The Process of Universal Design

Universal design is a process that requires taking a macro-view of the application being considered as well as a micro-view of subparts of the application. The following six-step process can be used to apply universal design to any campus course, information resource, service, or other offering:

1. Define the product, environment, service, course, website, or other application to which you wish to apply universal design.
2. Define the "universe," the group who will potentially use the application. Identify the potential diversity within this group with respect to gender, age, size, ethnicity/race, native language, learning style, and abilities to see, hear, move and manipulate objects, and learn.
3. Apply universal design and other selected design principles and standards for good practice to the overall design of the application.
4. Apply universal design to the subcomponents of the application.
5. Develop processes to address the accommodation needs of specific individuals with disabilities using the application for whom the design does not automatically provide access.
6. Test the application with users with diverse abilities, disabilities, and interests and make modifications based on this feedback.

Adapted from the Center for Universal Design at NC State University http://www.design.ncsu.edu/cud/

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Universal Design Activity - Putting it into practice

What is the service/product/area in which I'd like to consider using universal design principles?

Who is the audience and what might their "universe" encompass?

Quick Wins	Short Term Project	Long Term Objective

What are the obstacles to making these things happen?

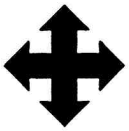
What additional information do I need?

Dis/ability Awareness in the Classroom
Universal Design as it Applies to the Classroom.

Tim McMahon, Teaching Effectiveness Program/Center on Diversity and Community, University of Oregon, timmc@uoregon.edu
Susan Verscheure, Human Physiology, University of Oregon, susankv@uoregon.edu

This workshop is designed for instructors at all levels and will explore the awareness and knowledge needed to help faculty work more effectively with students. The workshop will present the theory of Universal Design and offer practical tools that instructors can take with them.

A Framework for Creating Success for All Students
http://tep.uoregon.edu/resources/diversity/index.html

	Students: Know Who They Are	
Course Content: What We Teach		**Teaching Methods: How We Teach**
	Instructor: Know Oneself	

The model itself is taken from *A Model for Teaching Diversity* by Bailey Jackson in Marchesani, L. S., & Adams, M. (1992). Dynamics of diversity in the teaching-learning process: A faculty development model for analysis and action. In M. Adams (ed.), *Promoting diversity in college classrooms: Innovative responses for the curriculum, faculty, and institutions.* New Directions for Teaching and Learning, Number 52, Winter. San Francisco: Jossey-Bass, 9-20. A shortened version of this chapter is also available online at http://www.diversityweb.org/Digest/W99/multidimensional.html.

Place a statement in your syllabus and make an announcement at the first meeting of the class such as:
"If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon. Please bring a notification letter from Disability Services outlining your approved accommodations."
(From Disability Services, University of Oregon: http://ds.uoregon.edu/fac_guide/opti_lear.htm)

Faculty And Staff Handbook
http://www.umich.edu/~sswd/faculty.handbook.10.html

X. Recommendations for All Courses

1. Please include a statement such as the following in your syllabus and read the statement in class as you discuss the syllabus: "Any student who feels that he/she may need an accommodation for any sort of disability, please make an appointment to see me during my office hours." This approach indicates the willingness of the faculty member to provide assistance and also preserves students' privacy.

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. It takes an average of six weeks to get a book tape-recorded. So announce reading assignments well in advance for students who are using taped materials 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 (e.g., 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.

