

Faculty Handbook

Services for Students with Disabilities

Academic Year 2014-15



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Table of Contents

I. The Purpose of this Handbook.....	3
II. Critical Ways Faculty Can Support All Students with Disabilities.....	3
III. Students who are Blind or Visually Impaired	7
Services for Students with Visual impairments.....	10
IV. Students with Mobility Impairments	13
Academic Considerations	14
General Considerations	15
Services for Students with Mobility Impairments.....	15
Testing Accommodations	16
V. Students who are Deaf or Hard of Hearing.....	18
Services for Students who are Deaf or Hard of Hearing	21
VI. Students with Learning Disabilities	23
Characteristics of Common Learning Disabilities	23
Services for Students with Learning Disabilities.....	26
VII. Students with Speech Impairments	29
VIII. Students with Mental Health Conditions.....	30
Popular Misconceptions about People with Mental Health Conditions.....	31
IX. Other Disabilities	32
X. Recommendations for All Courses	35

I. The Purpose of this Handbook

Federal legislation mandates that the University provide reasonable accommodations that afford equal opportunity for all students. Achieving reasonable accommodations for students with disabilities involves shared responsibility between the students, faculty, and staff. This faculty handbook is designed to serve (1) as an introductory overview of disabilities that affect learning in a college or university setting and (2) as a quick reference for the various adjustments that can be made to accommodate students with disabilities.

It is important to note that each student with a disability will have a different level of functioning even within the same disability category. Compensation skills will also vary from one student to another and in the same student across time. Consequently, while the information presented in this handbook can be used as a general guide, specific knowledge of a student's needs should come to you via a letter prepared by the Services for Students with Disabilities (SSD) office and discussed with you by the student.

II. Critical Ways Faculty Can Support All Students with Disabilities

When students with disabilities are admitted to the University, they have met the same rigorous standards for admission as all other students, i.e., their high school grade point averages and college entrance exams scores are high. Faculty can support the continued success of students with disabilities by implementing certain practices described below, in sections that refer to students with specific disabilities (found later in this handbook) and in the quick reference list of Recommendations for All Courses (located at the end of this handbook).

Syllabus Statement

It is important that faculty include in each syllabus a statement asking students to inform them of any special needs to ensure that those needs are met in a timely manner. A further recommendation is that the statement be read aloud by the faculty member during the first week of class. This approach demonstrates to students that you are someone who is sensitive to and concerned about meeting the needs of ALL students you teach. Furthermore, it affords students the opportunity to make their accommodation needs known to you early in the semester. The following is an example, approved by SACUA, of a statement that can be included in your syllabus:

Accommodations for Students with Disabilities

If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way the course is usually taught may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities (SSD) to help us determine appropriate academic accommodations. SSD (734-763-3000; <http://ssd.umich.edu>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated as such.

This is another example that may be used.

Disability Statement:

The University of Michigan is committed to providing equal opportunity for participation in all programs, services and activities. Request for accommodations by persons with disabilities may be made by contacting the Services for Students with Disabilities (SSD) Office located at G 664 Haven Hall. The SSD phone number is [734-763-3000](tel:734-763-3000). Once your eligibility for an accommodation has been determined you will be issued a verified individual services accommodation (VISA) form. Please present this form to me at the beginning of the term, or at least two weeks prior to the need for the accommodation (test, project, etc.).

Confidentiality

It is essential that disability information be kept confidential. At no time should the class be informed that a student has a disability except at the student's request. All information that a student gives to the faculty member is to be used specifically for arranging reasonable accommodations for the course of study. We recommend that students bring letters verifying their disabilities to faculty during office hours or by special appointment. At that time, arrangement of accommodations can be discussed in private.

Attendance Flexibility

Faculty teaching at most colleges and universities consider attendance and participation mandatory. While the Americans with Disabilities Act (ADA) clearly stipulates academic accommodations and adjustments must not alter essential features or requirements of courses, it also protects students with disabilities from discrimination.

Please refer to the guidelines below from the Office of Civil Rights decision regarding Cabrillo Community College, Case No. 09-96-2150 (OCR Region IX 1996) in determining whether attendance is an essential aspect of a course:

1. Is there classroom interaction between the instructor and students, and among students? Do student contributions constitute a significant component of the learning process? Does the fundamental nature of the course rely upon student participation as an essential method for learning?
 - a. To what degree does a student's failure to attend constitute a significant loss to the educational experience of other students in the class?
 - b. What do the course description and syllabus say?
 - c. Which method is used to calculate the final grade?
 - d. And what are the classroom practices and policies regarding attendance?
2. After these factors have been examined, a reasoned judgment should be made about whether a waiver of the course attendance requirement would be acceptable.
3. Pay attention to possible claims of differential treatment. Occasionally, a professor has a strict attendance policy on paper but has modified it for others. It is important to consider any exceptions you may have made; either to your own policy or that of the program/school, especially for nondisabled students (athletes, death in the family, unplanned surgery, flu outbreak, etc...)
4. Regardless of the outcome, the deliberative process should be well documented, so that others who were not involved in the process can understand the alternatives considered

and the reasons for the final decision.

Source: http://www.etown.edu/offices/disability/Attendance_flexibility.aspx

Textbooks, Course packs, Syllabi, and Videos

Please make your book selections, compiled course packs and syllabi available in a timely manner. Students who are blind or visually impaired or have learning disabilities affecting their reading rates and comprehension require printed materials that are transformed into alternate formats. Conversion of text into a spoken format or Braille can be a time consuming process, taking as much as six months to complete. Your syllabus is required to determine the extent to which each text will be used and the order in which reading assignments will be completed.

Some students will rely on having printed material scanned and saved in computer format that can be listened to using voice output software. If you are collating various journal articles and portions of books into course pack please use original copies or copy that is as clean as possible. Creating course packs using second, third and fourth generation copies of material (copies made from copies, etc.) may cause images of text that are fuzzy. Such blurring often makes it impossible for character recognition software to decipher images as readable text. If material included in course packs is not all of top quality SSD would appreciate being able to briefly borrow your originals for scanning.

If you wish to be very supportive you may ask if the publishers of the books you are considering if they have created electronic text (e-text) and/or audiotape versions of them. Michigan, along with other states, is in the process of adopting legislation requiring book publishers to automatically create alternative format versions for all books they market. If possible, select a textbook with an accompanying study guide to maximize comprehension for all students.

In addition, using captioned versions of videos is extremely helpful for students who are deaf or hard of hearing and students who have other auditory processing difficulties. Although some videos used in classes are already captioned, others are not. In most cases, you will be contacted by a specialist in the office of Service for Students with Disabilities (SSD) before a semester begins or early in the semester, if there is a deaf or hard of hearing student in one of your classes who needs captioning. However if you are aware that you will be using videos in a class with an enrolled deaf or hard of hearing student, please contact SSD to discuss how captioning can be created for you. Be aware that to create such captioning, SSD requires a minimum turn-around time of two weeks from the receipt of a video. So your forethought, prompt action, and cooperation are greatly appreciated. Please provide us with a transcript if one is available. Creating captioning from a transcript simplifies the process and may shorten turn-around time. When requesting audio-visual equipment, make sure you request equipment with a captioning decoder.

How to Refer to People with Disabilities

The following are some suggestions for communication that can make both you and a student with disabilities more comfortable:

- A person with a disability is first and foremost a PERSON with many unique qualities, only one of which may be compromised in particular settings.
- Second, avoid references, phrases, and words that suggest restrictions, limitations, or boundaries because these phrases tend to carry stereotypes and contribute to discriminating attitudes. Even if a person with disabilities refers to him or herself in particular ways, using phrases like “confined to a wheelchair” reflect poor judgment on the part of the speaker or writer. If you feel awkward in how to refer to a person with

disabilities, your best bet may be to ask the person.

Receiving a Request for Accommodations

Procedurally, formal requests for accommodations will come to you in a Verified Individualized Services and Accommodations Form (VISA form) authorized by SSD. The accommodations recommended in these forms are not meant to give students with disabilities an unfair advantage, but rather to give them an opportunity to demonstrate mastery of course content. Although a student may request an academic adjustment at any time, the student should request it as early as possible. Some academic adjustments may take more time to provide than others. The student should follow established procedures to ensure that the University has enough time to review the request and provide an appropriate academic adjustment. Also, SSD does not ask that instructors modify essential course requirements for the sake of the student. Any faculty member considering denying an accommodation because it modifies an essential course requirement should consult with SSD or the ADA Coordinator. If you have any questions or concerns regarding the VISA form, please contact the authorizing staff person whose name appears on the VISA form.

Special Testing Accommodations

Some accommodations described in VISA forms relate to test taking. Time-and-one-half for testing is the usual accommodation given to students who, for disability related reasons, work slowly and require additional time to complete tests. A few students may also need to take tests in a room with limited distractions or with no other students present. For example, a student may need to read test questions aloud, and this would be disturbing to other test-takers. Still other students may request the use of a laptop computer or adaptive computer technology for taking essay exams.

When special test accommodations are needed, it is in everyone's best interest if the proctor is either one of the teaching assistants for the course, the professor, or another member of the academic department. This practice allows students to address any problems or questions they may have to someone with knowledge of course content and departmental procedures. Reading test questions aloud to the student or writing the student's dictated answers is not usually recommended; using a tape recorder or other independent means is preferred by most students.

