Presenting Content

Blackboard Learn 9.1
Last updated: June 2013
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Workshop Overview

In this section, we look at the key concepts covered in this hands-on workshop. You are introduced to planning, organizing, and presenting content in the Blackboard Learn™ environment.

First, we look at how content is organized and presented as we progress through a course as a student. We will view content in learning modules sequentially and non-sequentially, as well as view terminology in the glossary.

Next, turning to an instructor perspective, you will learn the skills necessary to integrate content and activities in online courses. The key concepts covered in this workshop include the following:

• Identifying course goals and objectives.
• Analyzing the audience and evaluating existing materials for online use.
• Using storyboards to depict the logical organization of your course.
• Creating usable and accessible web page designs.
• Relating pedagogical and practical issues to creating an online course that meets the needs of a broad and diverse audience.
Roadmap

Student Experience

• Access content sequentially and non-sequentially in learning modules.
• Search for keywords and definitions in the glossary.

Planning Content

• Learn some tips for writing effective goals and objectives.
• Analyze your audience so you can tailor your online course to meet their diverse needs.
• Evaluate existing content to see how you can reuse it in an online course.
• Create a storyboard to represent your course outline visually.

Creating Web-Friendly Content

• Explore effective page design: Learn the concepts behind designing web-friendly pages.
• Apply the elements that define well-designed web pages.

Building Learning Modules

• Create learning modules, and add content and activities to them.
• Reorganize or delete content in learning modules and copy or move them to other locations.

Creating a Glossary

• Add one glossary term at a time or update an existing glossary.
• Upload a glossary created outside of Blackboard Learn.
Student Experience

In this section, you view course content from the student perspective. You will see how content is presented in learning modules. In Blackboard Learn, learning modules are used to organize and package course content, such as lectures, images, assignments, and tests. You will also view and search for course terminology in a glossary. The information will provide some context for the decisions you make as an instructor.

Learning Outcomes

After completing this section, you will be able to:

• Access a learning module as a student.
• View content in a learning module.
• View a glossary.
Viewing a Learning Module

You can use learning modules to package and present content. A learning module is similar to a folder and allows you to organize related content together.

Students typically access learning modules from content areas.

A. If you enforce the viewing sequence, students can only view the content in order. In our example, the Introduction is the first page in the learning module and it appears in the content frame. The next page in the table of contents is an active link and is the only page that students can access.

B. If you do not enforce the viewing sequence, students can access content by clicking any of the active links in the table of contents. In our example, a student is viewing the Venus page first.
Viewing the Table of Contents

Even when you enforce sequential viewing, it is still beneficial for students to see the table of contents to gain perspective on the overall concepts you are teaching. If you hide the table of contents, students use the navigation arrows to move between pages, but they cannot see the list of items in the learning module.

If you decide to add the table of contents to your learning module, you also determine where it appears. By default, the table of contents appears to the left of the content frame. You can move it to the bottom, if you want. You can also select the way items in the learning module are labeled to denote their relative position in the table of contents. You can select letters, mixed, numbers, or Roman Numerals. If you select **None**, the items are not labeled, as shown in our example. The table of contents in our example shows that pages must be viewed in order.

A. On the action bar of the content page or the table of contents, use the arrows to page through content sequentially.

B. On the action bar of the table of contents, click the down arrow—the **Move to the Bottom** function—to change the position of the table of contents to the bottom of the page. Click **Minimize Table of Contents** or **Maximize Table of Contents** to close or open the table of contents.

C. Use the orientation bar to return to the content area.

D. The current content page being viewed in the content frame is highlighted in the table of contents and the available pages are links.
Viewing a Glossary

Use the glossary tool to present specific terminology and vocabulary related to your course. A glossary helps students find and learn definitions for course-related terms in one convenient location.

Access the glossary on the **Tools** page. You can also add a link to the glossary directly on the course menu, within a content area, or within a learning module. The following glossary has been added to a content area.

A. Click **Glossary** to open the **Glossary** page.

Glossary terms automatically appear in alphabetical and numerical order.
Glossary

The Glossary contains 18 terms in course Astronomy 101.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurora</td>
<td>The aurora is a bright glow seen in the night sky. Auroras in the Northern Hemisphere are called aurora borealis or northern lights and in the Southern Hemisphere are called aurora australis or southern lights.</td>
</tr>
<tr>
<td>Black hole</td>
<td>A black hole is a region with powerful gravity, from which not even light can escape.</td>
</tr>
<tr>
<td>Eclipse</td>
<td>An eclipse occurs when one celestial body passes in front of another one blocking the light from view. Examples of an eclipse are the Lunar eclipse and Solar eclipse.</td>
</tr>
<tr>
<td>Event Horizon</td>
<td>An event horizon is a boundary in space-time, such as the area surrounding a black hole or a wormhole. Think of a black hole's surface as the event horizon. Inside the horizon the inward pull of gravity is overwhelming and no information about the black hole's interior can escape to the outer universe. Light emitted from inside the horizon can never reach the observer, and anything that passes through the horizon from the observer's side disappears.</td>
</tr>
</tbody>
</table>

A. To browse for a word, click its first letter.
Hands-on Activity

For this activity, use the Student Course.

**Learning modules**

- On the course menu, select the **Units** content area.
- Navigate through the **Unit 2: The American Identity** learning module.
- From the last page of the learning module, compare the two **Ellis Island History** pages.

Which example is easier to read online? Why? Identify some key differences in the way the content is presented.

**Glossary**

- On the course menu, click **Glossary**. Locate terms starting with the letter S.
Planning Content

In this section, we turn to an instructor perspective and look at the planning phase of online course development. In this section, we examine the difference between course goals and course objectives, and learn how to write meaningful and measurable goals and objectives. Questions are posed about student demographics to help you design your online course with the broadest audience in mind. Then, the focus is on content organization as you consider the different ways of organizing your course material. Finally, we take a brief look at creating an example of a learning module.