Universal Design of Instruction
http://www.washington.edu/doit/Brochures/Academics/instruction.html

Principle	Your Course
Equitable Use. The design is useful and marketable to people with diverse abilities. *For example, a professor's website that is designed so that it is accessible to everyone, including students who are blind and using text-to-speech software, employs this principle.*	
Flexibility in Use. The design accommodates a wide range of individual preferences and abilities. *An example is a museum, visited as a field trip for a course, that allows a visitor to choose to read or listen to the description of the contents of a display case.*	
Simple and Intuitive. Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level. *Science lab equipment with control buttons that are clear and intuitive is an example of an application of this principle.*	
Perceptible Information. The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities. *An example of this principle being employed is when multimedia projected in a course includes captions.*	

Universal Design of Instruction
http://www.washington.edu/doit/Brochures/Academics/instruction.html

Principle	Your Course
Tolerance for Error. The design minimizes hazards and the adverse consequences of accidental or unintended actions. *An example of a product applying this principle is educational software that provides guidance and background information when the student makes an inappropriate selection.*	
Low Physical Effort. The design can be used efficiently and comfortably, and with a minimum of fatigue. *Doors to a lecture hall that open automatically for people with a wide variety of physical characteristics demonstrate the application of this principle.*	
Size and Space for Approach and Use. Appropriate size and space is provided for approach, reach, manipulation, and use regardless of the user's body size, posture, or mobility. *A flexible science lab work area designed for use by students who are left- or right-handed and with diverse physical characteristics and abilities is an example of employing this principle.*	

Examples of Instruction that Employ Universal Design
http://www.washington.edu/doit/Brochures/Academics/instruction.html

Example of Instruction	Your Class
Class Climate. *Adopt practices that reflect high values with respect to both diversity and inclusiveness.* Example: Put a statement on your syllabus inviting students to meet with you to discuss disability-related accommodations and other special learning needs.	
Physical Access, Usability, and Safety. *Assure that activities, materials, and equipment are physically accessible to and usable by all students and that all potential student characteristics are addressed in safety considerations.* Examples: Develop safety procedures for all students, including those who are blind, deaf, or wheelchair users; label safety equipment simply, in large print, and in a location viewable from a variety of angles; repeat printed directions orally.	
Delivery Methods. *Use multiple accessible instructional methods.* Example: Use multiple modes to deliver content and motivate and engage students-consider lectures, collaborative learning options, hands-on activities, Internet-based communications, educational software, field work, etc.	
Information Resources. *Assure that course materials, notes, and other information resources are flexible and accessible to all students.* Example: Choose printed materials and prepare a syllabus early to allow students the option of beginning to read materials and work on assignments before the class begins and to allow adequate time to arrange for alternate formats, such as books on tape.	

Examples of Instruction that Employ Universal Design
http://www.washington.edu/doit/Brochures/Academics/instruction.html

Example of Instruction	Your Class
Interaction. *Encourage effective interactions between students and the instructor and assure that communication methods are accessible to all participants*. Example: Assign group work for which learners must support each other and that places a high value on different skills and roles.	
Feedback. *Provide specific feedback on a regular basis.* Example: Allow students to turn in parts of large projects for feedback before the final project is due.	
Assessment. *Regularly assess student progress using multiple, accessible methods and tools and adjust instruction accordingly*. Example: Assess group/cooperative performance as well as individual achievement.	
Accommodation. *Plan for accommodations for students for whom the instructional design does not meet their needs*. Example: Know how to get materials in alternate formats, reschedule classroom locations, and arrange for other accommodations for students with disabilities.	

Resources

Faculty Guidebook□

http://ds.uoregon.edu/DS_Pages/DS_InstrInfo.html

A wealth of information and specific strategies for instructors from the University Of Oregon's Office of Disability Services.

Exam adjustments: http://ds.uoregon.edu/DS_Pages/DS_ExamAdjustments.html
Instructor notification: http://ds.uoregon.edu/DS_Pages/DS_InstrNotification.html
Sign language interpreting: http://ds.uoregon.edu/DS_Pages/DS_SignLang.html
Instructor/Student responsibilities: http://ds.uoregon.edu/DS_Pages/DS_Responsbilities.html

The Faculty Room

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

Outstanding information from the University of Washington's Disabilities, Opportunities, Internetworking, and Technology (DO-IT) program including print and video resources.
Of special interest may be:

