IPFW Online Course Design Standards and Peer Review Process

The IPFW Online Course Design Review Standards serve a variety of useful purposes.

1. Promote systematic reflection on elements of course design that promote a quality learning experience for students and achievement of the desired learning outcomes.
2. Encourage collegial dialogue with other online teachers at IPFW and the sharing of expertise and innovative ideas across disciplines.
3. Create a potential for "spillover" of online teaching strategies into classroom teaching.
4. Provide documentation that may be used as evidence of teaching effectiveness.

Online Course Design Standards

These standards have been developed by a team of IPFW faculty members who are experienced online teachers and who have been trained in formative peer review of online course design. The team has agreed that the standards listed in this document are critical to the effectiveness of an online course. They have been adapted for use at IPFW from the research-based Quality Matters™ rubric and serve as the guide for the formative peer review process and development of an Action Plan for continuous improvement of course design.

Formative Peer Review Process

Step 1: Once you have developed your course using the design standards in this document, request a design review of your course by contacting Xiaokai (Katie) Jia in CELT (481-6368, email: jiax@pfw.edu). You will then be paired with a peer reviewer whom **you** will contact to discuss:

- A time and place for your meeting prior to the review to address any questions about the process, any special concerns that should be considered, to understand your goals and objectives for the course, and any other questions about the course that will help the reviewer perform the review;
- Adding the reviewer to your course in the "Teaching Assistant" position during that timeframe;
- Arranging a time to meet after the review to discuss comments and suggestions and to formulate your Action Plan.

Step 2: Using the standards in this document, the reviewer will examine the design of the course, making note of the manner in which each standard has or has not been met. When the reviewer has completed his or her review, the reviewer will meet with you at the time you arranged in your first meeting. The second meeting is an opportunity to share observations about the course, ask clarifying questions, make suggestions, and share ideas for enhancing the course.

The reviewer will provide you with a copy of his or her comments and recommendations. This document belongs to you and you will determine what will be done with it. You may use it to document your teaching, as a basis for systematic reflection, or as a benchmark, among other uses. Please do not, however, ask the reviewer to write a letter for your promotion and tenure dossier based on this review. This process is meant to be formative in purpose.

The reviewer will notify CELT that the review was completed. At this point you may choose to end the peer review process, or, based on your discussion, formulate an Action Plan that will be feasible for you to complete in approximately four months from the completion of the review.

Please note*: Your review will automatically be placed in the "Unassigned" category if you are unable to complete Steps 1 and 2 within six months of your initial contact. You will be notified of the change in status and invited to initiate the process again at a time of your choosing.*

Step 3: To receive a Certificate of Continuous Improvement of an Online Course and the $250 incentive, you must develop and implement an Action Plan. Your reviewer can assist you in making the plan. After you have implemented your Action Plan, submit an application for your certificate and incentive online at the CELT "Document your teaching" page.

Any questions about this process should be directed to Xiaokai (Katie) Jia in CELT (481-6368, email: jiax@pfw.edu).

NOTE: The last page provides URLs for web sites listed in this document.

Overview of IPFW Online Course Design Standards

Standard 1: Course Introduction

The overall design of the course is made transparent to the student at the beginning of the course.

Standard Number	Met or not yet met?
1.1 Effective guidance is offered so that, within the first week of the semester, students may become familiar with requirements, expectations, and where to find various components of the course. **Comments:**	
1.2 Navigation throughout the components of the course is intuitive, consistent, logical, and efficient. **Comments:**	
1.3 The instructor's background information is available to the students. **Comments:**	
1.4 Clear standards are set for instructor responsiveness and availability. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to enhance "Course Introduction."]	

Standard 2: Student Preparation in Technology

Technologies used in the course are made available to students and they are given instructions to prepare for use of these technologies.

Standard Number	Met or not yet met?
2.1 Instructions explain clearly how to open, view, obtain, and use all materials required for the course. **Comments:**	
2.2 Technologies and software applications needed for the course are current and readily obtainable. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to enhance "Student Preparation with Technology."]	

Standard 3: Student Support Services

The course facilitates student access to IPFW services essential to student success.