Learning Outcomes

After completing this section, you will be able to:

• Write a course goal.
• Write a course objective.
• Analyze your audience.
• Evaluate your materials and resources for online use.
• Create a storyboard for your course.
• Create a learning module.
Identifying Course Goals and Objectives

The road to a successful online course starts with identifying your course goals and objectives. This is similar to planning content for a course in the traditional classroom, but in an online environment this step is even more critical. You can get caught up in using the technology and lose focus of what you are teaching and what your students need to learn. By clearly defining the goals and objectives of your course, you can stay on track.

**Course Goals**

A course goal is a general statement about learning outcomes.

**EXAMPLE:** Upon completion of this course, students will be able to describe the main differences between mammals, reptiles, amphibians, and birds.

Sometimes course goals are included in a syllabus or course description. If they are not, develop them before you begin designing your course. Course goals are useful in arranging content and sequencing instruction in a logical manner.

**Course Objectives**

The next step is to figure out exactly what your audience will achieve or be able to demonstrate as a result of taking your course. In other words, what are the objectives of the course? According to Merriam-Webster's Dictionary, an objective is "something toward which effort is directed: an aim, goal, or end of action." Objectives are statements of student behavior, not descriptions of what or how the student will be taught.

Course objectives serve many purposes. They drive content and activity choice, as well as help to determine the structure, sequencing, and pacing of the course. They also tell students what is expected of them.

Be as specific as possible when writing course objectives. Students need to clearly understand what is expected of them. Use verbs that are active and measurable. For example, you can test whether a student can write a mathematical proof to solve a problem. But you cannot easily test whether someone fully understands a concept or appreciates a topic.

An example of a poorly written objective: *Students will learn how to construct a mathematical proof of Fermat's Last Theorem.*
An example of a better objective: *Students will be able to use the Theory of Elliptical Functions to construct a proof of Fermat’s Last Theorem.*

To help you write effective course objectives, remember the acronym **SMART**:

- **S**pecific – define your goal and methods clearly.
- **M**easurable – define your objectives numerically.
- **A**chievable – your objectives must be realistic and attainable with the available resources.
- **R**elevant – your objectives must address the stated need.
- **T**imely – state the start and finish for your objectives.
Considering the Audience

So far, you have learned the difference between course goals and objectives. Now it is time to take a look at your audience.

When you are standing in front of students in a traditional classroom, you can tailor content and the presentation as you go along. You can slow down the pace or vary the explanations and examples. In your online course, it is equally important to remember the audience. But, because it is harder to adjust spontaneously, carefully consider the audience beforehand. Here are some questions to guide your audience analysis:

- What is the average age of your students?
- What is their educational background? Are they going to have more or less the same background knowledge? Will some need to catch up?
- Is the audience likely to be using older hardware or slower Internet connections? Will the average user’s computer be able to support all of your course functionality?
- Will English be the second language for any of your students?
- Will any of your students be using assistive technology (Braille readers, screen readers, alternative keyboards) due to physical or learning disabilities?

If you are uncertain about your students’ demographics, design your course with the broadest possible audience in mind.
Hands-on Activity

Discuss similarities and differences in the content presentation for two types of audiences.

Scenario: You are teaching an online history course titled Emperors of Ancient Rome

- Audience 1: Most students are on campus, and are history majors. The average age is 20, and a few have moderate learning disabilities (dyslexia and attention deficit disorder). One student is visually impaired.

- Audience 2: Students are a mixed-age group, and most are off-campus students logging in remotely. None of the students are history majors.
Gathering Materials

Before developing or reusing online materials, begin by examining how you teach your course in the traditional classroom. What sort of instructional methods do you use? How do these methods help you reach your course objectives? Do you use some teaching methods that will not work online?

After you have characterized your teaching style, you can start to recreate it online. First, assemble any materials that are web-ready or easily modified. For example, do you have any lectures in HTML format or Microsoft® PowerPoint® presentations? If you have images to include, are they digital files and optimized for the web? Do you have permission to distribute them online?

Sources of Content

Use the following resource checklist to create an inventory of your materials and determine which are ready to use online. For materials already developed, indicate their current format, such as Microsoft® Word, HTML, or handwritten.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Format</th>
<th>Need to Create</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External web links</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tests</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microsoft® PowerPoint®</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Cartridge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Images</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multimedia</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Organizing Content

As you begin to plan your content, consider the factors discussed so far:

- Course goals and objectives
- Audience characteristics
- Available resources

You are now ready to enter the final phase of the planning stage—organizing the content. Creating a logical organization for your course is vital for maximizing student learning and minimizing student frustration. The easiest way to visualize the flow of your course is to do what animators have done for years—create a storyboard.

Creating a Storyboard

Traditional storyboarding is a visual tool used originally in the film and animation industries. Storyboarding depicts how a scene is going to unfold. A storyboard consists of a series of boxes, each containing sketches or text. You can use a similar technique to organize your content before adding it to Blackboard Learn.

First, start by thinking about your course and the direction you want it to take. Take another look at your course goals and objectives, and consider the following:

4. What is the best way to break your course into manageable sections supporting your objectives?
5. Do you tend to teach in chronological order, by textbook chapter, or by subject area?
6. How do you want students to move through your course material—sequentially, non-sequentially, or a mixture of both?

Next, bring all this information together in a visual representation of your course and its individual content pages. You may sketch a series of boxes, which represent events, and use directional arrows, which represent order.

- Planning Content
- Organizing Content
- Storyboard Examples
We will look at three storyboard examples, each one representing a different way to organize a course about the history of British fashion. Here are the details about the course:

**History of British Fashion 1800–1945**

**Course Goal:** Upon completion of this course, students will be able to identify major fashion trends from 1800 to the end of World War II.