LSA Testing Accommodation Center (TAC)

The LSA Testing Accommodation Center (TAC) serves the College by providing reasonable testing accommodations to students with verified disabilities who are enrolled in LSA courses. By creating an appropriate space for completing exams, the Testing Accommodation Center aims to make education accessible for students with verified disabilities. TAC's mission is to serve both students and instructors through a well-defined process that ensures confidentiality and test security. For more information contact:

Test Accommodation Center
B129 Modern Languages Building (MLB)
812 East Washington
Ann Arbor, MI 48109-1275
Phone: (734) 763-1334
Fax: (734) 763-1365
E-mail: lsa.testcenter@umich.edu
www.lsa.umich.edu/facstaff/saa/tac

Making a Referral to Services for Students with Disabilities (SSD)

Faculty members sometimes contact SSD regarding students they feel might need to avail themselves of services offered by our office. Although teachers in high school are active participants in the process of identifying and referring students to special services, there is no comparable requirement in higher education. If you see a student who is struggling and wish to refer that student to SSD or to Counseling and Psychological Services (CAPS) (734) 764-8312, remember that our students are adults. They may respond best to private conversations in which you use an inquiring and supportive approach and share information about the existence and location of the SSD office. Only the student can decide to disclose his or her disability, or to pursue information about services available in the SSD office. If a student is requesting accommodations but has not presented you with a VISA form from our office, you may ask the student to contact SSD.

III. Students who are Blind or Visually Impaired

A major challenge facing students who are blind or visually impaired at universities is the overwhelming mass of printed material with which they are confronted - syllabi, course packs, books, time schedules, bibliographies, campus newspapers, posters, tests, etc. The increasing use of films, videotapes, overhead projectors, and closed-circuit television adds to the volume of visual material they must access in an alternative way. Therefore, students with visual impairments must plan their schedules well in advance of each semester to assure that support services are in place when classes begin. Such services may include textbooks converted to audiotope or electronic format, special equipment, or readers.

Reading Methods

By the time students who are blind or visually impaired reach college (unless newly blind), they have probably developed various methods of managing the volume of visual materials. Most students who are blind or visually impaired use a combination of methods including readers, books changed to audiotope or electronic format, Braille books, and taped lectures. If the student uses readers, hiring and scheduling arrangements must be made. Many students who are blind or visually impaired will be registered with the office of Service for Students with Disabilities (SSD) and work with the Coordinator of Services for Students who are Blind or Visually Impaired to make the necessary arrangements. Some students will work independently.

Textbooks and Course packs

So that the student who is blind or visually impaired has time to make the necessary arrangements, please choose books and collate course packs early, and make this information readily available to campus bookstores and copy centers. To have a text recorded on cassette or converted to Braille format takes two to four months.

Syllabi and Handouts

It is essential to provide syllabi and handouts so that they can be made readable by the time the rest of the class receives them. In many cases this entails creating and supplying these to the student in advance, either in printed copy, on computer disk, or by email. Before the class meeting, the student may then use an adapted computer to read or print the material or, if

appropriate, arrange for a reader to tape record it.

Describing Visual Cues in the Classroom

When there is a student who is blind or visually impaired in the classroom, the professor should remember that "this and that" phrases are basically meaningless to the student: for example, "the sum of this plus that equals this" or "the lungs are located here and the diaphragm here." In the first example, the instructor may be writing on the chalkboard and can just as easily say, "The sum of 4 plus 7 equals 11." The student who is blind or visually impaired in this case is getting the same information as the sighted student. In the second example, the instructor can "personalize" the locations of the lungs and diaphragm by asking class members to locate them by touch on their own bodies. Examples of this type will not always be possible. However, if the faculty member is aware not to use strictly visual examples, the student who is blind or visually impaired will benefit.

Class Notes

Many students who are visually impaired tape record lectures for reviewing later, even though listening to lectures over again takes valuable time. Other students use carbon paper, NCR (no carbon required) paper, or photocopying to obtain copies of another student's notes. These notes can then be converted to large print for reading or tape recorded for them to listen to. If the professor's notes are appropriate for student use, these can be photocopied as an alternative. Occasionally students prefer to recruit a note taker from outside of class. A small number of students use a laptop computer or Braille device to take their own notes during class. Whatever method the student uses for notes, he/she is responsible for the material covered in class.

Taping Lectures

Some faculty members are concerned about having their lectures tape recorded--whether the student is blind, visually impaired or sighted. When an instructor is planning to publish his/her lectures, the fear may be that the tapes will somehow interfere with these plans. If this is the case, the faculty member may ask the student to sign an agreement provided by SSD not to release the recording or otherwise hinder the instructor's ability to obtain a copyright.

Testing

A common area in which students who are blind or visually impaired need adaptation is testing. As a general rule, it is much better to avoid giving the student "different" tests from the rest of the class because this makes it difficult to compare test results. The fairest option is almost always to administer the same test questions in a non-visual format.

Some instructors prefer to give oral exams to students who are blind or visually impaired, or arrange for a teaching assistant to administer the test orally. Although this approach is certainly within the prerogative of the instructor, it can create an uncomfortable situation for the student when other students are taking written exams. An alternative method is to record the questions on tape for the student who is blind or visually impaired, who in turn records his/her answers on another tape recorder or types the answers.

Computers with adaptations for visual impairments can be very useful for test taking, and also for writing papers.

Illustrations, Models, and Technology

Students who are blind or visually impaired may use raised line drawings of diagrams, charts, and illustrations; relief maps; and/or three-dimensional models of physical organs, shapes, and microscopic organisms, etc. Modern technology has made available other aids including talking calculators, speech time compressors, and reading machines.

Art and Other Visual Subject Matter

Substitutions may be found for courses that are "visual" by nature; however, it should not be assumed automatically that a substitution would be necessary. Conversations between the student who is blind or visually impaired and the professor can lead to new and even exciting instructional techniques that may benefit the entire class.

For example, it is often thought that a student who is blind or visually impaired cannot take a course in art appreciation and that, if this class is a requirement for graduation, it should be waived. However, the student who is blind or visually impaired should have the opportunity to become familiar with the world's great art. A classmate or reader who is particularly talented at verbally describing visual images can assist the student who is blind or visually impaired as a visual "interpreter" or "translator." The "Mona Lisa" (or other great work of art) can be described, and there are poems written about the "Mona Lisa" that may be used as teaching aids to give more insight and understanding to the work. Miniature models of great works of sculpture can also be made available for display and touching in the classroom.

One student was able to learn the proper technique in an archery class when a rope was stretched perpendicular to the target. A "beeper" that was added to the target assisted with positioning. The point is that disabilities (in this case, blindness) do not automatically preclude participation in certain activities or classes. Students, professors, and advisors must be careful not to lower expectations solely on the basis of disability.

Guide Dogs

Some students who are blind or visually impaired use guide dogs. A guide dog will not disturb the class. They are very highly trained and disciplined. Most of the time, the dog will lie quietly under or beside the table or desk. The greatest disruption a professor can expect may be an occasional yawn or stretch. It is good to remember that as tempting as it may be to pet or speak to a guide dog, the dog while in harness is responsible for guiding its owner, and should not be distracted from that duty.

Field Trips

If classes involve field trips to out-of-class locations, discuss traveling needs with the student who is blind or visually impaired. In most instances, all that will be required is for a member of the class to act as a sighted guide. In locations where public transportation is adequate, many people who are blind or visually impaired travel quite independently.

Partial Sight and Accommodations

Between 70 and 80 percent of all persons who are legally blind in the United States have some measurable vision. Students who are partially sighted often require many of the same accommodations as students who are totally blind. This includes readers, tape-recorded texts,

raised line drawings, describing visual cues in class, etc. In addition, depending on their level and type of vision, partially sighted students may use large print textbooks, handouts, and tests; a closed-circuit TV magnifier or other magnifying device; or a large print typewriter. Large print is usually 18 to 22 pt., but varies from student to student. In class some partially sighted students are able to take notes with a bold felt tip pen or marker. Others use techniques mentioned under "Class Notes" above.

When a Student Doesn't Appear "Blind" or Visually Impaired

The student who is partially sighted is confronted with two basic difficulties that the student who is totally blind is not. First, the students who are partially sighted are sometimes viewed by instructors and classmates as "faking it" because most students who are partially sighted do not use white canes for travel and because most are able to get around much like everyone else. People have difficulty believing that the student needs to use adaptive methods when utilizing printed materials.

One student who is partially sighted commented that having been observed playing Frisbee by one of her instructors, she was sure that the instructor would no longer believe that she was partially sighted. As she explained, she had more peripheral than central vision and was able to see a red Frisbee. If any other color Frisbee was used, she could not see well enough to play. Playing Frisbee and reading text present quite different visual requirements. This is often difficult for the person who is fully sighted to understand.