Standard Number	Met or not yet met?
3.1 Course instructions articulate or link to IPFW online learning support, including the IT Services Help Desk, online learning tutorials, and Blackboard Learn tutorials. **Comments:**	
3.2 Course instructions articulate or link to an explanation of how other IPFW student support services can help students reach their educational goals. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to improve "Student Support Services."]	

Standard 4: Course Goals and Objectives

The course design is transparent, so that students clearly see how fulfilling the assignments will lead them to successful completion of the course goals and mastery of the learning objectives.

Standard Number	Met or not yet met?
4.1 Course objectives or goals are clearly described and measureable. **Comments:**	
4.2 All institutionally mandated course standards must be identified. These standards include the IPFW Baccalaureate Framework, IPFW General Education Requirements, and professional accreditation standards that may apply to a course. **Comments:**	
4.3 Instructional materials, resources, and activities align with course goals and this alignment is made clear to the students. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to improve "Course Goals and Objectives."]	

Standard 5: Interaction Design

Course design supports the quality and frequency of meaningful interactions for student learning and success, whether designed to encourage instructor-student, student-content, or student-student interactions.

Standard Number	Met or not yet met?
5.1 Student engagement is encouraged through meaningful instructor-student, student-content, and student-student interactions. **Comments:**	
5.2 The interactions included in the course support achievement of course goals and objectives. **Comments:**	
5.3 Requirements for the different types of interactions are clearly articulated, including the reasons or purposes for these interactions. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to improve "Course Goals and Objectives."]	

Standard 6: Assessment and Evaluation of Student Work

Assessment and evaluation policies of the course are clearly stated before any student work is assigned. Assessment strategies evaluate student progress by reference to stated learning objectives, and are integrated into the learning process.

Standard Number	Met or not yet met?
6.1 The course's assessment policy is clearly stated so students can develop and apply specific knowledge, behavior, and skills and gainfully direct their effort and time in the course. **Comments:**	
6.2 The learning goal(s) of each assessment are clearly stated and are explicitly aligned to one or more course learning objective(s) for the students. **Comments:**	
6.3 Evaluations should measure the student performance they claim to measure, occur periodically to inform students on their progress, and clearly align with the learning objectives and activities in the course. Students should also be informed in advance of the criteria for scoring or grading (e.g., what rubric will be used). **Comments:**	
RECOMMENDATIONS [Enter any recommendations to improve "Assessment and Evaluation of Student	

Standard Number	Met or not yet met?
Work."]	

Standard 7: Course Accessibility to Students

The face-to-face and online course components are accessible to all students.

Standard Number	Met or not yet met?
7.1 The course syllabus includes IPFW's disability statement and a link to Services for Students with Disabilities. **Comments:**	
7.2 Course materials are multimodal and alternatives to all non-text content are provided so that all learners have access to equivalent information. **Comments:**	
7.3 Course materials are designed to maximize usability by improving readability and clarity. **Comments:**	
7.4 Multimedia resources are easy to view, operate, and interpret. **Comments:**	
RECOMMENDATIONS [Enter any recommendations to improve "Course Accessibility to Students."]	

ACTION PLAN

[Enter summary of action plan for making changes and criteria for evaluating evidence of change. This will become the basis for award of a *Certificate of Completion of Continuous Improvement of an Online Course*. Please list at least one change and corresponding criteria.

After you have implemented your Action Plan, go to the Document Your Teaching page on the CELT web site to apply for your Certificate.]

GENERAL COMMENTS

[Enter any general comments here.]

Online Course Design Standards with Annotations

Standard 1: Course Introduction

The overall design of the course is made transparent to the student at the beginning of the course. .

1.1 Effective guidance is offered so that, within the first week of the semester, students may become familiar with requirements, expectations, and where to find various components of the course.

Folders or documents with titles such as Read me first, Start here, Introduction, Welcome, Course outline, or Syllabus, help the students to get a birds-eye view of the course. This document or folder should clearly introduce the basic course requirements. These basic course requirements can in turn introduce and lead the students to more detailed requirements as required by the subsequent Standards, either through links or course information in other documents or folders.

The introductory information should include indications of which Blackboard Tools will be used (for example, Email, Messages, Assessments, Assignments, Chat), and for what purpose (weekly or monthly schedule, due dates, software to be used, course timeline, prerequisites, expectations, homework, reports, grading policy, instructor policies, instructor background, available university services). In case of a hybrid course, this overview should clearly indicate the course activities that are to be covered in class (f2f) or online or both. Any course component that is planned to be introduced later in the course should also be clearly indicated at the beginning of the semester.