**Course Objectives:**

- Students will be able to identify important time periods with particular fashion trends and discuss the effect these trends had upon all levels of society.
- Students will be able to discuss the differences between dress styles and explain the reasons why certain fabrics were chosen for each. For example, fabrics may have been chosen because of availability of materials within England, cost of importing, the Industrial Revolution, and so on.
- Students will be able to pinpoint economic reasons that pushed fashion in certain directions within the middle and lower classes.

**Example 1: Chronological Storyboard**

<table>
<thead>
<tr>
<th>GETTING STARTED</th>
<th>WEEK2: FASHION</th>
</tr>
</thead>
<tbody>
<tr>
<td>week 1: Fashion 1800 - 1860</td>
<td>Topics:</td>
</tr>
<tr>
<td>week 2: Fashion 1890 - 1930</td>
<td>- Late Victorian era</td>
</tr>
<tr>
<td>week 3: Fashion 1939 - 1946</td>
<td>- Edwardians</td>
</tr>
<tr>
<td></td>
<td>- Flappers</td>
</tr>
<tr>
<td></td>
<td>Content:</td>
</tr>
<tr>
<td></td>
<td>- PPT: Late 19 century fashion accessories</td>
</tr>
<tr>
<td></td>
<td>- Discussion: Effect on internal organs from corsets</td>
</tr>
<tr>
<td></td>
<td>- Quiz: T or F. Next module released if score 75% or more</td>
</tr>
<tr>
<td></td>
<td>- Lecture Notes: HTML</td>
</tr>
<tr>
<td></td>
<td>- Images of corsets, hats etc: JPEG format</td>
</tr>
<tr>
<td></td>
<td>- Quiz: T or F. Next module released if score 75% or more</td>
</tr>
<tr>
<td></td>
<td>- External links: Web sites on Dana Gibson, flapper girls</td>
</tr>
</tbody>
</table>
Example 2: Subject Area Storyboard

**GETTING STARTED**

dress styles
hats
accessories

**DRESS STYLES: 1800 - 1945**

**Topics:**
- Empire Waist (1800)
- Princess Line (1866)
- Edwardian Tea Gowns (1875 - 1920)
- Flapper Dress (1926 - 1930)
- Patriotic Dress (1940 - 1945)

**Content:**
- PPT: The Rise and Fall of Hemlines
- Discussion: What to wear for an Edwardian Dinner?
- Self Quiz: T or F
- Lecture Notes: HTML
- Images of dress styles: JPEG format
- External links: Web sites on dress styles between the wars

Example 3: Content Type Storyboard

**FROM CHAUCER TO BYRON**

4 centuries of British poets

Chaucer (1343 - 1400)
Donne (1572 - 1631)
Pope (1688 - 1744)
Coleridge (1772 - 1834)
Byron (1788 - 1824)

**LEARNING MODULE: Chaucer**

- Overview of week ahead
- Learning Objectives
- Chaucer: a brief bio
- External link: http://www.chaucer.com
- Assignment: How does Chaucer view ancient history and belief systems in The Knight’s Tale?
- Graded Discussion: Does the Wife of Bath uphold or contradict the misogynist views of her time?
- Test
Mapping Your Content into Blackboard Learn

With a storyboard, you can represent your course’s organizational flow visually. The last step in the planning phase is to map the content into the Blackboard Learn environment. In Blackboard Learn, you can use learning modules or content areas to organize a variety of content. In this workshop, we focus on creating learning modules.

If you have taken the Getting Started workshop, you may remember something about content areas. A content area allows course content to be organized into folders, files, graphics, assignments, tests, web links, and Blackboard Learn tools. You can create multiple content areas for your course and place them on the course menu.

Learning modules are similar to content areas. The following table describes some of the key differences between them.

<table>
<thead>
<tr>
<th></th>
<th>Learning Module</th>
<th>Content Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Location in a course</strong></td>
<td>You create learning modules inside a content area.</td>
<td>Content areas appear on the course menu.</td>
</tr>
<tr>
<td><strong>Organizing content</strong></td>
<td>View content in a specified order—sequentially—or in any order—non-sequentially.</td>
<td>View content in any order. Content areas themselves appear in the content frame and cannot open in a new window.</td>
</tr>
<tr>
<td></td>
<td>You can set a learning module to open in a new browser window.</td>
<td></td>
</tr>
<tr>
<td><strong>Adaptive Release</strong></td>
<td>You can apply adaptive release conditions to a learning module. Students must meet specified criteria before they can gain access.</td>
<td>You cannot apply adaptive release conditions to an entire content area. As long as the content area is available on the course menu, students will have access.</td>
</tr>
<tr>
<td><strong>Table of Contents</strong></td>
<td>Each learning module has a table of contents so students can easily see a list of content.</td>
<td>No table of contents for content areas.</td>
</tr>
</tbody>
</table>
Learning Module Example

You can use this learning module example as a reference when planning learning modules for your course. The example is based on the following scenario:

You are teaching an online course titled *From Chaucer to Byron: Four Centuries of British Poets*. You have decided to organize the material by subject area and you want students to access the material sequentially.

The simplest strategy is to divide the course into learning modules, one for each poet. For each poet’s section, you can include the following:

- Overview of the week ahead
- Learning objectives
- Lecture files
- One or more links to external websites
- One written assignment
- One graded discussion
- One test

FROM CHAUCER TO BYRON
4 centuries of british poets

<table>
<thead>
<tr>
<th>Chaucer (1343 - 1400)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donne (1572 - 1631)</td>
</tr>
<tr>
<td>Pope (1688 - 1744)</td>
</tr>
<tr>
<td>Coleridge (1772 - 1834)</td>
</tr>
<tr>
<td>Byron (1788 - 1824)</td>
</tr>
</tbody>
</table>

LEARNING MODULE: Chaucer

- Overview of week ahead
- Learning Objectives
- Chaucer: a brief bio
- External link: http://www.chaucer.com
- Assignment: How does Chaucer view ancient history and belief systems in The Knight’s Tale?
- Graded Discussion: Does the Wife of Bath uphold or contradict the misogynist views of her time?
- Test
Hands-on Activity

Create a storyboard

• Take a few minutes to create a storyboard for your course. Use one of the three storyboard styles presented: Content Type, Subject Area, or Chronological Order.
Creating Web-Friendly Content

This section deals with the fundamental concepts behind effective page design and how to make an online course that is both usable and accessible. We discuss simple techniques that make your pages easier to read and more accessible to all students.

