **Functional Limitations**

It is impossible to generalize about the functional abilities of students with mobility disabilities. Mobility disabilities may impact students' strength, speed, endurance, coordination, manual dexterity, range of motion, and control of limbs, in various ways and to varying degrees. Students may experience difficulties that include but are not limited to:

- Chronic fatigue or pain
- Difficulty maintaining stamina
- Difficulty walking, standing, lifting, or sitting for a long time
- Lateness to class or attendance
- Problems with physical access to, and movement in, classrooms and labs
- Difficulty manipulating objects, such as pages, pens, computers, and lab equipment.

#### **Accommodations**

Accommodation needs of students with mobility disabilities vary greatly by individual and academic activity. Examples of accommodations for students with mobility disabilities include:

- Accessible locations for classrooms, labs, and field trips
- Wide aisles and uncluttered work areas
- Adjustable-height and tilt tables
- Easily reachable equipment
- Note-takers, scribes, and lab assistants
- Assistance with group activities
- Extended time on exams and or alternative testing arrangements
- Assistive technology
- Course materials available in electronic format

# **Teaching Strategies**

- Be prepared to listen, and involve the student in finding a solution to his challenges in the course
- Understand that occasional lateness or absence may be unavoidable
- Plan appropriate seating to integrate students into the class; avoid relegating them to a doorway, a side aisle, or the back of the room
- Plan ahead for off-campus assignments and fieldwork as these may pose problems of access for the student
- Know the college's emergency evacuation plan, and assure that it is manageable for your students with mobility disabilities



#### - 1

- DO-IT Home: The Faculty Room (University of Washington): http://www.washington.edu/doit/Faculty/
- DO-IT Home: Mobility Impairments (University of Washington): http://www.washington.edu/doit/Stem/mobility.html
- Fast Facts for Faculty: Teaching Students with Medical/Mobility
   Disabilities (Ohio State University Partnership Grant):
   http://ada.osu.edu/resources/fastfacts/Medical\_Mobility\_Disabilities.htm

# **Visual Disability**

Visual disabilities vary greatly. Persons are considered legally blind when visual acuity is 20/200 or less in the better eye with the use of corrective lenses, or when they have a field of vision no greater than 20 degrees. Most students who are legally blind may have some vision. Others



who are partially sighted may rely on residual vision with the use of adaptive equipment. Students who are totally blind may have visual memory, depending on the age when vision was lost. Some blind students may need to use a service dog to assist them to get around campus. These dogs are specially trained and are allowed in classrooms and other academic settings.

#### **Functional Limitations**

Students with visual disabilities face the challenge of accessing information designed for a visual world delivered in visually oriented forms and systems. These can include printed materials and books, graphical computer interfaces, and online video. Other activities impacted by visual impairments include:

- Transportation and mobility
- Reading laboratory devices and taking measurements
- Reading signage and room numbers
- Reading print materials, textbooks, and computer-based information
- Comprehending mathematical symbols and concepts

#### **Accommodations**

Accommodation needs of students with visual disabilities vary greatly by individual and academic activity. Some common accommodations provided include:

- Preferential classroom seating
- Audio recording of lectures
- Note-takers, scribes, and lab assistants
- Sighted assistance with group activities
- Use of canes or service animals for mobility
- Alternate formats of printed materials and texts
- Assistive technologies such as screen enlarging or reading software
- Extended time on exams

# **Teaching Strategies**

- Provide reading lists or syllabi in advance to allow time for ordering electronic versions of textbooks and other reading materials or for scanning or brailing of texts
- Provide in advance a list of videos that will be used in class or assigned, to enable private viewing with a video describer
- Consult with the students and the disability services staff to identify effective adjustments for students with visual disabilities in web-based or hybrid courses
- Assist the student, in cooperation with the disability services staff, in finding readers, note-takers, or tutors, as necessary, or team the student with a sighted classmate or laboratory assistant
- Reserve front seats for low-vision students (if a guide dog is used, it will be highly disciplined and require little space)
- Face the class when speaking
- Convey in spoken words whatever you put on the board or project on a screen and any other visual cues or graphic materials you may use





- Permit lectures to be taped and/or provide copies of lecture notes, when appropriate
- Provide print documents in large fonts and/or provide electronic copies
- Be flexible with assignment deadlines
- Plan field trips and such special projects as internships well in advance, and alert field supervisors to whatever adaptations may be needed
- Consider an alternative assignment if a specific task is impossible for the student to carry out
- Consider alternative means of assessment, such as oral exams, audiotaped exams, large print paper, Braille embossed or tactile materials versions of exams, electronic formats of exams readable by screen reader and magnification software. Other adaptations suited to specific instructional situations may be appropriate in presenting diagrams or illustrations in certain subjects
- Additional useful tips and practices for faculty working with visually impaired students can be found here