Large Size Handwriting and Large Print

The second difficulty students who are the partially sighted experience is more subtle. The sighted reader's psychological response to large handwriting may be that "a child has written this." Unfortunately this may unconsciously lead to the conclusion that the written communication, e.g. a student's essay on an exam, is less sophisticated than that of other students. When the student uses a large print typewriter, this can still be a problem. It is very important to read for content and try not to be distracted by large size writing. Note: it is sometimes assumed that a student using large print is trying to make an assignment appear longer as in the case of a term paper of a required length. When the number of words instead of pages required is stated, the assignment length is clearer for everyone.

Meeting With the Partially Sighted Student

Potential difficulties can be alleviated if the student and professor discuss the student's needs early in the term. Depending on the level of vision, a partially sighted student may be assisted by such classroom accommodations as sitting in the front of the room and having large print used on the chalkboard and on an overhead projector. The capacity to read printed materials, however, also depends greatly on conditions such as degree of contrast between print and background and the brightness and color of text. Therefore, it is essential for the student and instructor to clarify what methods, techniques, or devices will work to maximum advantage in the setting being used.

Services for Students with Visual impairments

Verification of Disability

As needed, the professor is entitled to confirmation of the student's disability from a qualified source such as SSD. At the student's or professor's request (with a release from the student), SSD will provide the student with a Verified Individualized Services and Accommodations Form

(VISA form) letter verifying his or her disability and detailing options for accommodations needed in class and/or in testing situations. The student may then share this letter with the professor during office hours and discuss how accommodations will be implemented.

Orientation and Mobility

Students are expected to travel independently as they conduct their day-to-day activities. Students requiring a tactile map of campus can ask SSD to order one from the American Printing House (APH). The Michigan Commission for the Blind and SSD also provide some orientation to campus. Students who are blind or visually impaired can obtain this service by contacting one or both of these offices.

Test Formats and Accommodations

Tests can be administered to students with visual impairments in a number of ways. It may be necessary for the student and instructor to discuss which of several testing methods recommended on an SSD verification form would work best; as needed the SSD office can assist with this process. Tests may be converted to Braille or audiotape format, read aloud, produced in large print (usually using a copier or large print computer screen), read using a closed circuit television (CCTV) which enlarges the print, or read by a computer with voice output. Students usually tape, type, or word process their answers.

If the instructor uses the computer for assembling tests, the file can be saved as an ASCII (text-only file) on a computer disk (CD) or flash drive. The student can then read the text using a computer adapted to read text aurally. Receiving the syllabus or other handouts in this medium would also be helpful for some students.

Additional Time

Faculty members routinely allow extra time for exams. It is up to the student to schedule exams through the instructor if they cannot be taken with the rest of the class.

Proctoring

Because students may have questions that would be best answered by someone with knowledge of the subject matter, it is in everyone's best interest if either one of the teaching assistants for the course or the professor proctors exams taken outside of the classroom. Another member of the academic department is also a good choice. Reading test questions aloud or writing the student's dictated answers is not usually recommended; using a tape recorder and typewriter or other independent means is preferred by most students.

Note Taking

For students in need of note takers, we often recommend that the instructor make an announcement to the class asking for volunteers, usually without mentioning the name of the student. A blank sheet of paper may then be passed around the room so that students who are interested in volunteering may write down their names, telephone numbers, and/or email addresses. It is then the responsibility of the student who is blind or visually impaired to contact those on the list and finalize note-taking arrangements. You will be contacted if this type of announcement is needed. In that case you may also consider allowing the student to use your

notes.

For students who are registered with SSD and qualify for note-taking assistance, SSD provides photocopying of other student's notes, NCR (no carbon required) paper for taking notes, and Grade-A-Notes transcripts of lectures, when they are available. These services are free of charge, as are all services offered by SSD.

Taped Textbooks and Other Alternative Formats

Many students who are visually impaired rely on textbooks recorded onto cassette tapes or converted into various other formats, e.g., large print and Braille. In addition, a small number of books are now available on computer disk for students to use. SSD assists students in locating books that have been produced in these alternative formats and by reformatting other texts as needed by U of M students.

Large print or Braille formats are virtually essential to make some subjects - such as math, certain sciences, or foreign languages - accessible to students with various visual impairments. It can take as long as six months for textbooks to be converted into these formats. SSD can assist students in making the necessary arrangements.

Readers

Tape users may also want to arrange for readers to help with the day-to-day material such as handouts and mail. This reader could be a friend, neighbor, or a volunteer. Postings in dormitories will often yield volunteers willing to read such material.

Reading Rooms

Shapiro Undergraduate Library, Hatcher Graduate Library, and other libraries on campus have study carrels that students may use if they need quieter study environments. The Knox Center Adaptive Technology Computing Site (ATCS) located in Shapiro Undergraduate Library is equipped with hardware and software to support the needs of students with all disabilities.

James E. Knox Center Adaptive Technology Computing Site (ATCS)

<http://www.itcs.umich.edu/atcs/>

The James Edward Knox Center Adaptive Technology Computing Site (ATCS), located on Central Campus in Room 1128 of the Shapiro Undergraduate Library, is operated by the Information Technology Services (ITS). The Center offers accessibility-related hardware and software, much of which is also available on all public Sites computers. A full list of equipment, with links to cheat sheets, is available at [Software and Equipment - Knox Center \(ATCS\)](#).

Upon request, students may receive evaluations to determine what assistive technology solutions would be most appropriate for their needs, or training in assistive technology use. Contact Jane Vincent, Knox Center director and Assistive Technology Lead, at jbvincen@umich.edu or 936-3794 for an appointment.

The Knox Center is open to all members of the U-M community. Proof of disability or registration with the SSD office is not required to use the Center or make an appointment. However, SSD funding resources for assistive technology acquisition (see <https://ssd.umich.edu/funding-and->

[financial-assistance](#)) are only available to students registered with SSD.

Library Retrieval Service (7-FAST)

The University Library's 647-FAST retrieval service is available free of charge to students whose disabilities make it difficult for them to use the library. The SSD office determines students' eligibility for this service. The retrieval service may then be reached by telephoning 647-3278 or emailing 7-FAST@umich.edu.

Transportation

Transportation assistance is often very useful for students with visual impairments. While students who are blind or visually impaired are generally able to use the fixed-route buses much as any other student, exceptions are made when circumstances such as heavy snowfalls make utilizing these buses hazardous. When requested under these conditions and as availability permits, Paratransit offers prescheduled, demand-response bus service. SSD establishes eligibility for students, faculty, and staff to use this service.

For people with various disabilities who live off campus and cannot get to campus by using the regular Ann Arbor Transportation Authority (AATA) bus service, AATA also provides door-to-door transportation, called "A-Ride." For more information, call (734) 973-6500 or visit their website at: <http://www.theride.org/aride.asp>

Equipment Use by Students

As well as offering a tactile map of campus, SSD has some small equipment that can be loaned to students on an interim basis, e.g., talking calculators, a Braille world atlas, and a raised line drawing kit. We also assist students in locating relief maps and other adapted teaching aids.

IV. Students with Mobility Impairments

Types of Mobility Impairments

Access is one of the major concerns of the student who uses a wheelchair. The student must learn routes to and from classes and across campus that do not present barriers. A barrier may be a stair, curb, narrow walkway, heavy door, elevator door that has no delay mechanism or one that is too fast, a vehicle blocking a curb cut or ramp, a sign in the middle of what would otherwise be a wide enough walkway, etc. Similar barriers exist for many students with mobility impairments who do not use wheelchairs.

Students use wheelchairs or other mobility aids as a result of a variety of disabilities including spinal cord injury, cerebral palsy, post-polio, multiple sclerosis, severe arthritis, quadriplegia, paraplegia, amputation, muscular dystrophy, and so on. The student with spina bifida may have short stature and may use a wheelchair, braces, or crutches. A number of individuals with conditions such as cerebral palsy walk without assistance but may not be able to negotiate steps or other barriers. Other disabilities that can significantly affect students' general mobility include cardiac conditions, chronic back pain, active sickle cell anemia, diabetes, and respiratory disorders such as cystic fibrosis. Classroom modifications will depend on the student's functional

limitations.

Wheelchairs

Wheelchairs come in a variety of styles and sizes, with many types of optional attachments available. Wheelchairs are either manual or powered (electric). Most students who are unable to manually propel the chair themselves for any distance will use an electric-powered wheelchair or scooter.

Classrooms

Auditorium and theater-type classrooms may present difficulties unless there is a large enough flat floor space in the front or rear of the room for a wheelchair to park. There must also be an entrance to and from that level. For students not using wheelchairs, some seats must be easily reached without steps. Classrooms with tables are more accessible to students using wheelchairs than rooms with standard classroom desks. It is preferable if the tables and chairs are movable rather than stationary.

Variations in Needs

It is difficult to make generalizations about the classroom needs of students who use wheelchairs because some students may be able to stand for short periods of time while others will not be able to stand at all. Some will have full use of their hands and arms, while others will have minimal or no use of them. There are, however, some general considerations that apply to most, if not all, students with mobility impairments.

Academic Considerations

Moving a Class

If a classroom or faculty office is inaccessible, it will be necessary to find an accessible location or alternative class section that is held in an accessible location. To change a room assignment for a class or section, the academic department contacts the room scheduling office for its unit. Services for Students with Disabilities (SSD) can also help in this process.