Faculty Resources: http://www.washington.edu/doit/Faculty/Resources/Doit/
Faculty Publications: http://www.washington.edu/doit/Faculty/Presentations/Publication/
Video Presentations: http://www.washington.edu/doit/Faculty/Presentations/Video/
Resources for Trainers, Staff, and Administrators:
http://www.washington.edu/doit/Faculty/Trainers/

Universal Design of Instruction

By Sheryl Burgstahler, Ph.D.
(Adapted from the publication *Universal Design of Instruction: Definition, Principles, and Examples*)
http://www.washington.edu/doit/Faculty/Strategies/Universal/
Excellent information from the University of Washington's Disabilities, Opportunities, Internetworking, and Technology (DO-IT) program.
Includes specific instructional strategies:

Large Lectures: http://www.washington.edu/doit/Faculty/Strategies/Academic/Lectures/
Group Work/Discussions:
http://www.washington.edu/doit/Faculty/Strategies/Academic/Groupwork/
Test Taking: http://www.washington.edu/doit/Faculty/Strategies/Academic/Testtaking/
Field Work: http://www.washington.edu/doit/Faculty/Strategies/Academic/Fieldwork/
Science Labs: http://www.washington.edu/doit/Faculty/Strategies/Academic/Science/
Computer Labs: http://www.washington.edu/doit/Faculty/Strategies/Academic/Computerlabs/
Computers/Adaptive Technology:
http://www.washington.edu/doit/Faculty/Strategies/Academic/Adaptive/
Web Pages: http://www.washington.edu/doit/Faculty/Strategies/Academic/Webpages/
Distance Learning: http://www.washington.edu/doit/Faculty/Strategies/Academic/Distancelearning/
Artwork: http://www.washington.edu/doit/Faculty/Strategies/Academic/Artwork/
Writing Assignments: http://www.washington.edu/doit/Faculty/Strategies/Academic/Writing/
International Travel Programs:
http://www.washington.edu/doit/Faculty/Strategies/Academic/International/
Work-Based Learning: http://www.washington.edu/doit/Faculty/Strategies/Academic/Workbased/

Universal Design of Instruction: Definition, Principles, and Examples
by Sheryl Burgstahler, Ph.D.
http://www.washington.edu/doit/Brochures/Academics/instruction.html
Informational brochure from the University of Washington's Disabilities, Opportunities, Internetworking, and Technology (DO-IT) program.

CAST: Universal Design for Learning
http://www.cast.org/
Wide range of information and resources.

Academic Accommodations for Students with Disabilities
http://teaching.berkeley.edu/bgd/disabilities.html
Specific suggestions for teaching in a manner that is accommodating to all students. Taken from *Tools for Teaching* by Barbara Gross Davis.

Making Accommodations for Students with Disabilities: A Guide for Faculty and Graduate Student Instructors
Of particular interest in this article written by Crisca Bierwert from the University of Michigan will be pages 8-10 entitled *Teaching Students with Disabilities: What Faculty Can Do*. (Downloads as a PDF file)

Faculty and Staff Handbook
http://www.umich.edu/~sswd/faculty.handbook.html
Excellent information from the Office of Services for Students with Disabilities at the University of Michigan.

Campus Resources

Disability Services
Location: 164 Oregon Hall
Phone: 541.346.1155
Fax: 541.346.6013
E-Mail: disabsrv@uoregon.edu
Mail: Disability Services 5278 University of Oregon Eugene, OR 97403-5278
Website: http://ds.uoregon.edu/DS_home.html

Teaching Effectiveness Program
Director, Georgeanne Cooper
Location: 64 Prince Lucien Campbell Hall
Phone: 541.346.2177
Fax: 541.346.2184
E-mail: gcooper@uoregon.edu
Mail: Teaching Effectiveness Program, Academic Learning Services, 1213 University of Oregon Eugene, OR 97403-1213
Website: http://tep.uoregon.edu

Additional Campus Resources can be found at:
http://ds.uoregon.edu/DS_Pages/DS_CampusResources.html