- NYS Commission for the Blind and Visually Handicapped: http://ocfs.ny.gov/main/cbvh/faq.asp
- Adaptive Technology Center for New Jersey Colleges: http://adaptivetech.tcnj.edu/resheet/blind.htm
- American Foundation for the Blind (AFB): http://www.afb.org/ProdBrowseCatResults.asp?CatID=49 http://www.afb.org/ProdBrowseCatResults.asp?CatID=39
- Online resources for teaching the Blind: http://www.uni.edu/walsh/blindresources.html

# **Deaf and Hard of Hearing**





A hearing impairment is a condition involving the entire range or spectrum of hearing loss. Deafness refers to a severe hearing loss, and a person suffering from it may use sign language, speech reading, and other non-verbal means of communication. "Hard of hearing" refers to a less severe

condition of hearing loss. The main mode of communication for a person hard of hearing may be audio-verbal. Students who are deaf or hard of hearing tend to define themselves by their choice of communication. It is not uncommon however to encounter students who are hard of hearing using sign language or students who are deaf preferring oral communication. Signs of hearing loss include the following behaviors:

- Giving inappropriate responses
- Speaking in an unusually loud or soft voice
- Not hearing or responding when someone speaks from behind
- Appearing to pay attention but not actively participating in class discussions
- Asking for something to be repeated
- Responding with smiles and nods but no further comments
- Withdrawn, introverted, shy, or, conversely, demanding and frustrated behavior
- Immature or awkward social skills
- Broad range of communication systems, from exclusively manual sign language to exclusively spoken language and all variations inbetween

#### **Functional Limitations**

- Hearing loss ranging from mild to profound
- Relying on visual cues
- Miscommunications
- Limitation in effective hearing, speaking, reading, and writing communications

#### **Accommodations**

In order for their accommodation services to be fully effective, deaf and hard-of-hearing students require professors to be sensitive and responsive to their needs so that they can fully participate in the educational experience.

Individuals who are deaf and hard-of-hearing use a variety of devices, such as hearing aids and cochlear implants, and strategies, such as lip reading, to augment their aural and communication abilities. Offices of disability services provide accommodations such as:

- Such assistive listening devices (ALD), as infrared, FM, or audio loops
- Sign language/oral interpreters
- Captioning
- Note-takers
- Extended time on exams

# **Teaching Strategies**

- Be natural when working with a sign language interpreter.
- Allow the student to sit where he can most easily see you, the interpreter, and the board or screen simultaneously
- Be aware that the interpreter lags slightly behind the speaker and that any comment by the student is also a few minutes behind. It is important to give time for the student to catch up so that any question can be clarified before the topic has passed
- Provide copies of the syllabus, PowerPoint presentations, or other handouts for the interpreter, captionist, or note-taker in as far advance as possible

- 1
- Have all audio/visual media, such as movies, DVDs, video, visual/audio internet media, captioned or subtitled
- Remember that a student with a hearing loss cannot watch someone speak or sign while something is being demonstrated
- Talk and listen directly to the student, not to the sign language interpreter or listening device
- Lecture from the front of the room, and do not pace around.
- Do not obscure your face or mouth (e.g., with hands, mustache and/or beard, or a face covering)
- Do not speak while writing on the board
- Identify who is speaking during classroom group discussion
- Repeat or rephrase questions or comments from the class before responding
- Avoid incomplete sentences, colloquialisms, and slang
- Avoid prolonged pauses in your sentences
- Do not exaggerate the speed or enunciation of your speech as this distorts the lip patterns
- Repeat and then paraphrase if the student does not understand
- Provide a note-taker and/or copies of notes and transparencies, since most students who are deaf or hard of hearing cannot take notes while they are lip reading or watching an interpreter
- Limit the amount of background noise



- PEPNet2: The Americans with Disabilities Act (ADA):
   Responsibilities for Postsecondary Institutions Serving Deaf and
   Hard of Hearing Students: Questions and Answers Book—2nd
   edition: <a href="http://www.pepnet.org/resources/ADAQA2ndEdition">http://www.pepnet.org/resources/ADAQA2ndEdition</a>
- PepNet2 Tipsheets: http://www.pepnet.org/search/node/PEPNet Tipsheet
- Hearing Impairment (University of Calgary): http://www.ucalgary.ca/access/instructors/hearing
- Registry of Interpreters of the Deaf: http://rid.org/
- Center for Hearing and Communication: http://www.chchearing.org/
- National Association of the Deaf: http://nad.org/
- Hearing Loss Association of America: http://shhh.org/

# **Speech Disorders**

1

The term speech disorder refers to a number of conditions including articulation disorders, phonological disorders, apraxia of speech, fluency disorders, and voice disorders. Stuttering, or stammering, is the most common example of speech disorder, in which the flow of speech is interrupted by stops and repetitions or prolonging sounds and syllables. Many disorders can be treated by speech therapists, which can help identify specific problems in students' verbal skills and teach them ways to compensate.