Learning Outcomes

After completing this section, you will be able to:

• Explain the meaning of accessibility.
• Create more accessible pages.
• Design web-friendly pages that make effective use of text, typography, layout, color, and graphics.
Effective Page Design

Effective web page design can create a more compelling and engaging showcase for your course material. More importantly, well-designed pages can help achieve the following:

- **Ease of learning**: How quickly can new students navigate through your course, learning the material?
- **Efficiency of use**: Once students are familiar with your course setup, how quickly can they accomplish tasks?
- **Subjective satisfaction**: How much do the students enjoy working through your course material?
- **Accessibility**: Can students with different levels of ability, experience, knowledge, language skills, or concentration level use your course?

Accessibility is an especially important consideration in online course development. As defined by the World Wide Web Consortium: "Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web."

As an online instructor, keep in mind that students have different backgrounds and diverse needs. Some students may have a physical or learning disability. Some may be using older computer hardware and software, and others may be accessing your course from a dial-up connection.

Therefore, your online course needs to be accessible—be easy to use and easy to understand—for all students. Tim Berners-Lee, the inventor of the World Wide Web said it best: "The power of the Web is in its universality. Access by everyone—regardless of disability—is an essential aspect."

In the next section, we look at how to create effective web pages.
Frequently Asked Questions

In the following table, learn about accessibility.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| Designing an online course is a lot of work! Since I usually do not have students with disabilities in my course, do I need to worry about accessibility? | Chances are you will have students with disabilities in an online course. According to the School of Public Health and Health Professions, almost one in five Americans has some type of disability. The following list includes some recognized disabilities:  
  - **Visual**: Visual impairments include blindness, low vision, poor eyesight, and color blindness.  
  - **Motor and mobility**: Difficulty or inability in moving the hands, head, or other body parts. Includes tremors, muscle slowness, and limited fine muscle control due to Parkinson’s disease, muscular dystrophy, cerebral palsy, stroke, arthritis, youth, or age.  
  - **Cognitive and intellectual**: Developmental differences, learning differences, cognitive disabilities affecting memory and attention.  
  - **Auditory**: Includes deafness or hearing impairments.  
  - **Seizures**: Photo-epileptic seizures caused by visual strobe or flashing effects. |

Students whose first language is not English, and students working with slow internet connections, older computers, and outdated software plug-ins are also at a disadvantage. An accessible course provides a better learning experience for them as well.

Complying with Section 508 is another reason to be concerned with accessibility. Section 508 requires that electronic and information technology developed, procured, maintained, or used by the United States Federal government be accessible to people with disabilities.
Creating Your Own Effective Web Pages

Most well designed web pages have five elements in common:

- Text written for the web
- Simple typography
- Simple, straightforward layout
- Well-chosen color scheme
- Graphics that are worth a 1000 words
- Multimedia to add dimension and engagement

Reference: http://www.webdesignfromscratch.com/current-style.cfm

Using these elements help you create usable and accessible web pages.

Text Written for the Web

- Write in brief sentences. Studies show people rarely read web pages word by word. Instead, they skim the page, picking out individual words and sentences.

- Write as though you are having a conversation with your students. Keep the writing informal, yet informative.

- Avoid jargon and unnecessarily complex or technical language. Do not assume all of your students understand discipline-specific language.

- Start subheadings, paragraphs, and bullet points with keywords. This allows students to quickly see these keywords when skimming down the left side of the page. Studies indicate online users read the first two words of a line more often than the third word.

- Write paragraphs that focus on one idea. Keep paragraphs short and simple. Put the most important points in your first paragraph.

- Break down pages into subcategories. Try to avoid forcing students to scroll to see text. For information that is interesting, but not mandatory, provide a link to a separate file in a Further Reading section.

- Put your most important content at the top of the screen or in the region of the browser window that loads first. This portion of the web page is visible without scrolling.
• Avoid using abbreviations or acronyms unless you provide a glossary of terms. Often abbreviations are rendered completely unintelligible when read by speech or Braille output software.

• Keep web links current. Nothing is more frustrating than clicking a link to a page that no longer exists.

Going Further for Accessibility

• To help students with learning disabilities, use graphics to convey textual information. Make sure icons are clear in their meaning. Always include a description of the graphic using the ALT attribute or the long description attribute.

• If additional information is in a new file on the page, warn blind users that a new window will open by adding the words "New Window" to the link text.

• Use the adaptive release tool in Blackboard Learn to release content gradually and avoid overwhelming students who need more time to process information.

Simple Typography

• Use no more than three font faces in your entire course. Be consistent with how you use them. For example, use Verdana for body copy text, but use Times New Roman for subheadings.

• Make sure the font faces you use are installed on most computer systems. Browsers substitute an available local font for one that is not available in the system.

• While font sizes smaller than 10 points are not recommended, if you need to, choose a simple sans-serif font like Verdana for your body text. Studies show sans-serif fonts are more legible onscreen when smaller sizes are needed.

• To make subheadings and titles stand out, apply bold to your body copy font, add color, or choose a complimentary serif font.

• Avoid underlining text for emphasis. Students think those words are links.

• Use italicized text sparingly as it is difficult to read online.