If the course is likely to be amongst the first a student would take online, consideration should be given to offering or requiring an introductory assignment/assessment for students to assess how well they understand the course design, requirements, and expectations.

Note: It is not advisable to give all the detailed requirements of the course in one document, commonly referred to as the “syllabus”, as it may get too long, making it difficult to easily find a specific topic. It may be tempting for the instructor to write the syllabus in this fashion, as a number of subsequent Standards may be satisfied by using one document. On the other hand, some of the introductory requirements may not lead to any detailed requirements, for example, listing of course prerequisites so that a separate document is not called for.

Upon request, CELT can enroll faculty in a sample Exemplary Blackboard Site. Contact Ludy Goodson (goodsonl@pfw.edu), CELT Associate Director, to gain access as an individual or as a department.

1.2 Navigation throughout the components of the course is intuitive, consistent, logical, and efficient.

Navigation refers to the process of planning, recording, and controlling movement of a learner from one place to another in the online course.

Even though there may be a clear description of all the components used in the course, the ease of navigation from component to component based on component interrelationships can make or break the course. For assistance in choosing an effective organizing strategy for your course, contact CELT’s Instructional Consultant/Designer.

1.3 The instructors’ background information is available to the students.

The instructor’s introduction should create a sense of connection between the instructor and the students. The instructor should try to strike a balance of professionalism and approachability. Give consideration to the pedagogical value of your introduction and the diversity represented in your class. The introduction can be of any form – text, graphical, audio, or video. You are encouraged to contact CELT for assistance with developing multimedia and with delivery of streamed audio and video files.

1.4 Clear standards are set for instructor responsiveness and availability.

Interactions between the instructor and the students are designed to facilitate students’ understanding and mastery of the objectives. A clear statement of instructor responsibilities is an important component of an online or hybrid course. This includes descriptions of when and how the instructor is available for meetings, when and how quickly the instructor will respond to e-mails, and when and how quickly the instructor will grade and provide feedback on assignments/assessments.

Students are better able to manage their course activities when the instructor has communicated these expectations.

By sharing these expectations, the instructor also deflects unrealistic student expectations of 24/7 service from the instructor. Frequently these expectations are conveyed in the syllabus or the "meet the instructor" message.

The communications between student and instructor may be one-to-one (personal emails) or one-to-many (discussion postings, class announcements).

Standard 2: Student Preparation in Technology

Technologies used in the course are made available to students and they are given instructions to prepare for these technologies. .

2.1 Instructions explain clearly how to open, view, obtain, and use all materials required for the course.

All required technologies (e.g., Acrobat Reader, media players, etc.) are easily downloaded, provided by the institution, available for purchase at the bookstore, or otherwise easy to obtain. Clear instructions for installation and use are included within the context of the course.

Students are informed of how to open folders, items, files, electronic textbooks, publisher resources, databases, websites, media, or other supplemental materials required for the course. They also are advised of what specialized technologies are required such as iPads or SmartPhones, and required software and costs involved, such as required “apps.”

2.2 Technologies and software applications needed for the course are current and readily obtainable.

If the course requires the use of external databases or websites, instructions on their use and information regarding technical support for those products are clearly indicated.

Standard 3: Student Support Services

The course facilitates student access to IPFW services essential to student success. .

3.1 Course instructions articulate or link to IPFW online learning support, including the IT Services Help Desk, online learning tutorials, and Blackboard Learn tutorials.

Here are some examples of instructions for students that could be included in the course syllabus or student resources document. While every online course at IPFW is a little different, there are many general resources at IPFW to help you successfully navigate a typical online course.

- The Division of Continuing Studies has a helpful FAQ about online courses and a quiz concerning whether online learning is a good idea for particular students. CELT also has a more detailed online readiness self-assessment that will assist students in making this decision.
- Information Technology Services can assist you with a wide variety of technical problems (email: helpdesk@pfw.edu; 481-6030; ITS Get Help web) including learning more about many Blackboard Learn features.
- If you can come to campus, you may also get help with multimedia from Studio M. Their Studio M, Multimedia Resources Lab is located in Walb 220 (481-0116, studiom@pfw.edu).
- Students who must take proctored exams should contact the Testing Services office (481-6600) as quickly as possible to arrange to sit for their exams.
- Students should also be aware of the proper etiquette surrounding discussion board postings and email usage.