### **Functional Limitations**

- Projection difficulties
- Chronic hoarseness and esophageal speech
- Fluency problems, as in stuttering and stammering
- Articulation of particular words or terms
- Anxiety and fear of speaking in public
- Self-confidence difficulties

#### **Accommodations**

- Electronic "speaking" machines or computerized voice synthesizer
- Course modifications, such as one-to-one presentations or written papers instead of verbal presentations
- Extended time on verbal presentations

# **Teaching Strategies**

- Give students the opportunity, but do not compel them, to speak in class
- Permit students the time they require to express themselves without unsolicited aid in filling in gaps in their speech
- Give enough time to students who speak slowly in class to express her thoughts
- Do not interrupt or complete a sentence for a student



- Ask the student to repeat what is said, if necessary (such a request **is** appropriate)
- Summarize what the student said to help him or her to check for accuracy of understanding
- Listen carefully to the student. Repeat what you think you understand and then ask the student to clarify or repeat the portion that you did not understand

- American Speech-Language-Hearing Association: http://www.asha.org/public/speech/disorders/
- National Dissemination Center for Children with Disabilities: http://nichcy.org/s-l-i-8-tips-for-teachers





# **Health Impairments**

A range of medical diagnoses and health problems can have a temporary or chronic impact on a student's academic performance. Common diagnoses include arthritis, cancer, multiple sclerosis, asthma, AIDS, diabetes and heart disease. Unless the condition is neurological in nature, health impairments are not likely to directly affect learning. But, the secondary effects of illness and the side effects of medications can have a significant impact on physical and mental abilities including memory, attention, strength, endurance, and energy levels (DO-IT: Faculty Room).

### **Functional Limitations**

- Difficulties attending classes full-time or on a daily basis
- Issues with physical skills needed to complete laboratory, computer, or writing assignments
- Inability to manipulate small laboratory equipment or complete tasks that require precise measuring, graphing, or drawing
- Problem with prolonged sitting
- Problem working with specific inhalants in a lab
- Fatigue and memory problems
- Lack of confidence in abilities to complete tasks

#### **Accommodations**

- Note-taker, copy of another student's notes, or audio recorders
- Extended time on exams
- Alternate location for testing
- Assignments made available in electronic format
- Use of email to facilitate communication
- Extended time on assignments and projects
- Class attendance flexibility, as long as the student completes the projects, exams, and homework
- Permission to withdraw late from classes without academic penalty

# **Teaching Strategies**

- Modify assignments only as needed
- Arrange room to accommodate student's equipment
- Consider alternatives for writing, such as marking or circling correct answers on worksheets
- Break tasks into small parts
- Assist with organization of materials and lessons
- Reduce the homework amount, taking into consideration the student's physical ability to complete it in a timely fashion
- Maintain a communication link with the office of disability staff and tutors to assure appropriate and coordinated instruction and accommodations
- Be flexible to accommodate the student's health-related needs

- Mangomon: Learning strategies for students with health impairments: http://www.mangomon.com/learning-strategies-forstudents-with-health-impairments/
- DO-IT Home: http://www.washington.edu/doit/Faculty/Strategies/Disability/Healt h/

# **Sample Syllabus Statements**

All instructors are encouraged to include in their syllabi a statement inviting students with disabilities to meet with them in a confidential environment to discuss making arrangements for accommodations. This statement both normalizes the accommodation process and help to create a positive and welcoming environment for students with disabilities. The statement also creates a collaborative model for determining and implementing legally mandated accommodations and serves as a reminder to students who need the accommodations that these arrangements need to be made. Below are a few recommended statements you may choose to use or you may consult your campus office of disability services for additional guidance.

<ol> <li>Any student who</li> </ol>	o feels that he may ne	ed an accommo	dation based	
upon the impact of	f a disability should co	ontact me privat	ely to discuss	his
specific needs. If y	ou think you need su	ch an accommo	dation and hav	e a
	ility, please contact th			
	room, or	call	_to coordinate	;
reasonable accomr	nodations.			
II. It is college pol	icy to provide reasona	able accommod	ations to stude	nts
with disabilities. A	any student with a disa	ability who may	need	
accommodations in this class is advised to speak directly to,				
located in	, or call	as early in th	e semester as	
possible. All discu	ssions will remain co	nfidential.		
III. Students with o	disabilities who believ	e that they may	need	
accommodations is	n this class are encour	raged to contact	: <u></u>	_
located in room	, or call	as soon	as possible to	
ensure that such ac	ecommodations are in	nplemented in a	timely fashion	1.
IV. All students w	ith disabilities and me	edical condition	s are encourage	ed
	e Office of		•	
	or information and ar			ce
	ocated in Room			
VP (video phone).				

# **Disability Etiquette**

Seemingly insignificant details of behavior and language can be disconcerting to some students with disabilities, as they often imply inaccurate assumptions. We hope the following information is useful in your interactions with students with disabilities.

