

Managing iTunes U Course Pages

After you customize the look and feel of your entire site to use your institution's colors, logos, and graphics to make your site appear familiar to instructors, staff, students, and alumni, you can further customize your site by designing a specific use and look for each Course page within your site. This section describes iTunes U Course pages and how to edit and manage your Course pages.

About iTunes U Course Pages

iTunes U is designed to provide students, instructors, and the public easy access to course content. It can also provide access to institutional information such as on-campus events, news, sports, or a message from your institution's president. Each course has its own [Course page](#), initially created by a site administrator.

Your site's root page can display a collection of descendant Welcome pages and Course pages. When a user clicks a course title or thumbnail image in a [Welcome page](#) or [Public Feature page](#), the associated Course page appears. Course pages contain the audio, video, or PDF content files you, instructors, staff, or students make available for download.

Within a Course page, you can use editing tools to create different groups, displayed as tabs within the Course page, to help organize and manage all the course content, and then, if you are using advanced access controls, can assign permissions to each group to control user [access](#) to the content. You can create the following types of groups within a Course page:

- **Simple.** A Simple group populates track content in a Course page when users explicitly upload tracks to the course in your iTunes U site.
- **Smart.** A Smart group displays tracks in a Course page by performing a search of your site for all tracks that match the criteria you specify.
- **Feed.** A Feed group automatically populates track content in a Course page based on the specified podcast feed URL and details. Course content can be updated on a periodic basis and, depending on your site settings, can be updated as often as every day.

The instructor or course manager creates or prepares content for the course, structures and organizes the course and Course page, and then adds the content to the Course page.

Remember that your content is what's most important. Make sure you bring the best content to your site. And, if needed, start small. It's better to start with a few great pieces of content. It's best to try and build your site from the bottom up. Starting with Course pages, figuring out how much content you have, and then branching out to more groups, sections, and so on.

For more details and information on how to create the different group types, see "[Creating Group Types](#)" (page 96).

If you are using advanced access controls, in addition to creating the groups for course content, you might create a group for students to upload their assignments and other work for review (for example, a group with permissions set to Drop Box). Only the site administrator, instructor, or course manager (or another user

with editing access) can view all of the contents of this group. You might also create a group for students to share their work with others (for example, a group with permissions set to Shared). You as well as students, instructors, and course managers can view and download the contents from a shared group.



To create groups with specific user access, first create the group, and then assign access permissions to the group. For details, see [“Assigning User Access to Groups”](#) (page 72)

When you add content, you add it to a specific group. Apple recommends that you think about how you want to organize content in the course before adding any content. This includes determining the number, names, and types of groups that you want to use to organize the course content.

Editing Course Pages

If you are logged in as the iTunes U site administrator (or another user with editing access), you can click Edit Page in the [Course page](#) you want to update to customize your iTunes U site. When you’re done editing the page, click End Editing.

To edit this element	Take this action
Course image	<p>Click the Upload icon in the upper-left corner of the course image, and then select a new course image for your Course page.</p> <p>iTunes U uses the image you select as the main image in the Course page. iTunes U also automatically creates a scaled down version of the image to display as a thumbnail in the pages used to navigate to the course.</p> <p>Apple provides default descriptions for all your iTunes U images for improved accessibility. iTunes U saves the descriptions as the image’s alt text. The default alt text is based on the page name where the image was uploaded. If the default alt text does not apply or is incomplete, you can use the Upload Artwork page to add your own alt text.</p>
Course page title	Click Edit Page in the Welcome page used to navigate to the course, click the Edit icon under the page title you want to update, edit the page title, and then click the Save icon to save the new title.
Course page author name	Click the Edit icon and edit the Course page author name, and then click the Save icon to save the new name.
Course page description	Click the Edit icon in the description area, edit the Course page description, and then click the Save icon to save the new description.