Travel Time

If breaks between classes are short, a student with a mobility impairment may be a few minutes late. Often the student must wait for an elevator, take a circuitous (but accessible) route, wait for assistance in opening doors, and maneuver along crowded paths and corridors. If the student is frequently late, it is, of course, appropriate to discuss the situation with the student and seek solutions. Most students will be aware of time restrictions and will schedule their classes accordingly. However, it is not always possible to leave enough time between classes. For students who require personal attendants, early classes and attendants' schedules can pose particular difficulties.

Labs

Classes taught in laboratory settings (sciences, language labs, arts, film and video, etc.) usually require some modification of the workstation. Considerations include under counter knee

clearance, work and counter top height, horizontal working reach and aisle widths. Working directly with the student may be the best way to provide modifications to the workstation.

Lab Aides

For those students who may not be able to participate in the laboratory class without the assistance of an aide, the student should be allowed to benefit from the actual lab work to the fullest extent. The student can give all instructions to an aide - from what chemical to add, to what type of test tube to use and where to dispose of the used chemicals.

Physical Education

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

General Considerations

Using a Wheelchair

Students are not "confined" to wheelchairs. They use their wheelchairs to get around much in the same way as others walk, and often transfer to automobiles and furniture. Some people who use wheelchairs can walk with the aid of canes, braces, crutches, or walkers. Note: using a wheelchair some of the time does not mean an individual is faking a disability. For those who walk with difficulty, a wheelchair is often a means to conserve energy or move about more quickly.

Offering Help

Most students with mobility impairments will ask for assistance if they need it. Don't assume automatically that assistance is required. Offer assistance if you wish, but do not insist and do accept a "No, thank you" graciously.

Relative Height

When talking with a student who uses a wheelchair or has short stature, try to sit down, kneel, or squat if the conversation continues for more than a few minutes. Then the student does not need to crane their neck to maintain eye contact.

Personal Space

A wheelchair is virtually part of a person's body. Don't hang or lean on the chair - this is similar to hanging or leaning on a person. It's fine if you are friends, but inappropriate otherwise.

Services for Students with Mobility Impairments

Verification of Disability

As needed, the professor is entitled to confirmation of the student's disability from a qualified source such as SSD. At the student's or professor's request (with a release from the student), SSD will provide the student with a Verified Individualized Services and Accommodations Form (VISA form) letter verifying his or her disability and detailing options for accommodations needed in class and/or in testing situations. The student may then share this letter with the professor during office hours and discuss how accommodations will be implemented.

Campus Accessibility Map

An accessibility map of the University of Michigan (U of M) campus is available in the SSD office. This map shows the locations of ramps, elevators, curb cuts, accessible parking, etc. so that students with mobility impairments may navigate campus more easily. SSD can also advocate on a student's behalf to remove physical barriers in the campus area or to ensure that a class or event is held in an accessible location.

Testing Accommodations

Additional Time

As needed due to mobility impairments that affect writing speed, faculty members routinely allow extra time for exams. It is up to the student to schedule exams through the instructor if they cannot be taken with the rest of the class.

Alternative Formats

When mobility impairments affect writing, using a word processor or tape recorder may be appropriate. It is the responsibility of the student and the instructor to decide which method to use. The SSD office can assist with this process, as needed.

Proctoring

When needed, it is in everyone's best interest if the proctor for testing is either one of the teaching assistants for the course or the professor, in the event of any problems or questions. Another member of the academic department is also a good choice. Reading test questions aloud and writing the student's dictated answers are not usually recommended; using a tape recorder or other independent means is preferred by most students.

Note Taking

Whatever method the student uses for notes, he/she is responsible for the material covered in class. For students in need of note takers due to a disability, we often recommend that the instructor make an announcement to the class asking for volunteers, usually without mentioning the name of the student. A blank sheet of paper may then be passed around the room so that students who are interested in volunteering may write down their names, telephone numbers, and/or email addresses. It is then the responsibility of the student requesting notes to contact those on the list and finalize note-taking arrangements. You will be contacted if this type of announcement is needed. In that case, you may also consider allowing the student to use your notes (depending upon their pedagogical utility and your own preference).

For students who are registered with our office and qualify for note-taking assistance, SSD office provides free photocopying of other student's notes, NCR (no carbon required) paper for taking

notes, and Grade-A-Notes transcripts of lectures, when they are available. These services are free of charge, as are all services offered by SSD.

Library Retrieval Service (7-FAST)

The University's Library Retrieval Service (7-FAST) is available free of charge to students whose disabilities make it difficult for them to use the library. The SSD office determines students' eligibility for this service. 7-FAST may then be reached by calling 647-3278.

Knox Center Adaptive Technology Computer Site (ATCS)

<http://www.itcs.umich.edu/atcs/>

The James Edward Knox Center Adaptive Technology Computer Site (ATCS), located on Central Campus in Room 1128 of the Shapiro Undergraduate Library, is operated by the Information Technology Services (ITS). A second site can be found in the Media Union on North Campus. Both locations offer special equipment and software to meet the disability needs of U of M students, instructors, and staff. Technology available for use includes: trackballs, ergonomic chairs, motorized height adjustable workstations, ergonomic keyboards, voice recognition/dictation software, a print scanner, talking computer (screen reading) programs, magnification software, 21-inch high resolution monitors, closed circuit television (CCTV), a raised imaging printer, a Braille printer and Ergo Quest 500 sit-stand-recline workstations, called Ergo Pods. <http://www.itcs.umich.edu/atcs/ergopods.php>

Upon request, students, faculty, and staff may receive training in the use of any of this technology. Contact (734) 647-6437 or AdaptTech@umich.edu. Contact the SSD office if you have questions regarding specific technology or how to access these labs.

For students who are familiar with them, these adaptive computers are often convenient alternatives that faculty can arrange to use for administering tests. Contact the SSD office at (734) 763-3000 for more information.

Transportation

The University provides a transportation service on campus for students who are not ambulatory, staff, and faculty, as well as those with other disabilities that affect mobility. Ride scheduling priority is given to persons with permanent disabilities. This accessible bus service runs door-to-door Monday through Saturday twelve months of the year. SSD establishes eligibility for students, faculty, and staff to use this service.

In addition, all buses on evening and Sunday campus bus routes have wheelchair lifts. More campus bus routes will become accessible as new buses are acquired. For more information, contact the U of M Transportation Services.

The Ann Arbor Transportation Authority also provides adapted transportation, called "A-Ride," that operates throughout Ann Arbor. For more information, call (734) 973-6500.

Parking

Each year, the campus parking map produced by Parking and Transportation Services indicates

where accessible parking spaces are located on campus.

Any person with a disability who has an accessible parking sticker from any state except Michigan may park free of charge in any U of M public metered or unmetered lot. A Michigan state law allows only persons with accessible parking stickers who are specifically certified for free parking to park free at meters.

To park in the U of M staff paid lots and structures, a student with an accessible parking permit from any state must also go to the Parking Services office and obtain a U of M staff paid permit. This service is free of charge to students with permanent and temporary disabilities. If you have questions about the U of M staff paid permit for students with disabilities or accessible parking on campus for faculty and staff, contact:

U of M Parking Customer Services Office
523 South Division St.
(734) 764-8291

Individuals with temporary disabilities who do not already have a state of Michigan permit will have to arrange for their physician to complete a special form from the Secretary of State's office in order to obtain a temporary State of Michigan permit. The appropriate form may be downloaded from the Secretary of State's Web page found at:

<http://www.sos.state.mi.us/dv/index.html>.

For more information, contact one of the local Secretary of State offices:

Ann Arbor Secretary of State Office
353 North Maple Road
Ann Arbor, MI 48103
(888) 767-6424

Ypsilanti Secretary of State Office
2720 Washtenaw
Ypsilanti, MI 48197
(888) 767-6424

Personal Attendants

Although the SSD does not provide students with personal attendants, SSD can assist the student in identifying techniques for screening, hiring, training, and supervising attendants. Once an attendant is found, staff can help negotiate a workable agreement between the student and the attendant. Ann Arbor's Center for Independent Living can assist students in finding qualified attendants. Call (734) 971-0277 or (734) 971-0310 (TDD) for further information.

V. Students who are Deaf or Hard of Hearing

Students who are deaf or hard of hearing, like hearing students, vary to some degree in their communication skills. Factors such as personality, degree of deafness, age at onset, and family environment all affect the kind of communication the student uses. As a result of these and other variables, a deaf student may use a number of communication modes.

Sign Language

One form of communication used by many, but not all, deaf and hard of hearing persons is American Sign Language, or "manual" communication. In sign language, thoughts are expressed through a vocabulary of hand and arm movements, positions, and gestures. The intensity and repetition of the movements and the facial expressions accompanying the movements are also important elements of manual communication. Finger spelling consists of various finger and hand positions for each of the letters of the alphabet.

Sign Language Interpreters

In the classroom, many students who are deaf will use an interpreter to enable them to understand what is being said. There are two types of interpreters - oral and manual. The oral interpreter "mouths" what is being said while the manual interpreter uses sign language. The two methods are often used in combination. There is a time lag, which will vary in length depending upon the situation, between the spoken word and the interpretation or translation. Thus, a deaf or hard of hearing student's contribution to the lecture or discussion may be slightly delayed. It is also important for the professor not to get too far ahead of the interpreter during a lecture.