3.2 Course instructions articulate or link to an explanation of how other IPFW student support services can help students reach their educational goals.

In the syllabus or another course document, the instructor may direct students to a link where this information can be found. For example:

- Student support services can be found at the IPFW Center for Academic Support and Advancement (CASA). More specifically, the Writing Center (located on the second floor of Helmke Library) can assist students in outlining, composing, and proofreading their written work.
- Two resources with which all students should be familiar are the IPFW Student Handbook and course bulletin.

The instructor can include a file with the list of IPFW support services and links posted at the course's Blackboard site or add the list of services provided in the IPFW syllabus template or both.

Standard 4: Course Goals and Objectives

The course design is transparent, so that students clearly see how fulfilling the assignments will lead them to successful completion of the course goals and mastery of the learning objectives. .

4.1 Course objectives or goals are clearly described and measureable.

Course objectives that are not institutionally mandated clearly describe what students are to gain from the online course. These objectives should be based on the course description as listed in the current IPFW Bulletin. If course objectives are institutionally mandated, this standard can be marked as met even if they do not clearly describe students' expected performance.

Appropriate use of technical words in the objectives is encouraged to help describe the objectives clearly. The revised Bloom's Taxonomy Action Verbs provides the definition and examples of action verbs for learning objectives. The Writing Measurable Learning Objectives page has examples and guidance on how to revise learning objectives. The Krathwohl's Affective Domain defines and shows examples of behaviors that indicates attitudes of awareness, interest, attention, and responsibility.

The course designer should consider using multi-level description of objectives to avoid confusing the students on what objective is being pursued at any given time, for example, having overall course objectives at the beginning and chapter-level or weekly objectives may help the student learning process.

4.2 All institutionally mandated course standards must be identified. These standards include the IPFW Baccalaureate Framework, IPFW General Education Requirements, and professional accreditation standards that may apply to a course.

For more information and assistance with general education proposal development, refer to the Contact tab of General Academic Programs.

If the course has assignments involving reading, writing, quantitative work, or critical thinking skills, appropriate mention of IPFW baccalaureate framework foundations that are met should be clearly pointed out when those assignments are given. Students also can be given a link to the IPFW Baccalaureate Framework. Similarly, for courses that meet General Education Requirements, related outcomes should be clearly pointed out and how the course meets those requirements (refer to Sample General Education Syllabus).

4.3 Instructional materials, resources, and activities align with course goals and this alignment is made clear to the students.

The course materials, resources, and activities enable students to achieve the stated learning objectives. Fulfilling this aspect of the Standard is left to the imagination of the course designer in using a variety of materials, resources, and activities other than those provided in the textbook. However, the availability of resources should be considered for distance learning students. Learning activities, especially peer to peer discussions (with the exception of student introductions), should be clearly relevant to a specific learning goal and should not carry time burdens either to the student or to the instructor that do not match those goals.

A certified reviewer who may not be an expert in the field of the course should be able to assess the overall fulfillment of this Standard.

Standard 5: Interaction Design

Course design supports the quality and frequency of meaningful interactions for student learning and success, whether designed to encourage instructor-student, student-content, or student-student interactions.

Whether instructor-to-student, student-to-content, or student-to-student, meaningful interactions, play a key role in improving student performance and course completion (Rust, 2006). Students who fail an online course tend to interact less (Davies & Graff, 2005). However, research also shows the quantity of interactions without substance actually can diminish online success (Moore, 2014). This happens when interactions are arbitrary or forced in unnatural ways. More ideas and examples of interaction design are available at: The Online Classroom's "Online Student Engagement Tools and Strategies," and Faculty Focus: "A Checklist for Facilitating Online Courses."

5.1 Students engagement is encouraged through meaningful instructor-student, student-content, and student-student interactions.

Interaction design can be accomplished in many ways within the online technology interface. Group work, communication in an online office, responses and feedback on assignments, discussion forums, are just a few examples of the possibilities. Regardless of technology, students are more successful online when they have the opportunity to communicate promptly with instructors and their classmates (Tornsaufer, 2010). They benefit from opportunities designed into the course that support them in creating something, solving a problem, making a decision, or forming a judgement (Funk, 2007).

