

## **Visual Impairments**

### **Description of Impairment**

Visual impairments vary greatly from individuals who have some form of partial sight to individuals who are totally blind. Individuals who are legally blind have visual acuity of 20/200 or less in the better eye with the use of corrective lenses or have a field of vision restricted to 20 degrees or less. Individuals who have low vision have a best corrected vision of 20/70 to 20/200. Individuals with low vision may also be identified as such due to the effects of a wide range of eye diseases (i.e. glaucoma, diabetic retinopathy, etc.). As a result these individuals may experience a loss of central vision, impaired peripheral vision, overall blur, or some combination of these effects. Visual impairments can affect students in different ways as presented in the following examples:

- A student with low vision may have difficulty viewing items through a microscope in the laboratory and may require the use of a projection system.
- A student who is legally blind who may not be able to tolerate reading enlarged print for extended periods of time may require the use of readers, audiotaped materials, or screen readers.

**Students with partial sight** may find that standard written materials are too small to read and small objects are difficult to see. Other students may see objects only within a specific field of vision or see an image with sections missing or blacked out. It is important to remember that there is a wide range of visual abilities among students with partial sight. Visual abilities may fluctuate or deteriorate over time. Visual abilities may vary depending on the situation (i.e. time of day, aspects of natural lighting in the classroom, physical aspects of the classroom, etc.).

**Students who are blind** have difficulty referring to written materials. Students who are totally blind may have visual memory- its strength will depend on the age when vision was lost. Consequently, a student who has been blind since birth may have difficulty understanding verbal descriptions of visual materials and abstract concepts. Some students who are blind use Braille, while other may have little or no knowledge of Braille.

Since students with visual impairments have such varied needs they may use a variety of auxiliary aids such as a closed circuit television (CCTV) which is a page magnifier, Braille 'n Speak, or electronic format of books. These aids assist in gaining access to the classroom; however, they do not ensure access. **The instructor is responsible for ensuring that instructional materials, i.e. lecture notes, overheads, handouts, videos, course websites, etc. are available in alternative formats, as needed. If you need assistance please contact Student Disability Services.**

### **Common accommodations:**

#### **Accommodations provided by Student Disability Services:**

- orientation to campus
- access to textbooks/materials in audio format

- access to adaptive technologies, such as a computer with screen reader or enlargement software
- access to Braille technologies alternative test formats/arrangements (i.e. use of adaptive or Braille technologies, reader/scribe)

**Accommodations provided in the classroom by instructor:**

- preferential seating with full view of instructor and visual aids
- large print materials (handouts, syllabus, etc.)  
(Note: large print is generally defined as 16 to 18 point bold in a basic font)
- access to printed materials (i.e. syllabus, handouts, etc.) on jump drive can allow a student to access those materials using adaptive technologies
- tape recording of class lectures
- use of laptop for note-taking purposes
- extended test time

**Classroom considerations when working with students with visual impairments:**

- provide a script with verbal descriptions of films, videos, slides, charts and graphs, etc.
- use descriptive language
- repeat aloud what is written on the board or on an overhead
- If a student uses a guide dog, keep in mind that a guide dog is a working dog that must be allowed access to campus. Refrain from talking, petting or feeding the dog as this distracts it from its intended purpose. If the guide dog is not under the owner's control, then contact Student Disability Services for further follow-up
- When creating or showing visual presentations, use high contrast values between the text and the background colors. Keep presentations simple, the less visual information in the presentation the easier the student can focus on the main idea. Examples of high contrast: black and white, a light color text on a darker color background. A bright orange and a light yellow would not be high contrast colors

**For more information on working with students with visual impairments go to:**

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