In general, interpretation is easiest in lecture classes and more difficult in seminars or discussion classes. Because class formats are so varied, it is recommended that the professor, interpreter, and student arrange a conference early in the course to discuss any arrangements that may be needed.

The interpreter and the deaf student will usually choose to sit in the front of the classroom. The interpreter is aware that sign language may be a distraction to the class and the professor. The interpreter has also learned that the initial curiosity of the class wanes and the professor adapts easily to the interpreter's presence. Interpreters who are certified by the Registry of Interpreters for the Deaf subscribe to a strict code of ethics that requires confidentiality of private communications and honesty in interpretation or translation.

Class Notes

Because it is difficult to follow an interpreter or speech read what the instructor is saying and take notes at the same time, a student who is deaf or hard of hearing may need someone to take notes for them. The student may choose to receive electronic or hand-written notes provided by a paid student note-taker. Note-taking captures classroom content. Whatever method the student uses for notes, s/he is responsible for the material covered in class. Students receive an electronic copy of the notes within 24 hours.

Community Access Real-time Translation (CART)

Some students may obtain access to the content of classes and campus events by using a court recording system called Community Access Real-time Translation or CART, to provide real-time and verbatim captions. CART provides immediate viewing of auditory information. The student can sit next to the CART provider or receive the text by remote. This system is especially helpful during classroom discussion when conversations are more difficult to follow.

CTools

If you have a CTools site set up for your course, it is recommended to include the note taker/CART provider on the site. This will give the service provider access to the course materials

and the ability to download course material as needed. If PowerPoint is used in lectures, note takers can download them and use them to take notes in class.

Tests and Exams

Most students who are deaf or hard of hearing will be able to take examinations and be evaluated in the same way as other students. However, if the method of evaluation is oral and the student does not use his/her own voice, the interpreter may voice what the student is signing. Similarly, testing that is administered orally may need to be signed to the student.

Partial Hearing Loss

The student who is hard of hearing may require nothing more than some form of amplification to participate in class - a hearing aid, public address system, or professor/student transmitter/receiver unit (also known as an auditory training unit or an FM unit).

Accessible Subject Matter

Assumptions cannot automatically be made about the deaf student's ability to participate in certain types of classes. For example, students who are deaf may be able to learn a great deal about music styles, techniques, and rhythms by observing a visual display of the music on an oscilloscope or similar apparatus, or by feeling the vibrations of music. Some students who are deaf will have enough residual hearing so that amplification through earphones or hearing aids will allow participation. It is always best to discuss with the student the requirements of the class and to determine if there are ways that the material can be modified so that the student can participate in what may become an exciting learning experience for all concerned.

Speech

Many students who are deaf can, and do, speak. Most deaf people have normal speech organs and many learn to use them in speech classes. Some deaf people cannot automatically control the tone and volume of their speech so the speech may be initially difficult to understand. Understanding is improved when one becomes more familiar with the deaf person's speech.

Guidelines for Communication

The following list of suggestions, compiled from the authors' personal experience and from publications of the National Technical Institute for the Deaf, the Registry of Interpreters for the Deaf, and Gallaudet University, is included in this handbook to facilitate the participation of students who are deaf or hard of hearing in (and out of) the classroom:

- Look at the person when you speak.
- Don't chew gum or otherwise block the area around your mouth with your hands or other objects.
- Speak naturally and clearly. Don't exaggerate lip movements or volume.
- Try to avoid standing in front of windows or other sources of light. The glare from behind you makes it difficult to read lips and facial expressions.
- Using facial expressions, gestures, and other "body language" is helpful in conveying your message.
- When other people speak who may be out of the deaf or hard of hearing person's range of vision, repeat the question or comment and indicate who was speaking (by motioning)

so the individual can follow the discussion.

- Avoid speaking with your back to the deaf person, such as when writing on the chalkboard. Overhead and opaque projectors are often a good substitute and allow you to face the class while writing.
- During video presentations and use of overhead projection, keep light levels high enough in the classroom so that the deaf or hard of hearing student will be able to clearly see what an interpreter is signing or typing in real time captioning.
- When particularly important information is being covered, be sure to convey it very clearly. Notices of class cancellations, assignments, etc., can be put in writing or on a chalkboard to ensure understanding.
- If you are talking with the assistance of an interpreter, direct your communication to the deaf individual. This is more courteous and allows the deaf person the option of viewing both you and the interpreter to more fully follow the flow of conversation.
- Establish a system for getting messages to the student when necessary. For example, the Michigan Relay Center can be used (see "Services" below). Class cancellations are particularly costly if an interpreter cannot be informed in advance of the change.

Visual Aids

The use of visual media may be helpful to students who are deaf since slides and videotaped materials supplement and reinforce what is being said. However, the student can only look at one thing at a time (e.g. a slide vs. the interpreter). The student will benefit if each teaching aid remains visible for a short period following the professor's explanation.

Closed-Captioning for Media Presentations

Using captioned versions of films, videos, or other visual aids is extremely helpful for students who are deaf or hard of hearing or have other auditory processing difficulties. If appropriate, foreign language films with English subtitles are also useful. Some visual aids used in classes are already captioned. When requesting audio-visual equipment, make sure you request equipment with a captioning decoder.

In most cases, you will be contacted by a specialist in the SSD office if there is a deaf or hard of hearing student in one of your classes who needs captioning. However, if you are aware that you will be using videos in a class with an enrolled student who is deaf or hard of hearing, please contact SSD to discuss how captioning can be created for you.

Interpreting during Audio-Visual Presentations

Interpreting should be used when captioning is not available. However, lower lighting, such as during a film, interferes with the deaf student's capacity to read manual or oral communication. In addition, audio-visual materials may be difficult to interpret because of sound quality and speed of delivery. Therefore, if a written script is available for a non-captioned film or video, provide the interpreter and student with a copy in advance.

Services for Students who are Deaf or Hard of Hearing

Verification of Disability

As needed, the professor is entitled to confirmation of the student's disability from a qualified source such as SSD. At the student's or professor's request (with a release from the student),

SSD will provide the student with a Verified Individualized Services and Accommodations Form (VISA form) letter verifying his or her disability and detailing options for accommodations needed in class and/or in testing situations. The student may then share this letter with the professor during office hours and discuss how accommodations will be implemented.

Note-taking Services

The SSD office hires students to be note takers for students who are deaf/hard of hearing. The student may choose to receive electronic or hand-written notes. Note-taking captures classroom content. Whatever method the student uses for notes, s/he is responsible for the material covered in class. Students receive an electronic copy of the notes within 24 hours.

The SSD office also employs professionally trained court stenographers to provide real-time, verbatim transcription of class lectures and discussions. Per a confidentiality agreement, Community Access Real-time Translation or CART transcripts are provided solely to the student who is registered to receive this service. CART transcripts are intended for students to follow class lectures and discussions and can be used as a reference after the class to review information that might have been missed.

Captioning Visual Media

SSD has the capability to add closed-captioning to any visual-audio media. Be aware that to create such captioning, SSD requires a minimum turn-around time of two weeks from the receipt of the video. In addition, please provide us with a transcript if one is available. Creating captioning from a transcript simplifies the process and may shorten turn-around time.

Assistive Listening Devices

On a short-term basis, the SSD office will lend FM amplification systems for students to use in the classroom and other school related functions. In addition, various auditoriums and classrooms on campus are equipped with amplification devices. You may contact SSD for a listing of these sites and to discuss your equipment needs. Portable transmitters are also available. (See "Partial Hearing Loss" near the beginning of this section.)

Sign Language Interpreters

The SSD office can provide sign language interpreters for academic purposes. For their classes and activities, students are responsible for making these arrangements with us. For other functions such as award ceremonies and Commencement, the sponsoring unit contacts SSD directly and there is an interpreter charge for this service. (See also "Sign Language Interpreters" and "Guidelines for Communication" near the beginning of this section.)

Video Relay Services and Videophone Locations

The SSD office has a video phone that students who are deaf or hard of hearing may use to make calls. This video phone is available during regular working hours. There are also two other locations on campus for students to use video phones. The one on Central Campus is located on the 1st floor of the Michigan Union next to the Campus Information Center (CIC) desk and the other is located on North Campus on the mezzanine level of Pierpont Commons near the catering office, around the corner from the CIC desk.

Michigan Relay Center

The Michigan Relay Center allows telephone customers using telecommunications devices for the deaf (TDD) to call persons or businesses without TDDs anywhere in the country with the use of a "voice operator." Persons without a TDD who need to call a person using a TDD should dial 711 or (800) 649-3777.

VI. Students with Learning Disabilities

An individual who has difficulty processing written or spoken information such that it interferes with his or her ability to read, write, spell, listen, talk, or do math may be diagnosed with a specific learning disability. Like all students, each student with a learning disability has a distinct combination of abilities and deficiencies and therefore a unique profile. Some areas of functioning will be in an average or above average (even gifted) range, while deficiencies will vary from minimal to severe. It is important to note that students with specific learning disabilities will display some, but not all, of the characteristics of that disability. In addition, the student's ability to compensate for information processing difficulties will vary across time and with differing levels of stress.