Instructor-to-Student: These interactions may be *instructional*, *evaluative*, or *motivational*. Early interactions with students, virtual online office hours where students can post questions and get instructor feedback, and individual motivational emails help students to feel more connected (Ashram, 2004) and support successful course completion (Robb & Sutton, 2014). Instructors at IPFW have also made dynamic use of FaceTime, Skype, Facebook, Twitter, and other forms of interactions. It is more important that the interaction design fit with the goals and content of the course than exactly what methods of interactions are chosen. Refer to Robb and Sutton (2014) for examples of sample motivational messages.

Student-to-Content Interaction: Interaction with content goes beyond simply reading or viewing something. Methods to support the student's interaction with content can take many forms, such as various media representations, connections with a subject librarian for conducting research, guidance to students in how to study and grapple with concepts, quizzes, and discussion forums that require them to apply concepts.

Student-to-Student Interaction: Interaction design that stimulates meaningful student-to-student interactions could include opportunities for students to collaborate, share ideas, or share their experiences related to what they are studying.

Discussion forums are one area for student-to-student interactions. They can be set up for different purposes, such as "discuss to comprehend," "discuss to critique," "discuss to construct knowledge," "discuss to share improved understanding," (Gai, Wang, & Sun, 2009, p. 69), or to make a judgment, decision, or evaluation on a controversial issue or problem. Some student discussions become more productive when students are asked to share examples for a concept from their own experiences, or from research. Others benefit from asking students to provide evidence and reasoning, or a counter-example to a common belief. In large classes, collaborative group work can be easier to manage than whole classroom discussions.

One successful method is the "jigsaw" technique in which each member of a group is assigned to become an "expert" on one aspect of an issue or problem and report findings to both the instructor and the group. The group then collaborates to make a decision, judgment or recommendation. The Jigsaw Classroom explains the jigsaw steps. Other ways to structure interactions include peer review, development of wikis, group assignments and the use of blogs, Twitter, and Facebook.

Faculty Focus provides more tips on fostering student-student interaction and wikis in the classroom. Pearce, Mulder, & Baik (2009) provide practical strategies and case studies for involving students in peer review. Minister (2014) gives tips on how to use Twitter for learning, and Miller (n.d.) gives some additional Twitter tips. Pappas (2013) gives more tips on effectively using social media in formal learning.

5.2 The interactions included in the course support achievement of course goals and objectives.

Interactions that lack substance can diminish student success in online courses (Moore, 2014); hence, interaction design should be thoughtful and systematic. Online courses should include interactions that relate to the course goals, enhance student engagement, and support student achievement of the learning objectives.

Instructor-to-Student interactions: Students value communication, feedback, encouragement, and accessibility to the instructor (Bolliger & Martindale (2004) and they are more likely to fail in courses where the instructor does not communicate individually with them (Moore, 2014). On the other hand, the quality and frequency of these interactions increases the likelihood that students will successfully complete an online course (Hawkins, Graham, Sudweeks, & Barbour, 2013; Herbert, 2006).

Student-to-Content interactions: Students benefit from an interaction design that requires them to engage in intellectual, thoughtful interactions with what they are studying (Hu, 2008). Using a backward course design can help identify opportunities for meaningful student-to-content interaction.

Student-to-Student interactions: Not all courses require extensive student-to-student interaction, but students can connect with each other and share resources and knowledge if the course design allows such opportunities. The purpose(s) of student-to-student interaction should be determined prior to implementing these interactions.

5.3 Requirements for the different types of interactions are clearly articulated, including the reasons or purposes of these interactions.

Requirements for the different types of interactions can appear in several areas, such as a syllabus, or in directions that accompany discussion forums, course assignments, or other learning activities. Informing students of these requirements helps to prepare them for what to expect in the course.

Standard 6: Assessment and Evaluation of Student Work

Assessment and evaluation policies of the course are clearly stated before any student work is assigned. Assessment strategies evaluate student progress by reference to stated learning objectives, and are integrated into the learning process.

6.1 The course's assessment policy is clearly stated so students can develop and apply specific knowledge, behavior, and skills and gainfully direct their effort and time in the course.