To edit this element	Take this action
Links box titles	<p>Click the Edit icon in the Links box title bar for the Links box title you want to edit, edit the existing Links box title text, and then click the Save icon to save the new title.</p> <p>Note: If your iTunes U site is public, iTunes U displays a link (RSS) in the title bar to an RSS feed view of the contents of the Links box. Control-click the link (or right-click for Windows) and choose Copy iTunes Store URL from the shortcut menu or use the ShowTree Web Services operation to obtain a URL containing the RSS feed. For more information, see “ShowTree” (page 129).</p>
Multiple Links boxes	<p>Click the Add icon above the Links box to add a new Links box below the existing Links box, and then click the Save icon to save the new Links box.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ To move a Links box up or down one level in the Course page, click the Edit icon for the Links box you want to move, and then click the Up or Down Triangle icon. ■ To delete a Links box, click the Edit icon for the Links box you want to delete, and then click the Delete icon.
Links box links	<p>Click the Edit icon in the Links box next to the link you want to edit, edit the existing link’s title and URL, and then click the Save icon to save the link information.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ To move a link up or down one level in the Links box, click the Edit icon for the link you want to move, and then click the Up or Down Triangle icon. ■ To delete a link in the Links box, click the Edit icon for the link you want to delete, and then click the Delete icon. ■ To add a new link to the Links box, such as to a department webpage, click the Add icon in the Links box above where you want the new link to appear, type a title and URL, and then save the new link by clicking the Save icon. <p>To add links between iTunes U pages and avoid a trip through the web browser, use an <code>itmss://</code> URL in the Links box. When you installed iTunes on your system, it added itself as a URL scheme handler for <code>itmss://</code> URLs. When a user tries to access an <code>itmss://</code> URL using advanced access controls, if the user has not already established a session, iTunes U reroutes the user to the Site login URL.</p>
Course page group names	<p>Click the Edit icon in the tab whose group name you want to change, edit the existing group’s name, and then click the Save icon to save the new group name.</p> <p>Notes:</p> <ul style="list-style-type: none"> ■ To move a group right or left one position in the Course page, click the Right or Left Triangle icon. ■ To delete a group from the Course page, click the tab for the group you want to delete, and then click the Delete icon. When you delete a group, iTunes U deletes all objects within the group. ■ To add a new group, such as a group with permissions set to Drop Box so students can upload files for instructors to review, click the Add icon in the tab controls section, type a name for the group, choose a group type from the Type pop-up menu, and then click the Save icon to save the new group. For more information on group types, see “Creating Group Types” (page 96).

To edit this element	Take this action
Group type	<p>Click the Edit icon in the tab whose group type you want to change, choose a new group type from the Type pop-up menu, and then click the Save icon to save the new group type.</p> <p>If you are changing from a Simple group to a Smart group or Feed group and the group contains files, you must move or delete the files before changing the group type. If you are changing from a Feed group to a Simple group or Smart group, iTunes U deletes all status messages and tracks stored from the last feed update. For more information on group types, see “Creating Group Types” (page 96).</p>
Course page group access	<p>Click the Edit icon in the tab whose group-level user access you want to define, and then choose the access level you want to assign to a user from the user’s Access pop-up menu. For more information on group-level access, see “Assigning User Access to Groups” (page 72).</p> <p>Note: You can only edit Course page group access when using advanced access controls.</p>

Creating Group Types

You can create groups, displayed as tabs, to help organize course content. How you create content and structure a course can determine the types of groups you choose to create and therefore how iTunes U populates the groups within a [Course page](#).

You can create the following types of groups within a Course page:

- **Simple.** A Simple group populates track content in a Course page when users explicitly upload tracks to the course in your iTunes U site.
- **Smart.** A Smart group displays tracks in a Course page by performing a search of your site for all tracks that match the criteria you specify.
- **Feed.** A Feed group automatically populates track content in a Course page based on the specified podcast feed URL and details. Course content can be updated on a periodic basis and, depending on your site settings, can be updated as often as every day.

Using Feed groups, your institution can host content on a local server instead of uploading content to Apple’s servers, allowing the content to remain inside your institution’s network. This technique offers multiple forms of distribution from a single source, allows the content to appear in iTunes U and other [podcast](#) aggregation destinations without multiple efforts, and allows your institution to provide much more content than if it was all uploaded to Apple’s servers.

To create a Simple group:

1. Make sure you are editing a Course page (click Edit Page in the Tools area).
2. Click the Add icon in the tab controls section to create a new group.
3. Type a name for the new group.
4. Choose Simple from the Type pop-up menu.

