



CERRITOS COLLEGE

TECHNOLOGY-BASED LEARNING COMMITTEE

**Standards for
Technology-Based Education**

PREPARED AND REVISED BY

Cerritos College Faculty Senate Committee
on
Technology-Based Learning

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Standards for Online Instruction: Introduction

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Cerritos College is known as a leader in instructional technology. Of paramount importance to the college faculty, students, and administration is the issue of maintaining course quality standards. The purpose of this document is to unify existing college policies related to online instruction, the California Community College Chancellor's Office Distance Education Accessibility Guidelines, and state and federal regulations to provide faculty with a resource for online instruction at Cerritos College, and to provide a framework for the management of instructional technologies.

As stated in the 2011 Distance Education Accessibility Guidelines for the California Community Colleges¹:

The guidelines reflect the concept of Universal Design, a holistic approach to designing inclusive environments; new state regulations regarding distance education; a re-evaluation of the global standards on access; the many new technologies in use today; and many of the barriers unintentionally created by these technologies... Throughout the community college system, distance education continues to grow to include more infrastructure, course offerings, and services. With this growth comes the responsibility to reach and accommodate more students, including those with disabilities.

The following definition of distance education is from the California Code of Regulations, Title 5, § 55200:

Distance education means instruction in which the instructor and student are separated by distance and interact through the assistance of communication technology. In addition, instruction provided as distance education is subject to the requirements that may be imposed by the Americans with Disabilities Act (42 U.S.C. § 12100 et seq.) and section 508 of the Rehabilitation Act of 1973, as amended (29 U.S.C. § 794d).

This definition distinguishes distance education from "correspondence education," which is a more general term that is applied to courses where there is little or no substantive contact between the student and the instructor. Students enrolled in such courses may be at risk of losing their eligibility to receive federal financial aid. Correspondence education is defined in the Code of Federal Regulations (34 C.F.R. § 602.3.) as follows:

Correspondence education means:

¹ "Distance Education Accessibility Guidelines for Students with Disabilities." California Community Colleges Chancellor's Office. 1 Jan 2011
<http://htctu.net/dlguidelines/2011%20Distance%20Education%20Accessibility%20Guidelines%20FINAL.pdf>

(1) Education provided through one or more courses by an institution under which the institution provides instructional materials, by mail or electronic transmission, including examinations on the materials, to students who are separated from the instructor.

(2) Interaction between the instructor and the student is limited, is not regular and substantive, and is primarily initiated by the student.

(3) Correspondence courses are typically self-paced.

(4) Correspondence education is not distance education.

Furthermore, the California Code of Regulations stipulates that the interactions between instructors and students in distance education courses must be regular and effective. (A fuller discussion of “regular effective contact” follows in the next section.) The standards for online instruction in this document pertain to distance education at Cerritos College, as defined above.

I. Regular Effective Contact

The following has been taken from California Code of Regulations, Title 5, Education, Division 6, California Community Colleges, Chapter 6, Curriculum and Instruction, Subchapter 3, Alternative Instructional Methodologies, Article 1, Distance Education, § 55204, Instructor Contact.

In addition to the requirements of section 55002 and any locally established requirements applicable to all courses, district governing boards shall ensure that:

- (a) Any portion of a course conducted through distance education includes regular effective contact between instructor and students, through group or individual meetings, orientation and review sessions, supplemental seminar or study sessions, field trips, library workshops, telephone contact, correspondence, voice mail, e-mail, or other activities. Regular effective contact is an academic and professional matter pursuant to sections 53200 et seq.
- (b) Any portion of a course provided through distance education is conducted consistent with guidelines issued by the Chancellor pursuant to section 409 of the Procedures and Standing Orders of the Board of Governors.

In distance education courses, **regular effective contact** is based on a mutual effort between faculty and students. Ensuring **regular effective instructor/student contact** guarantees that the student receives the benefit of the instructor’s presence in the learning environment, both as a provider of instructional information and as a facilitator of student learning. Subsection (a) stresses the responsibility of the instructor in a DE course to initiate regular contact with enrolled students to verify their participation and performance status. The use of the term “regular effective contact” in this context suggests that students should have frequent opportunities to ask questions and receive answers from the instructor of record.