• Avoid CAPITALIZATION because it carries extra emphasis in a screen reader and may sound like shouting. Moreover, capitalized words in sentences and paragraphs are harder to read than lowercase words. Capitalization causes problems for people with dyslexia.
Going Further for Accessibility

- It would be ideal if users could control text size in their web browsers. One way to do this is to use the em unit, which picks up the font size on a user’s computer. For more information, go to: http://www.w3.org/WAI/GL/css2em.htm

Simple, Straightforward Layout

- Keep pages clean and uncluttered. Use plenty of white space to separate paragraphs, images, and other page elements. Nothing is more overwhelming than a web page filled with text, graphics, and animations.
- Use block style paragraphs. Leave a space between each paragraph and do not indent the first line.
- Be consistent. Keep the same fonts, colors, and table styles throughout your course pages. If Century Gothic typeface is used for subheadings on one page, do this for all pages.
- Use tables for presenting data, not for creating a page layout. Tables used for data can be tagged so screen readers can interpret header rows and cell data. If you are using tables to define the layout of your page, screen readers will have a more difficult time interpreting the information on the page.

Going Further for Accessibility

- If you know how to create a Cascading Style Sheet (CSS), use it for layout. This is the standard according to the World Wide Web Consortium.
- Build in flexibility wherever you can by using percentage (%) values for table size. This allows the layout to be resized relative to the screen resolution in which it is being viewed. If you use a fixed height for a table’s row height, users who use larger text sizes may be unable to read a cell’s content.
- If you must use tables for layout, do not use headers and captions. The HTML tags <TH> and <CAPTION> indicate a data table is present.
Well-Chosen Color Scheme

- Use a consistent color scheme. Use no more than five colors in your palette. Different shades of the same hue with one or two extra colors as accents work well.

- Choose a light shade for the background color. Dark text against a white background is the most readable combination. If you decide to use a non-white background, select a light color to maximize contrast. Avoid dark pages or loud glaring colors, such as bright red, green, or yellow. These cause eye fatigue and are hard to read.

- Choose different colors for each of the three link statuses: visited, active, and static. Keep these consistent throughout the course. Link colors should be dark enough to be easily visible on a white background.

- To enhance layout and readability, use alternating colors in rows or columns of a data table, especially one containing a lot of text.
Going Further for Accessibility

• Do not rely on color alone to relay key information. Make important text stand out by using bolding, using an asterisk (*) beside it, or using the emphasis tag. Use the ALT attribute on colored images to help convey information that is color dependent.

• Avoid placing red and green, and blue and brown together because these colors are hard to tell apart by people with color blindness.

Graphics That ARE Worth 1000 Words

• Make sure all graphics mean something. They are there for a reason, not just because they look good. You do not want design overtaking content, nor do you want to increase download time unnecessarily.

• Use simple graphics, which are often the most effective. Avoid lengthy text and lots of numbers within the graphic.

• Crop photos whenever possible to maximize impact and decrease download time. Compare the two photos of a fern. Which one has the greater impact?
Going Further for Accessibility

- Use animated images sparingly. They can cause the screen, or parts of it, to flicker and change rapidly. They can detract from the accessibility and usability of a page. Moving images also cause problems for students with cognitive impairments and may be hard to interpret by students who have low vision. In any case, a textual description is necessary for concepts that use animation to illustrate their meaning.

- Provide alternative text using the ALT attribute. For detailed images like graphs or maps, use the long description attribute to provide more information. Screen readers and other text-to-speech software read the image’s alternative text aloud to the user. If the image’s alternative text is missing, the screen reader often reads the image file path or just says “image.”

Multimedia Adds Dimension and Engagement

- Use multimedia files to provide dimension to course content by selecting media that enhances and supports concepts and objectives. Multimedia also provides a way for learners to replay and review, augmenting and reinforcing content.

- Multimedia provides relief from long reading assignments and gives learners an opportunity to engage with the course in different ways, from controlling the playback functions to adding comments and opinions.

- Multimedia appeals to different learning styles, most especially audio and visual learners. Complex ideas and themes can often be demonstrated and clarified using video or animation.

- Place multimedia presentations strategically in the course to help learners get started with complex tasks.

- Keep multimedia presentations short so they do not interrupt the flow of the material. Short clips also take less time to download, reducing the chances of bandwidth problems for students with slower connections.

- It’s not necessary to produce your own multimedia presentations. You can use many of the available resources on the web within your course environment. The mashups feature provides a way to search for video, photographs and slideshows inside the course while you are building content.
Going Further for Accessibility

- Make sure that video presentations are captioned for students who are deaf or have hearing impairments. Captions also assist students who are not native speakers.
- Audio presentations need to provide a transcript for students who are deaf or have hearing impairments.
- Provide a long description of animations or other types of visual content such as slide presentations for students who have low vision or who are blind.
- Interactive multimedia needs to provide a way for users who do not use a mouse to navigate through the interaction or skip the interaction altogether. You can accomplish this by providing programmed keyboard shortcuts and keyboard navigation.
Frequently Asked Questions