Characteristics of Common Learning Disabilities

Reading

For college students with dyslexia or other print related learning disabilities, reading is not automatic and fluid particularly when under time pressures. Difficulties are liable to be linked to slow reading rates and misreading what is written due to transposing of letters and skipping words altogether. Because of slow reading rates, it may take students with reading-related disabilities longer than their colleagues to read books and articles, to locate a word in a dictionary, to find a passage that is part of a play and other writing, or to find their place in a scientific or mathematical table. With certain subject areas, these students may have more problems comprehending what is written in their texts, on the blackboard, in a test, or even in their own notes. Retaining the information that is read is therefore more difficult. A student with reading-related learning disabilities may be especially concerned when he or she has large volumes of printed material to read or is under pressure to complete an examination.

Some students with reading disabilities may find improvement in both reading speed and comprehension if their texts are changed into an alternative format, such as books on audiocassette tape or electronic text. This reformatting can allow students who qualify for the service to take information in through two channels or senses (visual reading and auditory processing). A student with reading disabilities may wish to contact a specialist at Service for Students with Disabilities (SSD) to determine whether or not they qualify for and could benefit from this service.

Writing

Some college students with learning disabilities have problems communicating effectively through writing. Whether these difficulties are related to dyslexia or to the physical act of printing or writing (dysgraphia), the outcome is likely to manifest itself in written work that appears careless. Although it is appropriate not to lower academic standards, it can be helpful to understand that students with documented written language disabilities usually put equal or greater effort into their

writing than do students who do not have disabilities. It may also help to know the types of errors you may encounter as you work with students who have written language disabilities. Sentences are sometimes incomplete with essential words and phrases missing. The organization of the paper can be choppy, jumping from one idea to the next and back again.

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

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

Mathematics

To be successful in understanding math concepts and in knowing when and how to apply them, the student must have strong language, memory, sequencing, and problem-solving skills. As the student approaches more complicated and abstract college level work, he or she also needs to be able to visualize the positioning of objects that are described and the spatial relationships between them, even when conceptual objects must be turned or moved. Students who have disabilities in math reasoning and calculation (dyscalculia) may make errors that seem to be "dumb mistakes," e.g., reversing numbers, miscopying and/or misaligning columns of figures, and making errors when changing operational signs and performing other conversions. Some students with learning disabilities in mathematics have difficulty remembering and working through the sequence of steps required to solve a problem (so that steps may be repeated, performed out of order, or forgotten altogether). These students may also have problems figuring out calculations mentally, estimating what answers would be, and/or organizing a problem, especially when it is a word-problem or when the student must first remember and perform calculations to obtain missing data.

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

Students with math disabilities and anxieties usually benefit from regular and frequent work with a tutor and clarification from the instructor, as needed. In addition, recommendation may be made by SSD that the student be allowed to use extended time, a quiet room, and scrap paper for quizzes and tests.

Foreign Language

Students who have disabilities that relate to distinguishing, processing, remembering, and expressing sounds and words may find learning a foreign language problematic. To successfully

master a second language a student must be able to: hear and cognitively differentiate between the sound structures of words, comprehend and remember the meanings of words and differing meanings when words are combined, understand rules related to sentence structure and grammar, retrieve information easily, and mentally manipulate it to successfully communicate verbally or in writing.

Students who have disabilities that affect learning a foreign language may benefit when instruction is multi-sensory, when students are given sufficient oral practice, and when pressures of timed responses (oral and written) are removed. Some students you work with may experience extreme and persistent difficulties/failures in learning a foreign language, despite the student's conscientious effort. In such cases, you may refer the student to the LSA Academic Advising Center (1255 Angell Hall) to discuss the possibility of petitioning to receive a foreign language substitution. Should the petitioning process be pursued, the student may ask his or her foreign language faculty to write a letter describing the specific difficulties experienced while trying to learn a foreign language.

Oral Language

Some students are eloquent writers yet have extreme difficulty in formulating an immediate verbal response to a question. They may appear socially inept as they are unable to gather and express their ideas amidst the fast pace of active dialogue. During oral presentations, their thoughts may come out jumbled and chaotic and they may use many filler words, e.g., uh, er, um, as they struggle to express themselves. Reading aloud in class and taking oral quizzes and tests can be stressful and embarrassing. If oral expression is not a fundamental requirement of the course being taught, you may allow a student to complete an oral assignment using a different format. Some students with disabilities related to oral expression may benefit from video-taping their presentation for viewing or delivering their presentation to the instructor privately.

Students who have a disability related to taking in oral information may have difficulty listening and taking notes at the same time. The problem may relate to difficulties in differentiating relevant from irrelevant details so that the student frantically tries to write down everything being said. Similarly, students with dysgraphia, who extend more than the normal focus and energy in actually writing words they are hearing, may fall behind in taking notes and miss examples and nuances of a lecture that aid other students in understanding and memory. Allowing students with disabilities to tape lectures often alleviates this problem. Many of the adaptive techniques that assist students who are deaf will also help these students - note takers, films, role-playing, captioned videotapes, and other visual materials. Students with oral receptive language disabilities will also benefit if instructions and assignments are given both orally and in written form.

Sequential Memory

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

Organization and Attention

Success in college requires a reasonably sophisticated development of skills related to organization, focus, attention, and study. Students who have a disability due to Attention Deficit Hyperactivity Disorder (ADHD), Traumatic Brain Injury (TBI), and certain learning disabilities may seem vulnerable or lacking in these skill areas. For instance, you may see from a student's participation in class discussions that he or she has completed the necessary reading and has a good grasp of course material. Yet the same student may misplace papers to be turned in or postpone starting projects so that the final product is rushed and less thorough than you would expect. The delayed start of papers and projects may relate to poor estimation of how long it will take to complete the task. A student may appear to have reasonable organization and study skills but have difficulty understanding how much detail to focus on during lectures or while reading, writing, and preparing for tests. Some students also have problems screening out sights and sounds in the classroom to maintain focus on class lecture. These difficulties can increase during longer lecture classes and peak stress times, such as during midterms and finals. It is important to note that for these problem areas to be termed as disabling they must meet criteria that go beyond mere developmental immaturity.

Students who have learning disabilities that affect organization and attention often have difficulty completing open-ended, unstructured, and last minute assignments. Therefore, they, like all students, can benefit from receiving a detailed syllabus that clearly states reading to be completed for each class period and gives due dates and clear descriptions for course papers and projects. Providing students with an outline of material to be covered for each class also helps them learn how to organize their listening, note taking, and studying. Some instructors make such outlines available at the beginning of each class, printed in a course pack, or available for downloading from the web so that students may spend more class time and attention understanding concepts and noting examples to aid memory.

Individual Differences

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

Conferences with Students

It is important to meet individually with each student who has learning disabilities once they identify themselves. Encourage students to do so at the beginning of the term (See #1 in the "Recommendations" section and "Verification of Disability" in the Services section that follows.)

If you are working with a student who seems to be struggling in your class but has not indicated that he or she has a learning disability, you may wish to refer the student to SSD.

Services for Students with Learning Disabilities

Verification of Disability

As needed, the professor is entitled to confirmation of the student's disability from a qualified source such as SSD. At the student's or professor's request (with a release from the student), SSD will provide the student with a Verified Individualized Services and Accommodations Form

(VISA Form) letter verifying his or her disability and detailing options for accommodations needed in class and/or in testing situations. The student may then share this letter with the professor during office hours and discuss how accommodations will be implemented.

Testing Accommodations

Faculty members routinely allow extra time for exams, often in a quiet room with no other distractions, to provide students with learning disabilities an adequate opportunity to show what they have learned. At times, alternative test formats are required, e.g. tests on tape or computer disk, dictating answers on tape, using a word processor with spell checker, using a calculator, avoiding scantron sheets for multiple choice testing. It is the responsibility of the student and the instructor to discuss the recommendations made in the student's verification letter and to decide how they will be implemented. As needed the SSD office can help with this process. The student should schedule exams through the instructor if they cannot be taken with the rest of the class.

Proctoring

In the event the student has questions about an exam, it is in everyone's best interest if the proctor for testing is either one of the teaching assistants for the course, the professor, or another member of the academic department. Reading test questions aloud or writing the student's dictated answers is not usually recommended; using a tape recorder or other independent means is preferred by most students.

Note Taking

Whatever note-taking method the student uses, he/she is responsible for the material covered in class. Many students with learning disabilities tape record lectures for reviewing later; this can be time consuming. A number of students prefer to recruit a note taker from class, which can sometimes be difficult. Once recruited, the classmate uses carbon paper, NCR (no carbon required) paper, or photocopying to obtain copies of their notes for the student with a learning disability.

Upon request it is essential to help the student find a note taker and/or allow the student to use your notes (depending upon their pedagogical utility). With the student's permission, it is often helpful for the instructor to make an announcement to the class asking for volunteers, usually without mentioning the name of the student. A blank sheet of paper may then be passed around the room so that students who are interested in volunteering may write down their names, telephone numbers, and/or email addresses. It is then the responsibility of the student needing notes to contact those on the list and finalize note-taking arrangements. You will be contacted if this type of announcement is needed.

SSD provides free photocopying of class notes, NCR paper, cassette tapes, and/or Grade-A-Notes (if they are available for that course).