Students are also responsible for maintaining regular effective contact with their instructor in DE courses. As stipulated in Cerritos College administrative procedure AP 5075, faculty must clear their rosters of “inactive students” no later than the fourteenth week of classes or 75% of the term, whichever is less. Inactive students in distance education classes are those who are no longer attending as determined by regular and substantive interaction between student and instructor

II. Online and Hybrid Definitions

Based on the reporting guidelines of Title 5, the following definitions for the two forms of distance education offered at Cerritos College have been adopted.

Online: All instruction occurs online. **Some instructors may require on-campus attendance for orientation, test taking, or to satisfy other course requirements.** Access to e-mail and the Internet are required. Students may be required to complete work using e-mail, chat rooms, discussion boards, and other instructional tools. **Online courses are designated as OL in the published class schedule.**

Hybrid: Hybrid courses include the combination of traditional in-class instruction with computer-based learning and other instructional technologies. Therefore, students will be required to attend live class meetings on campus as scheduled by the instructor, as well as complete work using e-mail, chat rooms, discussion boards, and other instructional tools. **These courses are designated as Hybrid in the class schedule.**

Orientation information is listed on the Distance Education Program section of the Class Schedule for each section of an online course offered. This information is repeated in the main course listing section of the Class Schedule. The orientation information is published in both the printed and online versions of the Class Schedule.

III. Basic Technology Competencies

Instructors who wish to teach online courses for Cerritos College must be proficient in certain basic technology skills such as the ability to compose content and transfer documents to their hosting web servers. Instructors can acquire these fundamental skills through the Center for Teaching Excellence, through online courses offered in the Educational Technology Program and the Business Computerized Office Technology Program, or on their own effort. The Distance Education Coordinator is responsible for assisting faculty and assessing an instructor’s proficiency; based on need, faculty will be offered assistance, additional instruction, or a Certificate of Technological Competence.

The five areas of basic technology competence include:

1. The ability to operate within one of the campus's standard operating systems (such as Windows or Mac OS) and be able to:

- a. Manage files
- b. Maneuver among multiple applications (multitasking)
2. The ability to use the campus standard word processing application (such as Microsoft Word) and be able to:
 - a. Use various formatting techniques
 - b. Save document in the appropriate file format (such as .doc, .rtf, .html, .pdf, or others as appropriate)
 - c. Edit documents
3. The ability to use the campus standard e-mail application(s) (such as Microsoft Outlook for Windows; Microsoft Entourage or Mail for Mac; and Microsoft Outlook Web Access) and be able to:
 - a. Use address book
 - b. Use group list
 - c. Create and use folders
 - d. Send, save, and open file attachments
 - e. Send and receive messages
4. The ability to use the campus standard Course Learning environment (such as TalonNet) and be able to:
 - a. Manage files
 - b. Use the discussion board
 - c. Navigate efficiently
 - d. Use the chat room
 - e. Post syllabus
 - f. Administer tests and quizzes
 - g. Post grades
5. The ability to make use of the Internet and be able to:
 - a. Use various search techniques
 - b. Download, locate, and open files
 - c. Use Favorites/Bookmarks
 - d. Use various browsers and search engines

IV. Pedagogic Competencies

Cerritos College prides itself in providing innovative instruction in a variety of modes, styles, and approaches. Online instruction will be no less dynamic and individualized; however, the nature of teaching online requires instructors to reexamine and modify their pedagogies. Therefore, all Cerritos College instructors wishing to teach online must demonstrate an awareness of the pedagogic opportunities and constraints inherent in online instruction, understand the concept of Universal Design, and be certified for online teaching by the Distance Education Office. Online instructors must be certified before teaching an online course at Cerritos College.

Instructors can acquire the necessary fundamental skills and online teaching certification through the Online Teaching Workshop, online courses offered in the Educational

Technology Program, or other coursework and workshops approved by the Technology-Based Learning Committee. Faculty professional development and training opportunities in the pedagogical competencies needed for online teaching will be offered throughout the year through the Center for Teaching Excellence.

Faculty seeking to learn more about online instruction and receive online teaching certification on campus can complete the Educational Technology course, EDT 125, "Fundamentals of Teaching Online Courses," offered through the EDT program. (Course syllabus, content, and assignments are available upon request from the Distance Education Office.)