# Meeting Students in Wheelchairs

- Do shake a person's hand.
- Don't lean on the wheelchair
- Avoid stiff necks! Try to get at a wheelchair user's eye level, which means you might need to kneel down or sit down
- Do offer assistance, wait until it is accepted, and provide the help in the way the person asks you to. And don't be offended by a refusal
- Students with disabilities are independent adults who are used to doing things for themselves



- Don't worry about making mistakes; just ask if you need information or clarification
- Talk to the person with disabilities, not to their assistants

# Meeting Students with Hearing or Speech Impairment

- Repeat or rephrase questions/comments from the class before responding
- Face the class and speak naturally, at a moderate pace
- Avoid the temptation to pick up the pace when time is short
- Do not speak while writing on the board
- Lecture from the front of the room, not pacing around
- Point out who is speaking during group discussions
- Do not drink or chew gum while lecturing



- Do not stand or sit in front of a window where shadows might impede speech/lip reading
- Discuss privately any concerns about the student's ability to hear
- Provide classroom services (e.g., write announcements, assignments proper names, technical vocabulary, formulas, and unfamiliar/foreign names on the board)
- Always use captioned films/videos or provide a written manuscript.
- Arrange for the deaf/hard-of-hearing student to have a written copy of any orally administered test
- Don't shout at deaf or hard-of-hearing students; do position yourself in their vision, and attract their attention with a light touch or a wave if necessary
- Be aware that deaf students may regard American Sign Language (which has a unique grammatical structure) as their first language, not English
- Be patient with students with speech impairment; don't correct them and don't finish their sentences. If you don't understand, don't pretend that you do. Ask them to repeat what they have said if necessary, and tell them what you have understood so far

# **Meeting Students with Visual Impairments**

- Tell a visually impaired person who you are and introduce other students who are there, saying where they are in the space in reference to the individual
- Don't grab a person to guide them; let the student take your arm.
   Do ask the student if they wish to be warned about steps, doors, and other obstacles
- Do say clearly where the visually impaired student's seat is, or place their hand on back or arm of the chair
- You may use a common saying like "see you tomorrow" with a visually impaired person
- Remember that a visually impaired person may miss out on a
  gesture or facial expression and so appear to respond
  inappropriately; it may seem that the person does not get a joke, for
  example, when in fact it was not properly communicated to them

# **Organizing Events**

- Advertise the accessibility of the venue
- Consider physical access and space, including seating and space for wheelchair users. Is there room for them to maneuver?
- Engage a sign-language interpreter and determine the seating arrangement to augment signing
- Produce literature in forms other than standard print e.g., large print, Braille, and electronic format
- Ask persons fielding questions from the audience to repeat the question so that everybody has heard and the sign language interpreter may interpret the question

# **Working with Assistants**

- Always direct your question to the student and not the assistant
- Be aware that students with disabilities employ, schedule, and manage personal assistants to provide them with a service. These individuals are employees of the student, not the student's friends
- Do look at the student when she is speaking to you, even if she is using an interpreter
- Be aware that personal assistants, note-takers, and interpreters, though they don't participate in the class, may sometimes inadvertently make comments or respond to questions. Take this participation good-naturedly, and continue to include the student with the disability in the class
- Remember that note-takers are in the class only to take notes for the student when the student is present in the class. A note-taker is not a substitute for a student. If a student is not present in the class, the note-taker will not take notes and will leave after 10-15 minutes
- Be aware that all support workers, including dogs, will need somewhere to sit and may need to go to the restroom or take a break
- Do not touch, water, or feed guide or support dogs; they are working. These dogs are **not** pet
- Show awareness that the work sign language interpreters do is very intense and requires focus and concentration. Any class more than an hour in length therefore will require two sign language interpreters to be present

• Don't make assumptions; remember that anybody may have a hidden impairment or a medical condition such as diabetes, asthma, emotional disability, or sickle cell anemia, to name a few

# Always:

• Treat students as individuals and put the emphasis on the person, not her disabilities (the principle of "person with a disability" instead of "a disabled person")

# Finally:

• When in doubt, don't hesitate to ask your students about their needs or what may be helpful to them. They are the experts!



# **Emergency Procedures**

During an emergency, faculty behavior is likely to influence student responses. Faculty who have a ready plan of action may be better prepared to handle an emergency in a calm and efficient manner. While this preparedness is important for the welfare of all the students in the class, it is essential for the student with disabilities in the classroom who may need extra help in dealing with the emergency. Instructors are not responsible for determining a student's disability status, but in the event of an emergency, classroom instructors are expected to provide adequate assistance to students who self-identify as having a disability and are in need of assistance.

# **Building Evacuations**

Techniques for evacuating students with disabilities vary with the nature of each student's disability. In general:

- Always ask the student how you can help before giving emergency evacuation assistance. Ask how he or she can best be assisted or moved, and if there are any special considerations or personal items or equipment that need to be taken.
- Do not use elevators unless authorized by FDNY personnel.
- Have a class roster and a working cell phone with emergency numbers available

# **Students with Mobility Impairments**

Students with mobility impairments have varying degrees of limitations. Some may be ambulatory and others may not. Some students who customarily use a wheelchair or scooter for long distance travel may be able to walk independently in an emergency.