The instructor should clearly indicate the general grading style to be used in the course. For example, the assignment grade may depend on: showing calculations clearly, organizing arguments logically, avoiding grammar and spelling mistakes, using discipline-specific material correctly, citing sources properly, and turning in work on time.

In addition, the instructor should clearly indicate what is expected in specific or unusual assignments (if any) in the course. Specific assignments could be: group project, research work, community or industry project, oral presentation, class participation, or team activity.

Some of the instructor expectations could be: providing results and conclusions, required number of meaningful postings, examples of meaningful postings, attendance and participation in team meetings, following formatting instructions for written work, or number of quality references used.

6.2 The learning goal(s) of each assessment are clearly stated and are explicitly aligned to one or more course learning objective(s) for the students.

Students need to be able to easily see how the assessments that they complete will help them to meet specific course learning objectives. The instructor, in the syllabus or otherwise, should clearly communicate these connections and alignments.

6.3 Evaluations should measure the student performance they claim to measure, occur periodically to inform students on their progress, and clearly align with the learning objectives and activities in the course. Students should also be informed in advance of the criteria for scoring or grading (e.g., what rubric will be used).

Assessments should evaluate student progress during the learning process, giving students feedback on their progress. Assessments should reference the learning objectives being assessed. Assessments should also provide reasonable ways to measure those objectives. For example, papers and projects include the criteria by which they will be scored or graded, such as a rubric (scoring guide) that students can view along with or in advance of an assignment.

Examples of objective and assessment alignment would include:

- A problem analysis evaluates critical thinking skills;
- Multiple choice quiz tests vocabulary knowledge;
- A composition assesses writing skills; and
- Graded discussions measure content interaction.

Standard 7: Course Accessibility to Students

The online course components (and face-to-face components, in the case of a hybrid course) are accessible to all students.

7.1 The course syllabus includes IPFW's disability statement and a link to Services for Students with Disabilities.

Disabilities Statement

If you have a disability and need assistance, special arrangements can be made to accommodate most needs. Contact the Director of Services for Students with Disabilities (Walb Union, Room 113, telephone number 481-6658) as soon as possible to work out the details. Once the Director has provided you with a letter attesting to your needs for modification, provide me with a copy. For more information, please visit the Services for Students with Disabilities web site.

Additional wording also can be included such as that found in the Model Syllabus for IPFW Faculty:

""IPFW is committed to providing reasonable accommodation and access to programs and services to persons with disabilities. If you have a disability or acquire one, contact the office of Services for Students with Disabilities, (SSD) Walb Student Union Room 113, 260-481-6658."

7.2 Course materials are multimodal and alternatives to all non-text content are provided so that all learners have access to equivalent information.

"The Office of SSD provides free and appropriate academic aids and services including the use of accessible computers and assistive equipment, reader and sign interpreter services, special test proctoring services, academic support and counseling assistance specific to disability issues, and more. SSD also serves the campus community as an advocate/consultant resource on all disability related issues."

Course materials are provided in formats that meet the diverse needs of students.

Examples:

- Videos and animations are captioned, or text transcripts are readily available.
- Visual information, including images, graphs, and tables, are described via an alt-tag, long description, caption, or audio description.
- Tables are set up with headings for columns and rows.
- A document scanned as a PDF graphic is NOT an image. All text in PDFs is selectable and searchable.
- Course materials are multimodal and alternatives to all non-text content are provided so that all learners have access to equivalent information.

- Colors alone are not relied on to convey meaning. The meaning is also conveyed in another way that does not require perceiving different colors.

More information is available at the Services for Students with Disabilities web site. For particular technology applications to support accessibility, refer to the IPFW guide on Learner-Centered Design section on *Technology Applications* and the CELT website on Students with Learning Disabilities.

7.3 Course materials are designed to maximize usability by improving readability and clarity.

The course also should employ appropriate font, color, and spacing to facilitate readability and minimize distractions for the student.
Examples:

- Formatting such as **bold** or *italics* are used in addition to color coding so that the reader need not rely solely on color coding to understand the organization or emphasis in the text.
- Formatting and color coding serve specific instructional purposes. For example, format and color are used purposefully to communicate key points, group like items and emphasize relevant relationships, etc.