The content of Fundamentals of Teaching Online Courses includes:

1. Planning the online course, including modifications to the syllabus appropriate for online coursework
2. Designing the site
3. Presenting content knowledge
4. Online assessment strategies
5. Providing feedback
6. Evaluating online
7. Addressing accessibility issues

Instructors wishing to teach online must take at least one online course as a student. It is imperative for an instructor to experience this mode of delivery from the student's point of view. EDT 125, offered at Cerritos College through the Educational Technology Program, satisfies this requirement as does the equivalent online certification program offered through the Distance Education Office.

Department Chairs and Division Deans will be advised that instructors seeking to teach online for the first-time have fulfilled the certification requirement by completing EDT 125 or the Online Teaching Workshop. Upon successful completion of one of these programs or the equivalent, the Distance Education Office will forward a copy of the Online Teaching Certificate to the instructor, his or her Division Office, and the Human Resources Office.

Universal Design (*excerpted from Distance Education Accessibility Guidelines for Students with Disabilities, 2011*)

To meet the challenge of access, educational research has come to acknowledge the concept of Universal Design as a paradigm shift, representing an all-inclusive approach to designing barrier-free environments. The term, originally borne in the field of architecture, has found its place in the educational arena, where the design of curriculum and course materials allows us to rethink the design, preparation and delivery of instruction.

Building universally designed courses is a joint responsibility between faculty, trainers, distance education coordinators, access specialists, alternate media staff and administrators who make the commitment through institutional support. Universal Design incorporates those accessibility features into the beginning stages of course design. This is

a proactive approach to building broad usability for many and alleviates the need for numerous individual accommodations.

There are four principles that provide the foundation for Distance Education and web accessibility: *perceivable, operable, understandable, and robust*. The Guidelines and Success Criteria are organized around these four principles, which lay the foundation necessary for anyone to access and use Web content. Anyone who wants to use the Web must have content that is:

1. **Perceivable:** Information and user interface components must be presentable to users in ways they have the ability to comprehend (it can't be invisible to all of their senses), e.g.:
 - Provide **text alternatives** for non-text content.
 - Provide **captions and alternatives** for audio and video content.
 - Make content **adaptable**; and make it **available** to assistive technologies.
 - Use **sufficient contrast** to make things easy to see and hear.
2. **Operable:** User interface components and navigation cannot require interaction that a user is unable to perform, e.g.:
 - Make all functionality **keyboard accessible**.
 - Give users **enough time** to read and use content.
 - Do not use content that may cause **seizures**.
 - Help users **navigate and find** content.
3. **Understandable:** Information and the operation of user interface cannot be beyond the users' comprehension, e.g.:
 - Make text **readable and understandable**.
 - Make content appear and operate in **predictable** ways.
 - Help users **avoid and correct mistakes**.
4. **Robust:** Content must be **robust enough** that it can be interpreted reliably by a wide variety of user agents, including assistive technologies, e.g.:
 - Maximize **compatibility** with current and future technologies.

V. Accessibility Requirements

Cerritos College is committed to having effective communication with the widest audience possible; therefore, all online instructors must provide accessibility for students with disabilities. Online instructors may obtain assistance in maximizing accessibility of course materials through the Distance Education Office and/or Center for Teaching Excellence. Accessibility requirements of the Americans with Disabilities Act of 1990 (42 U.S.C. 12100 et seq.), Section 508 of the Rehabilitation Act of 1973 (29 U.S. C. § 794d), and California Government Code section 11135 apply to all methods of content delivery.

Attention to access is required whether courses entail the use of print media, audio or video conferencing (live or pre-recorded), the Internet, or any software. Specifically:

1. All web-based material must be presented using the accessibility guidelines in the Cerritos College Web Handbook
2. Any visual enhancements must have “alt” tags and alternate text descriptions to provide access for students with visual impairments.
3. Sound enhancements and video presentations must have closed captioning or a transcript.
4. When necessary, text versions of web pages must also be made available.
5. Course web pages and course syllabi should include a statement requesting students with disabilities to apprise the instructor of limitations so that reasonable accommodations can be met in a timely manner.
6. When access is not compatible with a student’s disability, the instructor must make available alternative methods of instruction.
7. Additional resources are available through the Chancellor’s Office High Tech Center Training Unit and the Distance Education Accessibility Guidelines for Students with Disabilities, 2011.

Basic Requirements for Distance Education (*excerpted from Distance Education Accessibility Guidelines for Students with Disabilities, 2011*)

Distance education resources must generally be designed to provide “built-in” accommodation (i.e., closed or open captioning, descriptive narration) and/or interface design/content layout, which is accessible to “industry standard” assistive computer technology in common use by persons with disabilities.