In the following table, learn how to add the ALT attribute.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
</table>
| How do I add alternative text to images in my course pages?             | Add alternative text to all images that convey meaning in the content, navigation, or access to tools. Alternative text must impart the same information as the graphic. For example:  

```
<img src="images/boston-fern.jpg" alt="photograph of a large Boston fern in a planter outdoors"/> Looking at the image in the context of the page and assessing its purpose will help you decide what alternative text to provide. You do not need to include the words “image” or “picture of” in the ALT attribute. If the image is photographic or has a relevant style, such as abstract or expressionistic, that can be included. Screen readers will identify an image element before they read the alternative text.

Functional graphics must have alternative text that describes the function of the image. Functional images include images used as links.

If you use an image for decoration only, leave the alternative text attribute empty (alt="").

Structural images give structural meaning to the page, such as a graphic representation of a bullet. Use alt="bullet" or better yet, do not use an image, use an HTML list. |
Hands-on Activity

For this activity, use your Practice Course.

Based on the guidelines presented in the section, make simple changes to an existing content page to improve readability and visual appeal.

**Access and update the content**

- From the **Units** content area, available from the course menu, select the **Unit 1: Astronomy Overview** folder. Within the folder, select the **Planets** folder.
- In **Edit Mode**, access the **Planets Overview’s** contextual menu and select **Edit**.
- Using the content editor, adjust the layout, add subheadings, put information into bulleted lists, incorporate tables, and add color so the article is easier to read online.

**TIP:** The **Workshop Resources** content area contains a multi-planet image you can incorporate into the content.
Building Learning Modules

Now that you have learned how to plan and prepare your content, we look at how to present it in a learning module.

Learning Objectives

After completing this section, you will be able to:

• Create a learning module in your course.
• Add content to a learning module.
• Arrange and delete items within a learning module.
• Copy and move learning modules.
About Learning Modules

A learning module is an organized collection of content presented together. You can use a learning module to support a course goal, a course objective, a subject, a concept, or a theme.

For example, a learning module can present the concept of magnets' fields before describing how speakers and microphones work. Understanding the first concept is dependent on understanding the second concept. Alternatively, you can allow students to explore the content in a learning module in any order, and at their own pace. For example, use a learning module to present a series of images and descriptions of various animals in a genus. Students can view the images and descriptions in any order, as no order is required for understanding the whole.

Content within a learning module is added and managed just like in any folder in a content area. The learning module is a shell to which other content items such as files, assignments, and tools are added. You can manage learning modules like any other item within a content area.

The value of creating learning modules lies in the ability to integrate related content and activities, providing a rich, interactive learning experience for students. You can include the following in a learning module:

- Content items
- Files
- Folders
- Web links—links to websites
- Mashups—links to multimedia viewed inside your course
- Tests and surveys
- Assignments
- Discussion board forums
- Other tools
Creating a Learning Module

First, you create a new learning module in a content area. This first step creates an empty shell. You add content in the next step.

**NOTE:** In this workshop, the phrase “in Edit Mode” refers to **Edit Mode** being **ON**, showing all instructor functions.

QUICK STEPS: Adding a Learning Module

1. In **Edit Mode**, on the course menu, click an existing content area or create a new one.
2. On the action bar, point to **Build Content** to access the drop-down list.
3. Select **Learning Module**.
4. On the **Create Learning Module** page, type in a **Name**. Students access the learning module by clicking the name you type.
5. Optionally, type a description in the **Text** box. You can use the content editor functions to format the text and include files, images, external links, multimedia, and mashups. Any files uploaded from your computer are saved in Course Files or the Content Collection in the top-level folder.
6. Select **Availability** options.
7. Select **View** options.
8. Select **Table of Contents** options.
9. Click **Submit**.

Selecting Options for a Learning Module

**Availability**

- **Permit Users to View the Content Item**: Select **No** to restrict users from seeing the Learning Module. This makes the learning module unavailable.

- **Select Date and Time Restrictions**: You can set learning modules to display on a specific date and time, and to stop displaying on a specific date and time. Display restrictions do not affect content availability, only the appearance of the learning module. You may see more or fewer content items in a learning module based on the date restrictions you select.
View

- **Enforce Sequential Viewing of the Learning Module**: Select Yes to force students to view the pages in order. If sequential viewing is not enforced, students can view the content in any order.

- **Open in New Window**: Select Yes if you want the learning module to be viewed in a separate window instead of in the content frame. Opening a learning module in a new window allows students to view the course and its contents at the same time as the learning module. They can navigate to other areas and keep the learning module open in the separate window.

- **Track Number of Views**: To turn on statistics tracking for the learning module, select Yes. Statistics tracking records the number of times the learning module is viewed, when it is viewed, and by whom.

Table of Contents

- **Show Table of Contents to Students**: Select Yes to display a table of contents to students when they enter the learning module.

- **Hierarchy Display**: Select the way items in the learning module are labeled to denote their relative position in the table of contents. **Numbers**, differences, or **Roman Numerals** can be selected. If **None** is selected, the items are not labeled.
Adding Content to a Learning Module

Adding content to a learning module is similar to adding content to a content area.

As well as adding content items, files, web links, and tests, consider adding activities and tools that promote interactive learning and collaboration.

For example, you can add assignments or group projects to give students an opportunity to apply what they have studied in a learning module. Or, you can add collaboration tools, such as chat sessions and discussion board forums where students can brainstorm and share their ideas about topics presented in the learning module.

Click a learning module's title to begin adding content. Use the functions on the action bar to add a full range of items and tools. In our example, the Build Content drop-down list offers many choices. You can also use the Assessments, Tools, and Publisher Content functions to continue to add content to create a robust learning module.

QUICK STEPS: Adding items to a Learning Module

1. In Edit Mode, access the learning module.
2. On the action bar, point to Build Content to access the drop-down list.
3. Select Item.
4. On the Create Item page, type a Name. The Name appears in the table of contents in the learning module.