For the few large lecture classes where Grade-A-Notes have been taken, transcripts of these notes have proven to be excellent aids to students with disabilities. Contact Grade-Notes on-line in Dublin, OH. <http://www.gradeanotes.com/index.html>

Knox Center Adaptive Technology Computing Site (ATCS)

<http://www.itcs.umich.edu/atcs/>

The James Edward Knox Center Adaptive Technology Computing Site (ATCS), located on Central Campus in Room 1128 of the Shapiro Undergraduate Library, is operated by the Information Technology Services (ITS). A second site can be found in the Media Union on North Campus. Both locations offer special equipment and software to meet the disability needs of U of M students, instructors, and staff. Technology available for use includes: trackballs, ergonomic chairs, motorized height adjustable workstations, ergonomic keyboards, voice recognition/dictation software, a print scanner, talking computer (screen reading) programs, magnification software, 21-inch high resolution monitors, closed circuit television (CCTV), a raised imaging printer, a Braille printer and Ergo Quest 500 sit-stand-recline workstations, called Ergo Pods. <http://www.itcs.umich.edu/atcs/ergopods.php>

Upon request, students, faculty, and staff may receive training in the use of any of this technology. Contact (734) 647-6437 or AdaptTech@umich.edu. Contact the SSD office if you have questions regarding specific technology or how to access these labs.

For students who are familiar with them, these adaptive computers are often convenient alternatives that faculty can arrange to use for administering tests. Contact the SSD office at (734) 763-3000 for more information.

Taped Textbooks

Some students who have reading based learning disabilities rely on textbooks recorded onto audio-cassette tapes. In addition, a small number of books are now available on computer disks for students to use with audio-output software. As needed, SSD assists U of M students in locating books that have been produced in these alternative formats and by reformatting other texts, such as course packs and class notes.

Tutors

SSD can help students with learning disabilities assess their self-management, time-management, and learning strategy needs and can work with these students to find more effective methods. The office does not, however, provide content tutoring support for courses taught at the University. Students are encouraged to ask their instructor and academic department about tutoring recommendations.

Psycho-Educational Assessments

Counseling and Psychological Services (CAPS) has a staff person certified to administer the test batteries used in diagnosing learning disabilities. SSD determines students' eligibility for this service. You are welcome to refer to us undiagnosed students exhibiting some of the signs listed above.

Guidance and Counseling

Students with learning disabilities may have some particular guidance or counseling needs to assist in their academic, social, or personal development. SSD often encourages first-year students to stay in contact with a staff member at least once a week as a means of resolving any problems and improving academic performance.

Small Equipment

The SSD office has a limited supply of small equipment, e.g., Franklin Spelling Aces and laptop computers, students who are registered with our office can borrow on a short term basis. We provide students who use books on tape or record lectures with up to ten free cassettes per semester.

VII. Students with Speech Impairments

You may work with some students who appear shy and withdrawn when you call on them in class or attempt to engage them in conversation outside of the classroom. They may use single words or short phrases when communicating verbally or delay in responding, as they seem to struggle in finding the correct words. Some students have difficulty coming to the point or staying on the topic in their oral communication, even though they appear to understand the information being discussed or communicate effectively in writing.

These observable traits may be signs that the student has a speech impairment that he or she was born with or that has resulted from illness or injury. The condition may also be part of another disability. In any case, the college student with speech impairment may be reluctant to talk with you about such difficulties because he or she feels frustrated expressing thoughts orally. Unless it has been recently acquired, the student will probably have received some speech therapy.

Types of Speech Conditions

Impairments include problems with the way words are pronounced (omitting, distorting or substituting sounds in the words spoken), voice quality (volume, pitch, tonal quality, or chronic hoarseness), rate of speech (long pauses while searching for the right word, stuttering, speaking too quickly or too slowly, or stopping and starting of speech with the use of filler words like um, er, uh) and esophageal speech resulting from a laryngectomy. Occasionally distorted movements and facial expressions may accompany these conditions.

Self-Consciousness

Many students with speech impairments will be hesitant about participating in activities that require speaking. Even if the student has adjusted well to their speech impairment new situations may aggravate old anxieties. Therefore, if making oral reports, reading aloud in class, or responding to tests orally is a part of, but not an essential component of your course, you may wish to discuss alternatives with the student. Please keep in mind that speaking in front of a group can be an agonizing experience for any student with or without speech impairment.

Interacting with the Student

It is important to encourage the student with a speech impairment to express him or herself and to allow time for the student to organize thoughts and formulate responses before speaking. Make a point of concentrating on the content of what the student says rather than on the format, and keep in mind that regardless of the type of communication the student is always an equal intellectual participant in the class. It is also beneficial to resist the temptation to complete words and phrases for the speech-impaired student. By patiently accepting and responding to all attempts at communication, the professor can set a mood that aids a student's effective self-expression in class and encourages appropriate reactions from other students.

Speaking Aids

Persons, who cannot speak and who are otherwise physically disabled so that they cannot sign, write, or type, may use a variety of communication aids. Some individuals may use sophisticated electronic "speaking" machines, activated by punching a keyboard with a head pointer or mouth wand (both assistive devices that allow individuals to perform tasks that would ordinarily be performed by hand or finger movement). Others may rely on a spelling board that consists of a layout of the alphabet and a few common words and phrases ("yes" or "no") to which a speech impaired person points and an assistant may speak out loud. Individuals with speech impairments may use devices that provide a "ticker tape" printout or display the message on a calculator-like screen across which the characters move. With less portable devices, the message may be displayed on a TV screen. Most frequently, these students need respect, patience, quiet encouragement, and an opportunity to develop self-confidence in an unfamiliar group.

Accommodations May Include

Oral presentations may be a concern for students with speech impairments and their instructors. It is recommended that instructors openly discuss these concerns with the student and come up with adjustments to oral assignments, if needed. Listed below are several possibilities for alterations.

- Modifications of oral assignments by allowing one-to-one presentations (between you and the student) or the use of a computer with a voice synthesizer.
- Allowing substitutions for oral class reports, where the oral report is not fundamental to the class.

VIII. Students with Mental Health Conditions

Some mental health conditions, such as bipolar disorder, may interfere with the performance of major life activities, such as learning, thinking, communicating, and sleeping. The type, intensity, and duration of symptoms vary from person to person and in each individual across time. They come and go and do not always follow a regular pattern, making it difficult to predict when symptoms and functioning will worsen. Although symptoms of psychological conditions can often be controlled effectively through medication and therapy, some people continue to experience periodic episodes that require further treatment. Accordingly, some people with mental health conditions will need no extra support, others may need only occasional assistance, and still others may require thorough and ongoing support to maintain their productivity.

Signs of Mental Health Conditions

Mental Health Conditions are generally not apparent. Therefore, faculty and staff are unlikely to know if a student has a mental health condition unless he or she chooses to discuss it. Disclosure is a personal decision on the part of the student that involves many factors including trust, perceived open-mindedness and support of the faculty, security that knowledge of the mental health condition will be kept confidential and general comfort.

In addition, many individuals first develop symptoms of mental illness between the ages of 15 and 25. College students who fall into this category, may be unsure of what is happening to them, not fully recognize the impact that symptoms are having on their academic or social performance,

and/or be unaware of effective treatments and supportive services that are available to them.

Academic Considerations

It is impossible to generalize about the characteristics of all students with psychological disabilities. When asked about how their psychological symptoms affect functioning in school, some students cite difficulty in maintaining concentration. Students who take medications to control their symptoms may experience side effects such as: excessive thirst, drowsiness, nervousness, difficulty focusing on multiple tasks at the same time (especially amid noise and distractions), blurred vision, or hand tremors.

Of course, the strengths and weaknesses of each student must be assessed individually, regardless of the presence of a disability. The student's ability to perform well in class will depend not merely on the presence or absence of psychological symptoms but on his or her past experiences, knowledge of the mental health condition, and skills for effective coping.

Services for Students with Mental Health Conditions

Because symptoms of mental health conditions vary broadly, as does the level of impairment experienced by each person at any one time, it is impossible to list accommodations that work for all students with psychological disabilities. If a student has contacted the office of Services for Students with Disabilities (SSD), provided us with documentation that clarifies that he or she has a mental health condition that qualifies as a disability, and requests intervention on his or her behalf, recommendations for accommodations will be written in a student's verification letter created by SSD. The student is then responsible for delivering a copy of this letter to each instructor from whom he or she is requesting accommodations. If a student is struggling but has not provided you with a verification letter, you may choose to discuss your concerns with him or her in privacy and, if needed, to make a referral to the SSD office.

Like all students, those with mental health conditions may benefit from well-organized teaching and classroom management practices. Best practices include:

- Approach each student with an open mind about his/her strengths and abilities.
- Clearly delineate expectations for performance.
- Deliver feedback on performance, both positive and corrective, in a timely and constructive fashion.
- Make yourself available to consult with students during regular office hours and through contact by telephone and email.
- Demonstrate flexibility and fairness in administering policies and assignments.

Some students with mental health conditions may need to take more frequent breaks, have food and drink with them in class (due to side effects of medications they are taking), and/or use testing accommodations, such as extended time and a distraction-free environment for testing.