Adoption of access solutions which include assigning assistants (i.e., sign language interpreters, readers) to work with an individual student to provide access to distance education resources should only be considered as a last resort when all efforts to enhance the native accessibility of the course material have failed. This is particularly true since, for several years, colleges have received funding to assist them in providing access to distance education. In the event that a student files a discrimination complaint, a district relying on the use of readers or interpreters to make a distance education course accessible will bear the burden of demonstrating that it was not possible to build in accessibility.

Distance education courses, resources and materials must be designed and delivered in such a way that the level of communication and course-taking experience is the same for students with or without disabilities.

Any DE courses, resources or materials purchased or leased from a third-party provider, or created or substantially modified “in-house” after August 1999, must be accessible to students with disabilities, unless doing so would fundamentally alter the nature of the instructional activity or result in undue financial and administrative burdens on the district.

The college is responsible for assuring that distance education courses, materials and resources are accessible to students with disabilities. All college administrators, faculty and staff who are involved in the use of this instructional mode share this obligation. The

Chancellor's Office will make every effort to provide technical support and training for faculty and staff involved in the creation of accessible distance education courses, resources and materials.

VI. Additional Requirements for Online Instructors

It is the desire of the Cerritos College Faculty Senate that first-time online instructors meet all of the requirements established by the Technology-Based Learning Committee and passed by the full Senate initially in May 1998, and revised subsequently on 9/12/00, 11/20/07, 12/1/11, and [date TBD].

Cerritos College will provide the support necessary for online instructors to meet the following requirements:

1. First-time online instructors will agree to be mentored during the entire first semester by online course mentors approved by the Distance Education Office at Cerritos College.
2. First-time online instructors will agree to be mentored during the semester preceding the offering of an online course.
3. First-time online instructors will agree NOT to teach more than one online course for the first semester.
4. Any course to be taught online must be a course that the online instructor has had adequate training and preparation to teach.
5. All online instructors will use TalonNet as the portal (access point) for their course through which students can access at least the following information:
 - Course syllabus
 - Assignment due dates
 - Instructor office hours
 - Instructor e-mail address
6. All online instructors will demonstrate technical and pedagogical competence with College Standards as set forth by the Technology-Based Learning Committee and approved by the Faculty Senate, and be certified for online teaching by the Cerritos College Distance Education Office.
7. All online instructors will agree to make all course materials accessible to persons with disabilities. Instructors will agree to meet with personnel in the Distance Education Office and/or Center for Teaching Excellence (CTX) for assistance in maximizing accessibility of course materials (See Section VI).
8. As a component of the evaluation process, all online instructors should include in their teaching portfolio the syllabi for their online class or classes, examples of supplementary material that is provided online, and other examples of effective online teaching.

VII. Student Competencies

Student Skills and Expectations: In order to support student success in online classes, students and faculty should be aware of core skills and expectations that promote student achievement in an online learning environment. Students who are interested in taking an online class for the first-time are encouraged to take EDT50-Preparation for Online Learning before enrolling in another online class. Faculty may require students to take the general orientation for online courses, which can be found on the Distance Education website (<http://cms.cerritos.edu/de/online-orientation/>). This online orientation includes a quiz. A certificate will be E-mailed to the instructor and the student upon completion of the orientation and quiz. Students may also receive assistance in developing their online skills in the Student Success Center.

Student Skills

1. Basic computer skills
 - a. Send and receive e-mail and attachments
 - b. Download files
 - c. Fundamentals of file management
 - d. Search and navigate the Internet using a browser
2. Awareness of institutional support services (Student Success Center, for example)
3. Successful completion of prerequisite coursework
4. Organizational skills
5. Reading comprehension
6. Writing skills
7. Communication skills
8. Time-management skills
9. Proficiency in any adaptive computing software/hardware needed to access the online course material when there is a disability-related barrier.
10. Recommended completion of online orientation or equivalent preparation (such as EDT 50)
11. Familiarity with college course management system (such as TalonNet)

Student Learning Expectations

1. Motivated and focused
2. Awareness of online expectations, environment and workload
3. Autonomous, self-motivated learner
4. Positive attitude toward technology
5. Intention to complete the course
6. Ability to work independently
7. Ability to work as a group member
8. Having the confidence to follow directions and to ask for assistance

VIII. Course Outline Approval for Online Delivery

The Cerritos College Curriculum Committee must approve courses for online delivery. The course outlines must be altered to address new technology-mediated delivery method. Guidelines for altering course syllabi to address online delivery are provided in the course, EDT125-Preparation for Online Teaching and through the online certification workshop. The department making the submission is required to answer a series of questions developed to address feasibility, adequate course and instructor preparation, and other concerns of the committee.