5. Add a description in the Text box. You can use the content editor functions to format the text and include files, images, external links, multimedia, and mashups. Any files uploaded from your computer are saved in Course Files or the Content Collection in the top-level folder.

6. Add an attached file.
   - If Course Files is the course’s storage repository, click Browse Course.
     -OR-
• If your school licenses content management, click **Browse Content Collection**.

7. Select the **Options** for availability, tracking, and date and time restrictions.

8. Click **Submit**.
Adding Mashups to a Learning Module

You can use the mashups feature to add multimedia to your course without having to create it yourself. With the popularity of services like YouTube™, you can ask students to view a clip and ask for responses or use it as part of an assignment. A mashup combines elements from two or more sources. When you view a YouTube video in a Blackboard Learn course as part of the course content, you are experiencing a mashup. When you create a mashup, you can also include Flickr® photos and SlideShare presentations. Students can add mashups to some of their course contributions also.

Access the learning module and select your mashup type. On the Search Results page, you can view the results of your search and make a selection.
In Blackboard Learn, you can add mashups anywhere you add other content—in content areas, folders, learning modules, and lesson plans—and wherever a content editor exists, such as in the discussion board, blogs, journals, wikis, or when creating content in Course Files.

You can add a mashup to your learning module and it appears as a link in the table of contents.
Adding Assessments to a Learning Module

You can add a test, survey, or an assignment to a learning module using the **Assessments** drop-down list on the action bar. There are several advantages to including an evaluation in a learning module. After students read and work through the material in a learning module, they can immediately take a test to assess what they just learned, complete a survey to give you feedback, or complete an assignment and submit it for a grade.

After adding the test, survey, or assignment to a learning module, you must make the link available so students can gain access. If you added any date and time restrictions on the items, they will apply.

In the example, the table of contents contains links to an assignment and a quiz.

![Table of Contents and Assessments](image_url)
Adding Tool Links to a Learning Module

You can add collaboration tools, such as chat sessions, discussion board forums, blog topics, or group membership to a learning module. These additions can help students brainstorm and share their ideas about topics presented in a learning module.

You can also select the More Tools option to view an expanded list of additional tools.

In the example, the table of contents contains a link to a discussion board forum.
Adding Folders to a Learning Module

Adding folders to a learning module provides a way to organize content in the table of contents that displays the relationship among items. Content that is placed within a folder becomes a subsection of the table of contents hierarchy. The content you are viewing now in this learning module uses folders. You can use numbers or letters to label the hierarchy to further illustrate the relationship among items.

You can nest folders to provide a way to display many levels of content. Be aware that when folders are used in learning modules that are set to be sequential, each folder and all nested folders and the content within them must be navigated through before returning to an upper level in the hierarchy.

Each folder itself is a page in the learning module. Provide a description when adding a folder so that the page does not appear blank to students navigating through the learning module.

When you hide items in a table of contents, all nested items are also hidden. For example, if you hide a folder, then none of its content is visible either.
Hands-on Activity

For this activity, use your Practice Course.

In this activity, build a new learning module for **Unit 3**. Your Practice Course already contains a **Unit 3** folder—your **Unit 3** learning module will demonstrate a different way to present some of the same content.

**Create the learning module**

- Add a new learning module titled **Unit 3: Gas Giants** to the **Units** content area. Select the options you want and make the learning module available.

**Add content**

- Add an item titled: **Introduction.** Type the following text: **Unit Overview:** This unit explores Uranus, Saturn, Jupiter, and Neptune.
- Add a mashup. Search for and add a YouTube video.
- Add the **Diagnostic Quiz.** This test already exists; you do not need to create it.
- Add a **Unit 3: Mass Objects** discussion board link.

**Add files**

Add the following files from Course Files > **Unit 3**:

- uranus.htm, saturn.htm, jupiter.htm, neptune.htm

**Add folders**

Add the following folder under the file **jupiter.htm**:

- Folder Name: Moons of Jupiter
- Type the following folder description in the content editor: The content in this section discusses the moons of Jupiter. According to **Universe Today**, there are 63 confirmed moons of Jupiter. In the course, we will study the four largest moons.

Add the following folder under the file **saturn.htm**:

- Folder Name: Moons of Saturn. Be sure to include a description.

**NOTE:** If the files are not available from Course Files, you can download them from the **Workshop Resources** content area. The file name is **unit_resources.zip**
## Frequently Asked Questions

In the following table, learn more about learning module length.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>How long should my learning module be?</td>
<td>Because so many factors influence course design, including your audience, subject matter, and teaching style, there is no formula appropriate for everyone.</td>
</tr>
<tr>
<td></td>
<td>As a general rule, include approximately 8–14 items in a learning module. Units with too many items can appear daunting to students, whereas very short modules make for inefficient navigation. To promote continuity and consistency, try to make modules approximately the same length.</td>
</tr>
</tbody>
</table>
Changing the Content Order in a Learning Module

Content appears in the order you added it, but you can change the order. Use the drag-and-drop function or the keyboard accessible reordering tool to rearrange content. Be sure **Edit Mode** is **ON**.

To move an item using the drag-and-drop function, press the arrows next to the item. The item is highlighted.

Press and drag the item into the new location in the learning module. The item is surrounded by dashes as you move it into its new spot.

Release the item to place it in its new location.
Alternatively, you can use an accessible tool to reorder items.

1. In **Edit Mode**, in the content area, click the keyboard accessible reordering tool on the action bar.
2. In the **Reorder: Content** box, click an item in the list to select it.
3. Use the up and down arrows below the title box to adjust the order.
4. Click **Submit**. A pop-up box states: **Items have been reordered**.
5. Click **OK**.

![Diagram of reordering tool](image)

**TIP**: When you make a change in the order of your items in a learning module, click the refresh icon on the table of contents action bar to see the new order.
Deleting Content From a Learning Module

You can delete items and files that are no longer needed in your learning modules. Files that you added to a learning module using Course Files are not deleted from the system and you can add them again. When you delete a test or survey, it remains available in the tests tool and you can add it again later.

**TIP:** Keep copies of any content descriptions and notes in case they are needed later.

**QUICK STEPS: Deleting Content From a Learning Module**

1. In **Edit Mode**, in the learning module, access the item’s contextual menu.