• Encourage students with mobility impairments who are ambulatory to exit the building on their own, where possible. Designate someone to walk beside the students to provide assistance as needed. It is advisable that students wait until the heavy traffic has cleared before attempting to evacuate. It also may be necessary to help clear their exit route of obstructions and/or debris.

- 1
- Direct those students who cannot evacuate to an emergency rescue area and instruct them to remain there until emergency rescue personnel arrive. Alert emergency personnel of the students' location and need for evacuation.
- Do not attempt a rescue evacuation unless you had rescue training or the person is in immediate danger and cannot wait for professional assistance.

#### Students Who Are Blind or Have Low Vision

Students who are blind or have low vision should already be familiar with their surroundings after mobility and orientation training. They may not, however, be aware of emergency exits.

- Alert students who are blind or have low vision to the nature of the situation. Offer assistance and guide the student to the nearest emergency exit and away from the building to safety.
- Be aware that, depending upon the nature of the emergency, there
  may be a lot of commotion and noise. Students who are blind may
  not be able to orient themselves as well as in calmer times. Your
  assistance is critical to their safety.
- Use what is known as the sighted guide technique by offering a person who is blind or has low vision your elbow. The person holds on to your elbow, and you proceed ahead.
- Alert the student, as you walk, to where he is and inform him of any obstacles, debris, doorways, or narrow passages.
- Orient the student, once you are safe, to his or her surroundings and determine if further assistance is needed.

# Students Who Are Deaf or Hard of Hearing

Students who are deaf or hard of hearing may not hear alarms or other audible warnings. Instructors should inform such students of an emergency. There are three ways to get these students' attention:

- Write a note for the student alerting her or him to the emergency and instructing her or him where to go.
- Turn the light switch off and on to gain attention.
- Tap his shoulder.

In most instances, an interpreter/transcriber will be in the classroom to explain the emergency to the student. Provide any assistance a student might need during the evacuation process.

Faculty may encounter other types of emergencies in the classroom involving students with disabilities. There may be various instances in which faculty are expected to provide leadership. Two examples are addressed below.

# Student Having a Seizure

Most persons who have a seizure disorder are able to control their seizures through the use of medication; medical management of a seizure disorder is not however always totally effective. Students with an active seizure disorder will likely speak to you about their seizures and direct you how to respond if a seizure occurs.

### In the Event of a Grand Mal Seizure:

- Prevent injury by clearing the area around the person of anything hard or sharp
- Keep objects away from the individual's mouth
- Ease the student to the floor and cushion his head with an available sweater, sweatshirt, coat, etc.
- Remove the student's eyeglasses and loosen ties or anything around the neck that may make breathing difficult
- Turn the individual on his side. This will help keep the airway clear.
- Do not restrain an individual having a seizure
- Stay with the student until the seizure ends naturally and he is fully awake
- Do not offer the person water or food until he is fully alert
- Be friendly and reassuring as consciousness returns
- Alert Public Safety or EMT on campus

In the event of an "Absence Seizure" (also referred as Petit Mal) in which the individual appears as blankly staring, with loss of awareness and/or involuntary blinking, chewing, or other facial movements:

Stay calm and speak reassuringly.



- Guide the student away from dangers
- Block access to hazards, but do not restrain the student
- Stay a distance away, if the student is agitated, but close enough to protect the student until full awareness has returned.

# **Elevator Breakdowns and Repair**

- Elevator breakdowns are a relatively common occurrence and can be extremely inconvenient or even life-threatening to a person who uses a wheelchair. When an elevator ceases to operate, contact the college's Office of Public Safety. Be prepared to give Public Safety the details of the emergency situation, which is especially important in cases where time is of the essence.
- If there is a breakdown of the main elevator, assist the student in finding and using an alternate elevator, if one is available.
- If you become aware of long-term elevator repair issues that will
  negatively impact access for a student with disabilities in your class,
  contact the office of disability services about getting the class
  changed to another site.
- For further information and assistance please contact the college office of disability services.

- CDC First Aid for Seizures: http://www.cdc.gov/epilepsy/basics/first\_aid.htm
- Disability Services (Ohio State University): http://ods.osu.edu/faculty/instructor-handbook-teaching-studentswith-disabilities/



# **Additional Disability-Related Terminology**

The definitions used in this document are some of the commonly used disability-related terms and may have various definitions depending on their context. For additional terms, please see the Do-It Glossary from which terms are taken or adapted:

http://www.washington.edu/doit/Brochures/Programs/glossary.html

**Accessible:** Descriptor of a site, facility, service, program, or activity that is easy for a person with a disability to approach, enter, operate, participate in, and/or use safely and with dignity, with or without accommodations or auxiliary aids.