DISTANCE EDUCATION QUESTIONS

Revised by the Curriculum Committee 4-12-07

1. Describe how this course will be presented as a distance education (DE) course so that objectives, as written in the course outline, may be met. How will you ensure both the rigor and quality of instruction of the DE course as compared to the traditional course?
2. Describe how you will address the educational effectiveness of this course (including assessments of student learning outcomes, student retention, and student satisfaction) to ensure comparability to traditionally-delivered courses.
3. Regular and effective contact, per Title 5, Section 55376, takes place through office visits, telephone conversation, e-mail exchanges, virtual office hours, traditional course lectures, group or individual meetings, orientation and review sessions, video conferences, supplemental or student sessions, and/or field trips.

The use of the term, “regular effective contact” suggests that students should have frequent opportunities to ask questions and receive answers from the instructor of record. Describe how this will take place.

Regular and effective weekly contact is the responsibility of the instructor, not the student.

Describe how distance education meets these requirements for this course as compared to the traditional course, including class size?

Describe how you will ensure effective interaction among students. If student interaction does not take place, how will this impact the course?

4. Education Code 76365 specifically mentions textbooks and instructional materials as having continued value outside of the classroom. Describe how you will ensure this.
5. Title V Section 59402 (c) requires that tests be provided free to students. How will this be done with this course?

6. How will attendance policies for this course, as applied to traditional classroom courses, be applied and measured in this distance education course?
7. If the course contains a lab element, how will lab work, as opposed to homework, be measured?
8. Does the offering of this course through distance education require any special equipment and materials beyond a basic computer and web browser? How will you meet these needs?
9. Accessibility requirements of Section 508 of the Americans with Disabilities Act apply to all content delivery. How will you address access for students with disabilities? Attention to access is required if your course entails the use of print media, audio or video conferencing (live or prerecorded), the Web, or software such as video laserdisc, CD-ROM, or DVD.

Appendix: Accessibility Checklist for Web Content and Online Courses

Element	Accessibility Concern	Suggestions	✓
<i>Graphics</i> (those that are important to page content)	Include alt tags and/or long descriptions (if the graphic element provides detailed information). <i>Best practice:</i> Include a long description tag and a “D-link” for those using older screen readers.		
<i>Flashing/ Flickering Objects</i>	Avoid flashing and flickering graphics and text. Flickering items trigger seizures for people who have seizure disorders.	If you have a graphic that you must use that flickers, create a separate link to it with a warning that it flickers.	
<i>Video Clips</i>	Include captions for students who are deaf or hard-of-hearing and audio descriptions of video for students who are blind or have low vision.	Use an application that will assist you in creating captions or audio descriptions of your video clips, such as Camtasia and Dragon Naturally.	
<i>Audio Clips</i>	Include a link to transcripts of any audio clips that you use.	 Transcript of Lecture #4	
<i>Tables for Layout</i>	Make sure a screen reader will read the table in an order that makes sense to the user. Use a validation tool that will show you the order that the cells will be read by a screen reader.	If your site is already on the web, view it using WAVE 3.01: www.wave.webaim.org If your site is a work in progress, still on your PC, use A-Prompt. It can be downloaded for free at: http://aprompt.snow.utoronto.ca	
<i>Color and Contrast</i>	Make sure text is on a background with good contrast. Avoid using color only to convey meaning.	Black text on a white or a light background is ideal. If you use color as a method for categorizing topics or coding items, make sure there are other designations. Use shapes and color or text and color.	
<i>Related Links</i>	Make sure the sites that you recommend to students are accessible or be prepared to provide the content in an alternate format.	Check the sites using an accessibility validator. WAVE 2.01: www.wave.webaim.org WAI: http://validator.w3.org	

Adapted from: Accessibility Checklist for Web Content and Online Courses–A Self-Assessment Tool–Univ. of Arkansas at Little Rock Project PACE