Popular Misconceptions about People with Mental Health Conditions

Myth #1: Mental Health Conditions Are Uncommon

Recent estimates by the federal government indicate that 3.3 million American adults (approximately 2 percent) have a serious mental health condition. The National Institute of Mental Health estimates that one out of every five people in the U.S. will experience a mental health

condition in his or her lifetime, and that one in four of us knows someone personally who has a mental health condition. In all likelihood, one or more of the college students and faculty/staff you work with will experience a mental health condition.

Myth #2: Mental Health Condition is Something People Choose to Have

It is important to know that mental illness is not caused or necessarily prolonged by any moral weakness. Additionally, it is not something that an individual can merely "snap out of" by choice.

Myth #3: People with Mental Health Conditions Are Likely to be Violent and/or Disruptive

This myth is reinforced by the way people with mental health conditions are portrayed in the movies, television, and news media, as frequently and randomly violent. Data from scholarly research does not support this sensationalized picture of people with psychological disabilities. Research further indicates that students with mental health conditions are no more disruptive than other students.

Should a student's behavior seem threatening or be disruptive to class, it is important to remember that, like all U of M students, they are required to meet the University's code of conduct. Therefore, it is appropriate to follow policy recommendations on handling these situations.

Myth #4: Recovery from Mental Health Conditions is Not Possible

For many decades, a mental health condition was thought to be permanent and untreatable. As a result, people with mental health conditions were hospitalized to separate them from the rest of society. With the discovery of various medications to alleviate symptoms of mental illness, there has been a gradual evolution toward providing treatment and rehabilitation services in the community. Long-term studies have revealed that people with mental health conditions show genuine improvement over time and are able to lead stable, productive lives. Recovery rates are cited as ranging from 25% to 90%.

Myth #5: People with Mental Health Conditions Cannot Tolerate Stress

This myth oversimplifies the complex human response to stress. People with various medical conditions may find their symptoms exacerbated by high levels of stress. Furthermore, people vary substantially in what they view as stressful. Some people find unstructured schedules highly stressful, while others struggle with too much regimentation. Some people need solitude to focus and be productive, while others thrive on high levels of social contact and public visibility. Therefore whether or not a mental health condition is present, success in dealing with stress seems to depend most on how well an individual's needs and daily life circumstances match.

IX. Other Disabilities

A number of students registered at the University of Michigan (U of M) have disabilities that do not specifically fall into the major categories previously discussed. The degree to which these disabilities affect students academically varies widely. At times it is the medication which is required to control symptoms that impairs a student's academic performance, rather than the

condition itself. Common side effects of medications include fatigue, memory loss, shortened attention span, loss of concentration, and drowsiness. The degree of impairment may also vary from time to time because of the nature of the disability or the medication that is taken. Some conditions are stable while others may be progressive.

Epilepsy

Most people who have epilepsy are now able to participate in activities such as sports and lead active, normal lives. Students who have epilepsy generally manage seizure activity through adequate rest, proper diet, and regular medication, and have few problems in the classroom.

The following is a short list of do's and don'ts included here so that the instructor will be prepared in the unlikely event that a seizure occurs during class.

1. Remain calm. Please keep in mind that other students will tend to mirror the emotional reaction of the instructor. Note: the seizure is painless.
2. Do not try to restrain the person. There is nothing you can do to stop the seizure once it has begun. It must run its course.
3. Clear the area around the individual so that he/she does not injure him/herself on hard or sharp objects. Try not to interfere with movements in any way.
4. Don't force anything between the person's teeth. If the person's mouth is already opened, you might place a soft object like a handkerchief between the side teeth.
5. It isn't generally necessary to call a doctor unless the attack is followed almost immediately by another major seizure or the seizure lasts more than ten minutes.
6. When the seizure is over, let the person rest if he/she needs to.
7. Turn the incident into a learning experience for the class. You might clarify that the seizure is not contagious and explain these steps.

Multiple Sclerosis

Multiple sclerosis (MS) is the number one cause of chronic disability among young adults. It may affect the student in a multitude of ways. Because MS most often occurs between the ages of 20 and 40, the college student with MS is apt to be currently adjusting to having a disability. Depending upon the degree to which the MS has progressed, the student's mobility, speech, vision, and emotional state may be affected.

One of the most difficult aspects of MS is that the symptoms have a tendency to come and go but they continue to progress. "In between" periods may last for a few days to months in the early stages. When affected the student may appear as if intoxicated--slurred speech, staggering when walking, and unfocused eyes. Understanding the fluctuations that may occur in the student's behavior makes it easier to understand variations in classroom performance.

The physical adaptations required by the student with MS, if any, will vary from student to student, depending on functional limitation. The most common adaptations required have been discussed in previous sections.

Fluctuating Symptoms

Other conditions that may result in marked fluctuations of behavior and performance include muscular dystrophy, certain types of kidney problems that may necessitate dialysis, AIDS/HIV, cystic fibrosis, diabetes, and lupus.

Pain

Chronic pain may result in limitations in a student's ability to sit for long periods of time in the classroom. In addition, there may be some loss of strength or difficulties standing, walking, climbing, kneeling, stooping, and carrying even mildly heavy objects. The onset of pain may increase with cold weather or sudden changes in temperature.

Students with chronic pain may need to stand or change positions intermittently during class. Therefore, they may ask to be seated in a part of the room where these movements will not be disruptive to the rest of the class or to the instructor. Severe pain may cause an increased number of absences for the student. He or she is still required to complete course assignments.

Respiratory Disorders

Some respiratory disorders can result in significant limitations to activities such as walking and climbing. Persons with these disorders often show a limited tolerance to temperature changes or extremes in temperature, wet or humid conditions, fumes, dust, and smoke.

Medications

Some of the conditions described in this section require medication for control of symptoms. If an instructor has questions about the potential effect of any medications on the student's academic performance, the student can probably provide this information. However, for confidentiality reasons, students always have the choice about what to disclose and not disclose.

Permission to Leave Class

Some disabilities result in the need to consume large amounts of fluids, to urinate more frequently than other students, to move about more than is possible in the classroom to relieve pain, or to take medication or give self-injections during a class period. As a result, the student may need to leave the classroom more frequently than other students.

Considerations for Hidden Disabilities

Many disabilities are obvious and the question then is one of degree of accommodation and assistance required. However, there are many cases in which a faculty member would have no immediate way of knowing that a student has a disability. For example, a student with diabetes, bipolar disorder, or another chronic condition may deal with their disability every day but have no clear symptoms during the class period. Learning disabilities are another common example of non-visible conditions which may become clearer as the course proceeds. The frequency of various non-obvious disabilities is one reason an announcement is strongly recommended at the beginning of each course (see Recommendations section).

Individuals do have the right to keep their disability confidential. For example, a student who is epileptic and on medication may not expect or need any adaptation and might not mention his/her condition to the professor. During a remission period a student with multiple sclerosis may not feel the need to mention the condition. These judgments are up to each student depending on their current situation. Sometimes, however, the student's condition will worsen during the term and they will feel the need to inform you at that time. Faculty members are also welcome to ask a specialist in the Service for Students with Disabilities (SSD) office for information about how a

type of disability may affect a student's academic needs or performance.

X. Recommendations for All Courses

1. Please include this statement in your syllabus and read the statement in class as you discuss the syllabus. This approach indicates the willingness of the faculty member to provide assistance and also preserves students' privacy.

Accommodations for Students with Disabilities

If you think you need an accommodation for a disability, please let me know at your earliest convenience. Some aspects of this course, the assignments, the in-class activities, and the way the course is usually taught may be modified to facilitate your participation and progress. As soon as you make me aware of your needs, we can work with the Office of Services for Students with Disabilities (SSD) to help us determine appropriate academic accommodations. SSD (734-763-3000; <http://ssd.umich.edu>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated as such.

2. Confidentiality of all disability information is essential. At no time should the class be informed that a student has a disability, except at the student's express request. All disability information which the student gives to the faculty member is to be used specifically for arranging reasonable accommodations for the course of study.
3. A detailed course syllabus which can be made available before registration is useful to many students with disabilities.
4. Clearly spell out expectations at the beginning of the course (e.g., grading, material to be covered, assignment due dates).
5. Scanning books can take up to three weeks to complete. So announce reading assignments well in advance for students who are using E-text or other alternative formats.
6. All students, including students with disabilities, will benefit if you start each lecture with an outline of material to be covered during that class period. Briefly summarizing key points at the conclusion of class aids students in clarifying their notes and delineating supporting information from the main ideas you wish them to remember.
7. Present new or technical vocabulary on the blackboard, an overhead, or in a hand out. Providing examples may also convey greater meaning.
8. Give assignments both orally and in written form to avoid confusion.
9. Allow students to tape lectures for reviewing later.
10. Provide adequate opportunities for questions and answers, including review sessions.

11. For exams, supply students with study questions that demonstrate the format as well as the content of the test. Explain what constitutes a good answer and why.
12. Allow students with disabilities who require alternate testing formats to demonstrate mastery of course material by using methods appropriate to the student and the subject matter, for example, extended time limits for testing, taped exams, individually proctored exams in a separate room.
13. When a test is not designed to measure a student's mastery of basic arithmetic or spelling, allow the use of simple calculators, scratch paper, and spellers' dictionaries during exams.

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