**Accommodations:** An alteration of environment, curriculum format, or equipment that allows an individual with a disability to gain access to content and/or complete assigned tasks. Accommodations allow students with disabilities to pursue a regular course of study. They do not alter what is being taught; instructors should be able to implement the same grading scale for students with disabilities as they do for students without disabilities.

Americans with Disabilities Act (ADA) and the Americans with Disabilities Amendment Act (ADAAA) of 2008: A comprehensive federal law that gives civil rights protection to individuals with disabilities similar to that provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for and prohibits discrimination against individuals with disabilities in employment, state and local government services and activities, public accommodations, transportation, and telecommunications.

**Assessment:** A broad term used to describe the tests or other strategies used to measure ability, achievement, or mastery in a particular area against a set of standards or against others' performance. Assessment also refers to the data and information gathered to ascertain a student's disability and to recommend accommodations and services.

**Assistive Technology:** Technology used by individuals with disabilities in order to perform functions that might otherwise be difficult or impossible. Assistive technology can include mobility devices such as



walkers and wheelchairs, as well as hardware, software, and peripherals that assist students with disabilities in accessing computers or other information technologies.

**Auxiliary Aids and Services**: A wide range of services and devices that must be provided to individuals with disabilities so that they can have an equal opportunity to participate in or benefit from an institution's programs and services, unless an undue burden on a program or service would result.

[Central] Auditory Processing Disorder ([C] APD): A neurological syndrome that affects how the brain processes spoken language. There is a breakdown in receiving, remembering, understanding, and using auditory information, making it difficult for the student to process verbal instructions or to filter out background noise in the classroom.

**Decoding:** The ability to translate a word from print to speech, usually by employing knowledge of sound-symbol correspondences. It is also the act of deciphering a new word by sounding it out.

**Disability**: A physical or mental impairment that substantially limits one or more of the major life activities of an individual as compared to most students in the general population, a record of such an impairment, or being regarded as having such an impairment.

**Dyscalculia:** Difficulty understanding and using math symbols and concepts.

**Dysgraphia:** Difficulty with the physical task of forming letters and words using a pen and paper and difficulty producing legible handwriting.

**Dyslexia:** Difficulty decoding or processing words and/or numbers. It may also be referred to as reading disability, reading difference, or reading disorder.

**Dysnomia:** A marked difficulty in remembering names or recalling words needed for oral or written language.

**Dyspraxia:** A developmental impairment of, or difficulties with, the organization, planning, and execution of physical movement.



**Expressive Language:** The aspect of spoken language that includes speaking and the aspect of written language that includes composing or writing.

Family Educational Right to Privacy Act (FERPA): A federal law that protects the privacy of student education records. The rights of parents with respect to their children's education records at elementary and secondary school levels are transferred to the student when they reach the age of 18 or attends a postsecondary institution at any age.

**Impairment:** An injury, illness, or congenital condition that causes or is likely to cause a loss or difference of physiological or psychological function.

**Nonverbal Learning Disability:** A neurological disorder that is characterized by below-average motor coordination, visual-spatial organization, and social skills against a background of relatively intact verbal abilities.

**Qualified Individual with Disability** - At the postsecondary educational level, a qualified student with a disability is an individual who, with or without reasonable accommodation, meets the academic and technical standards required for participation in the class, program, or activity. The standards for a student with a disability are the same as those for all students entering the program or activity.

**Reading Disability:** Another term for Dyslexia, sometimes referred to as reading disorder or reading difference.

Reasonable vs. Unreasonable Accommodations: Reasonable accommodations are modifications to academic requirements that are necessary to ensure that such requirements do not discriminate, or have the effect of discriminating, on the basis of disability against a qualified applicant or student with a disability. Accommodations are not considered reasonable if making the accommodation or allowing participation poses a direct threat to the health or safety of others, requires a substantial change in an essential element of the curriculum, and/or imposes an undue financial or administrative burden.

**Self-advocacy:** The development of specific skills that enable students to take a proactive role in the management of their college experience. Self-



advocacy has been linked to improving student persistence and to retention in postsecondary education.

Temporary Impairment vs. Disability - The ADA states that "impairments that are transitory and minor" are not given protection under the act; a transitory impairment is defined as impairment with an "actual or expected duration of 6 months or less." Temporary, non-chronic impairments, such as common colds, influenza, and most broken bones and sprains, that are short-lived and that have little or no long term impact on functionality usually are not disabilities. However, a temporary condition that substantially limits a major life activity, such as temporary paralysis, may be considered a temporary disability. The determination as to the status of an impairment is made on a case-by-case basis. CUNY policy treats pregnancy, childbirth, false pregnancy, termination of pregnancy, or recovery therefrom as a temporary disability, which is subject to civil rights protection.

Universal Design for Learning (UDL), also known as Universal Design for Instruction (UDI): A set of principles for the design of class curricula that give all students equal opportunities to learn. UDL takes account of the potential broad ranges among students with respect to ability, disability, age, reading level, learning style, native language, race, ethnicity, and other characteristics.