2. Select **Delete**.
3. Click **OK** to delete the item.
Editing or Deleting a Learning Module

At any time, you can edit a learning module’s name, description, and options. You can delete the entire learning module, which permanently deletes the learning module container including the table of contents. Items you added to the learning module from Course Files remain in Course Files and are not deleted from the system.
Copy content or Moving a Learning Module

You can copy or move content items, including learning modules, from one area or course to another area or course. If copying or moving between courses, both courses must belong to you.

- Copying content does not delete the learning module from the original location in your course.
- Moving a learning module deletes it from its original location.

Some content items have copy and move restrictions. For example, course links can only be copied or moved to another area within the same course. Assignments, tests, and surveys cannot be copied, but can be moved within the same course.

If a learning module contains items that cannot be copied, such as a test, survey, or assignment, a link is created to it instead. After the copy action is complete, a message appears: "Some items copied. The following items were created as links:" and the specific items are listed.

If an item, such as a learning module contains items that cannot be moved to another course, such as a test, a message appears: "The move operation has completed but the following items could not be successfully moved." The specific items are listed.
Hands-on Activity

For this activity, use your Practice Course.

Within the Unit 3: Gas Giants learning module:

Delete a content item

• Delete the link to http://www.nasa.gov.

Reorder content

• Reorder the planet pages so they appear in alphabetical order.

Move a learning module

• Move a learning module to a different content area. Alternatively, if you had copied the learning module, would you have received any notices about items that were not able to be copied but were added as links instead?
Creating a Glossary

In this section, you learn how to add a glossary to your course to present terms and definitions in alphabetical and numerical order. A glossary is a useful teaching aid, allowing students to search for and learn important terms and concepts.

To create a glossary, you can add terms one by one, or upload an existing file. We will take a closer look at these options on the next few pages.

Learning Objectives

After completing this section, you will be able to:

- Add individual glossary terms.
- Upload an entire glossary.
- Edit or delete glossary terms.
Adding a Glossary Term

You can add glossary terms one at a time. This feature is especially useful for a short glossary consisting of a few terms or for updating terms in an existing glossary.

When the glossary is ready for students to view, make sure the glossary tool is available.

QUICK STEPS: Adding a Term to the Glossary

1. On the Control Panel, expand the Course Tools section.
2. Select Glossary.
3. On the Glossary page, click Create Term on the action bar.
4. On the Create Term page, you can format the definition using the functions in the content editor.
5. Click Submit.
6. On the course menu, click Tools and ensure the glossary is available to students.
Uploading a Glossary

If you plan to build a large glossary, you can upload a file containing all, or most of the terms, and then update the glossary by manually adding more terms. This is the most efficient way to create a large glossary for your course.

To create a glossary file for uploading, type the terms and definitions in spreadsheet software, such as Microsoft® Excel®. Files must have one term and one definition per line, with the term in one column and the definition in the next column. Save the file as CSV (comma separated values).

Alternatively, you can use a simple text editor to create your glossary file. With one entry per line, separate the term from the definition by a comma or by a tab. Next, save the file in CSV format or TXT format.

After you create your glossary file, upload it using the glossary tool. You have the option to either update an existing glossary or replace it altogether. After you upload the glossary, you can make further updates by adding terms manually or uploading another file.

NOTE: If duplicate terms are in the uploaded file, they will replace those in the existing glossary.

QUICK STEPS: Uploading a Glossary

1. Using spreadsheet software, type the terms in the first column, and type the definitions in the second column. A comma or a tab must separate the term and definition.
2. Save the file in the correct format, such as CSV.
3. Access the Glossary from the Control Panel.
5. On the Upload Glossary page, click Browse to locate and upload the file.
6. Select one of the upload file options.
7. Click Submit.
**NOTE:** Change *Edit Mode* to **OFF** and view the glossary to make sure the terms are correct before the glossary is made available to students.
Editing or Deleting a Glossary Term

You can edit or delete glossary terms one at a time.

For extensive updates to the glossary, download it to your computer, make the updates, and then upload it again.

QUICK STEPS: Editing a Glossary Term

1. Access the glossary.
2. On the Glossary page, access the term’s contextual menu.
3. Select Edit.
4. On the Edit Glossary Term page, make the changes.
5. Click Submit.

To delete a term, select Delete from the term’s contextual menu and when prompted, click OK.
Hands-on Activity

For this activity, use your Practice Course.

Add to the glossary

- Upload the glossary file provided by the facilitator. This file is titled `spaceglossary.csv` and is also found in the Workshop Resources content area.
- Add the following term to the glossary: Orbit – An orbit is a closed path an object takes as it revolves around another body. Orbits are generally elliptical, but may be altered by the presence of yet other bodies and even form unusual figures.
Workshop Wrap Up

The Workshop Wrap Up provides the opportunity to reflect on what has been learned by focusing your attention on the key concepts presented in the workshop. Also, the next page includes a storyboard for planning and organizing the content for your course.

In this workshop, you learned how to do the following:

- Write course goals and objectives.
- Analyze your audience.
- Evaluate your materials and resources for online use.
- Describe three ways to organize a storyboard.
- Explain the meaning of accessibility and create more accessible pages.
- Design web-friendly pages.
- Create a learning module and add content items.
- Arrange and delete items within a learning module.
- Copy and move learning modules.
- Add individual terms to a glossary.
- Edit or delete terms in an existing glossary.
- Upload an existing glossary file.
Spotlight on Your Course

It is time to think about planning, organizing, and presenting the content in your course.

- First, remember to identify your course goals and course objectives.
- Next, gather your materials and make note of the resources that are web-ready, and those that still need to be developed.
- Then, decide how to break your course into manageable sections that support your objectives. Consider using a storyboard or another visual tool to depict the logical organization of your course.
- Finally, map your course’s organizational flow into learning modules.

Using the following example, plan a learning module for a particular subject area in your course.

### YOUR COURSE

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
</table>

### LEARNING MODULE: Subject Area 1

- Introduction
- Learning Objectives
- Reading Materials (articles, files, bibliographies)
- External Links (Web sites, online resources)
- Communication (chat sessions, discussion forums)
- Evaluations (assignments, tests, surveys)