Documents have style names (electronic labels) that signal their structure, such as Title, Heading 1, Heading 2, Section, Topic, List, or similar hierarchy of organization. Tables, if used within documents, have style names for each cell.

Microsoft Style Sets are available and editable for this purpose. When saved as PDF, *Options* need to include selection of document properties and tags to preserve style readability in the PDF file. An unstyled document saved as PDF is not "web accessible" – it only opens more readily than other formats.

The IPFW guide on Learner-Centered Design provides information on using styles in the *Best Practices* section under the *Style Sets* heading.

For assistance, the instructor may request CELT Services: Course Design or Technology Consultation or contact CELT's Instructional Consultant and Designer.

In course materials, hyperlinks are embedded in their titles so that the URLs are "behind" the words. URLs, if listed, appear at the end of a document or in a separate file or area with their corresponding titles.

CORRECT WAY TO EMBED URL …the Services for Students with Disabilities web site.
INCORRECT: …the Services for Students with Disabilities web site at http://www.ipfw.edu/disabilities/.

The Office of Institutional Equity has dedicated a portion of its web site to providing information about Web Accessibility.

The instructor should contact IT Services User Technology Support or CELT for assistance in implementing these guidelines.

7.4 Multimedia resources are easy to view, operate, and interpret.

When graphics and animations are used, they enhance the instructional materials without causing distractions. Images are clear enough and sized appropriately for easy viewing. Audio quality is clear. A video window can be resized; resolution is sufficient for viewing. Longer videos (longer than 15 minutes) are broken into short segments or searchable or interactive. Movement through presentations can be controlled. Video play is smooth and without frequent interruptions. All multimedia materials, along with their interactive elements, are cross-platform and cross-browser. Otherwise, students should be provided guidance as to the best browser or software to use.

Note: Instructional videos are commonly used in online courses. While there are different purposes of using instructional videos, the following practices can help enhance student learning via instructional videos.

- Decrease students' cognitive workload by (1) highlighting important information, (2) chunking the information into small pieces, (3) eliminating extraneous information, and (4) using the auditory and visual channels to convey complementary information.

- Engage students by (1) keeping the videos short and targeted on learning goals, (2) delivering information in an enthusiastic and conversational style, and (3) keeping your target students' characteristics and needs in mind.

- Help students monitor their learning by (1) using guiding questions, (2) using interactive features (e.g., quiz questions), and (3) providing formative feedback.

NOTE: For standards 7.1 through 7.4, the IPFW guide on Learner-Centered Design provides information on Technology Applications, Accessibility Evaluation, and Standards.

URLs for web sites listed in this document are given below in alphabetical order.

A Checklist for Facilitating Online Courses: http://www.facultyfocus.com/articles/distance-learning/a-checklist-for-facilitating-online-courses/

Academic Support Services: http://ipfw.edu/academics/support/.

Baccalaureate Framework: http://ipfw.edu/academics/programs/baccalaureate-framework.html.

Blackboard Learn: https://www.ipfw.edu/training/blackboard-learn/

Center for Academic Support and Advancement (CASA): http://www.ipfw.edu/casa/.

Center for the Enhancement of Learning and Teaching (CELT): http://www.ipfw.edu/celt/.

CELT's Instructional Consultant and Designer: http://www.ipfw.edu/offices/celt/AboutUs/.

CELT Services: Design & Technology Consultation: http://www.ipfw.edu/offices/celt/request-services/.

Document Your Teaching: http://www.ipfw.edu/offices/celt/document-your-teaching/

Fostering Student Interaction in the Online Classroom: http://www.facultyfocus.com/articles/online-education/fostering-student-interaction-in-the-online-classroom/

General Education Program: https://www.ipfw.edu/offices/oaa/programs/genedprograms.html

How to Use Twitter as a Learning Tool: http://elearningindustry.com/use-twitter-learning-tool

Information Technology Services: http://ipfw.edu/its/.

Involving Students in Peer Review: http://www.cshe.unimelb.edu.au/resources_teach/teaching_in_practice/docs/Student_Peer_Review.pdf

IT Services: Get Help: http://www.ipfw.edu/offices/its/help/.

IT Services User Technology Support: http://www.ipfw.edu/training/staff/index.html

Jigsaw Classroom: https://www.jigsaw.org/

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