Visible vs. Invisible Disability: A visual disability is a disability that is readily noticeable to others. Visible disabilities include, but are not limited to, amputations, paralysis, lack of physical coordination, or other mobility impairment; speech impediments; vision impairments; and some cognitive impairment. Visible disabilities are what most people think of when they think of disabilities. Invisible or hidden disabilities are not easily noticed and may include such examples as learning disabilities, ADD/ADHD, Autism Spectrum Disorders, psychiatric impairments, hearing impairments, low vision, and chronic medical conditions. Individuals with invisible disabilities constantly make decisions about whether to disclose their disability or to "pass" as non-disabled.

- Job Accommodation Network (JAN): http://askjan.org/links/adaglossary.htm
- National Aphasia Association: http://www.aphasia.org/
- DO-IT Project (University of Washington): http://www.washington.edu/doit/
- Center for Applied Special Technology (CAST): http://cast.org/udl/index.html
- LD online: http://www.ldonline.org/index.php
- American Psychological Association (APA): http://www.apa.org/pi/disability/dart/toolkit-three.aspx

# **Additional Resources**

Jane E. Jarrow, *Title by Title: The ADA's Impact on Postsecondary Education* (Columbus, Ohio: Association on Higher Education and Disability (AHEAD), 1992)

Katherine Garnett and Sandra LaPorta, *Dispelling the Myths: College Students and Learning Disabilities* (New York: Hunter College/CUNY, 1984)

Higher Education and the Handicapped (HEATH) Resource Center, *Factsheets* (Washington, D.C., The National Clearinghouse Postsecondary Education for the Handicapped, American Council on Education)

Phillip S. Jastram and Guy C. McCombs III, *Access for Handicapped Students to Higher Education* (Washington, D.C.: United States Department of Education, 1985)

Office of Civil Rights, USDOE, *Handicapped Persons' Rights under Federal Law* (Washington, D.C.: OCR, USDOE, January 1987)

Lynn Smith, *The College Student With a Disability: A Faculty Guide* (Washington, D.C.: The President's Committee on Employment of the Handicapped, 1980)

Digby Tantam, *Clinical Topics in Psychotherapy*, (Gaskell Press, ed. 1998)

Digby Tantam, *Psychotherapy and Counseling in Practice*, (Cambridge University Press, 2002)

# **Acknowledgments**

1

This Guide has been researched and prepared by the Reasonable Accommodations Subcommittee:

- Tony Allicino, LaGuardia Community College
- Mirian Detres-Hickey, Queens College
- Carlos Herrera, Queensborough Community College
- Sudi Shayesteh, Hunter College, Subcommittee Chair
- Stella Woodroffe, Kingsborough Community College

Special thanks to the Division of Student Affairs, the following offices and their staff at Hunter College:

- Office of AccessABILITY
- Office of Graphic & Web Design, Li Gardiner, for design and production, and for editorial assistance to Estelle Malmed and Kristin Brophy
- The Reading/Writing Center, Dennis Paoli, Coordinator and English Department Instructor

# Also special thanks to:

 CUNY Assistive Technology Services (CATS) for their assistance in making this guide accessible

# **COSDI Directory**



### • BARUCH COLLEGE

# **Disability Services**

55th Street and Lexington, Room 2-271, Box B2-271, New York NY 10010

646.312.4590 | Fax: 646.312.4591

www.baruch.cuny.edu/studentaffairs/ossd/disabilityServices.htm

# • BOROUGH OF MANHATTAN COMMUNITY COLLEGE

Office of Accessibility

199 Chambers Street, N-360, New York, NY 10007

212.220.8182 / Fax: 212.220.1264

www.bmcc.cuny.edu/accessibility/index.jsp

### • BRONX COMMUNITY COLLEGE

**Student Affairs** 

Loew Hall, Rooms 211, 213, 215, 217

2155 University Avenue, Bronx, NY 10453

718.289.5880 / Fax: 718.289.6347

http://www.bcc.cuny.edu/Disability-Services/

### • BROOKLYN COLLEGE

Center for Student Disability Services

138 Roosevelt Hall, 2900 Bedford Ave., Brooklyn, NY 11210

718.951.5538 / Fax: 718.951.4442

http://www.brooklyn.cuny.edu/web/about/offices/disability.php

#### COLLEGE OF STATEN ISLAND

Center for Student Accessibility

2800 Victory Blvd., Staten Island, NY 10314

718.982.2510 / Fax: 718.982.2117

http://www.csi.cuny.edu/csa/

#### CUNY CENTRAL OFFICE

# Student Affairs

555 West 57th Street, Suite 1401, New York, NY 10019

646.664.8800 / Fax: 646.664.8861 http://www.cuny.edu/index.html

#### CITY COLLEGE

# AccessAbility Center

North Academic Complex, Room 1/218, Convent Ave. at 138th St, New York, NY 10031

212.650.5913 | Fax: 212.650.5722 | TTY: 212.650.6910 http://www.ccny.cuny.edu/accessability/index.cfm

#### CUNY GRADUATE CENTER

Student Affairs Disability Services; Office of the VP

365 Fifth Avenue, Suite 7301, New York, NY 10016 212.817.7413/7400 | Fax: 212.817.1621

http://www.gc.cuny.edu/Prospective-Current-Students/Student-Life/Resources

## • CUNY School of Professional Studies

# Office of Accessibility

119 W. 31st Street, 4th Floor, New York, NY

646.664.8616 | Fax: 646.664.8728

http://sps.cuny.edu/student\_services/disabilityservices.html

### • CUNY LAW SCHOOL

# **Disability Services**

2 Court Square, Room 5-115 Long Island City, NY 11101

718.340.4380 | Fax: 718.340.4372

http://www.law.cuny.edu/students/disabilities.html

#### HOSTOS COMMUNITY COLLEGE

# Accessibility Resource Center

500 Grand Concourse, Savoy Building, Room D101-L, Bronx, NY 10451 (149th Street at Walton Ave.)

718.518.4454 | Fax: 718.518.4433

http://www.hostos.cuny.edu/Administrative-Offices/Accessibility-

Resource-Center-(ARC)

#### • HUNTER COLLEGE

# Office of AccessAbility

695 Park Avenue, Room 1214 East Building, New York, NY 10065

212.772.4857 | Fax: 212.650.3449 | VP: 646.755.3129 http://www.hunter.cuny.edu/studentservices/access

# • JOHN JAY COLLEGE OF CRIMINAL JUSTICE

# Office of Accessibility Services

524 West 59th Street, Suite L66, New York, NY 10019

212.237.8031 | Fax: 212.237.8144 http://www.jjay.cuny.edu/2023.php

#### • KINGSBOROUGH COMMUNITY COLLEGE

## **Access-Ability Services**

2001 Oriental Blvd, Room D-205, Brooklyn, NY 11235

718.368.5175 | Fax: 718.368.4782 | by text: 347.766.6227

http://www.kbcc.cuny.edu/access-ability/Pages/welcome.aspx

### • LAGUARDIA COMMUNITY COLLEGE

### Office for Student Services and Disabled Students Program

31-10 Thomson Ave., Shenker Hall, Rm 102,

Long Island City, NY 11101-3071

718.482.5260 | Fax: 718.482.6055 http://www.lagcc.cuny.edu/osd/

# Program for Deaf Adults

29-10 Thomson Avenue, Long Island City, NY 11101

718.482.5324 | VP: 917.832.1207 | Fax: 718.609.2069

http://laguardia.edu/pda/adss/IS\_for\_Academic\_Students.aspx

### • LEHMAN COLLEGE

Student Disability Services

250 Bedford Park Blvd. West, (Goulden Ave. by gate #4)

Shuster Hall Room 238, Bronx, NY 10468

718.960.8441 | Fax: 718.960.7489

http://www.lehman.edu/student-disability-services/index.php

#### MEDGAR EVERS COLLEGE

Services for the Differently-Abled

1650 Bedford Ave., room B1024, Brooklyn, NY 11225

718.270.5027 | Fax: 718.270.5003

http://www.mec.cuny.edu/Division-of-Student-Affairs/osda/OSDA-



## • NEW YORK CITY COLLEGE OF TECHNOLOGY Student Support Services

300 Jay Street, Room A-237, Brooklyn, NY 11201 718.260.5143 | Fax: 718.254.8539 | TTY: 718.260.5443 http://www.citytech.cuny.edu/students/supportservices/

## • QUEENS COLLEGE

Office of Special Services

65-30 Kissena Blvd. Frese Hall 111, Flushing NY 11367 718.997.5870 | Fax: 718.997.5895 http://sl.qc.cuny.edu/oss/

#### QUEENSBOROUGH COMMUNITY COLLEGE

Services for Students with Disabilities

222-05 56 Avenue, Room S-132, Bayside NY 11364

718.631.6257 | Fax: 718.281.5733

http://www.qcc.cuny.edu/ssd/

**CUNY Assistive Technology Services** 

718.281.5014

http://catsweb.cuny.edu

# • STELLA AND CHARLES GUTTMAN COMMUNITY COLLEGE

Wellness/AccessABILITY Services

50 W. 40th Street, New York, NY 10018 646.313.8162

http://guttman.cuny.edu/students/health-wellness-1.html

#### YORK COLLEGE

The Center for Students with Disabilities

94-20 Guy R Brewer Blvd., Room 1G02, Jamaica NY 11451

718.262.2191 | Fax: 718.262.2364

https://www.york.cuny.edu/student-development/star



# **CUNY Council on Student Disability Issues (COSDI)**

City University of New York Central Office of Student Affairs 555 West 57<sup>th</sup> Street, Suite 1401 New York, NY. 10019