5. Choose an advisory label for the group, if needed:
 - **Unset.** Indicates that the group's explicitness is unknown. iTunes U does not apply an advisory setting to the group.
 - **Do Not Mark.** Indicates that the group's content is not explicit. iTunes U applies the setting, but does not display an advisory graphic for the group. Apple recommends that you choose Do Not Mark when a group is not explicit but should not have the Clean icon advisory graphic because the group does not contain an alternate version of content from an explicit group (Mark Explicit). Choose Do Not Mark to implicitly indicate a group is clean.
 - **Mark Explicit.** Indicates that the group is known to contain explicit content, and you want iTunes U to apply an "explicit" setting to the group. iTunes U applies the setting and displays the Explicit icon advisory graphic for the group.
 - **Mark Clean.** Indicates that the group is known to be free of explicit content, and you want iTunes U to apply a "clean" setting to the group. iTunes U applies the setting and displays the Clean icon advisory graphic for the group. Apple recommends that you choose Mark Clean only if the group contains alternate versions of content from an explicit group (Mark Explicit).

iTunes U applies the advisory label setting to any new tracks added to the group and displays an advisory graphic for the group, and all tracks within the group. You can override the setting for specific tracks using the Upload and Manage Files webpage. For more information, see ["Adding Content Using the Upload and Manage Files Webpage"](#) (page 53).

6. Click the Save icon in the tab controls section to save the new group.

A Simple group populates track content in a Course page when users explicitly upload tracks to the course in your iTunes U site.

To explicitly upload tracks to the course, click Upload And Manage Files in the Tools area of the Course page.

To create a Smart group:

1. Make sure you are editing a Course page (click Edit Page in the Tools area).
2. Click the Add icon in the tab controls section to create a new group.
3. Type a name for the new group.
4. Choose Smart from the Type pop-up menu.
5. Choose one of the following from the Rules pop-up menu:
 - All. Indicates you want iTunes U to combine rules and search for tracks that match all the rules you define.
 - Any. Indicates you want iTunes U to search for tracks that match at least one of the rules you define.
6. Choose the criteria you want to search from the pop-up menu.

You can choose one of the following criteria: Title, Album Name, Artist Name, Category Code, Comment, Course Description, Group Name, Course Name, Handle, Information, Keywords, Description, Lyrics, Kind, Release Date.

7. Type the criteria text you want to match. For example, you can create a rule with the criteria that “Title matches physics” or “Artist Name matches John Smith.”

If you selected Kind as your criteria, choose Audio, Video, Audio or Video, or PDF from the pop-up menu to indicate the media file type(s) you want to match.

If you selected Release Date as your criteria, type a number indicating you want iTunes U to search for tracks with a release date in the last *x* day(s). For uploaded tracks, Release Date is the date the track was first uploaded to iTunes U. For tracks within a Feed, Release Date is the track’s “pubDate”. If the [track](#) does not have a “pubDate”, Release Date is the date the track was first added to iTunes U.

8. Click the Add icon to add more rules and combine rules to refine your query, or click the Save icon to save the rule.
9. Click the Save icon in the tab controls section to save the new group.

A Smart group displays tracks in a Course page by performing a search of your site for all tracks that match the criteria you specify. Tracks displayed in a Smart group can change when you add or update tracks to your site. Depending on your search and the iTunes U content caching system, it can take up to 24 hours to display new or updated tracks in a Smart group.

Because iTunes U populates the group by performing a search of your site for all tracks that match the criteria you specify, and the actual tracks in the Smart group exist in another group within your site, when a user access a Smart group, the track list iTunes U displays in the group depends upon the user’s permissions to the track’s original group. For example, if a user does not have access to a track in its original group, the user does not have access to the track in the Smart group and iTunes U does not display the track in the Smart group track list.

To create a Feed group:

1. Make sure you are editing a Course page (click Edit Page in the Tools area).
2. Click the Add icon in the tab controls section to create a new group.
3. Type a name for the new group.
4. Choose Feed from the Type pop-up menu.
5. Provide details about the new Feed group using the fields and options provided.
 - **Feed URL.** Type a Really Simple Syndication (RSS) 2.0 full podcast feed URL. To verify that an RSS podcast feed URL is unique, iTunes U checks the Globally Unique Identifier (GUI), and then checks the podcast title.
 - **Security.** If the podcast feed URL is protected by HTTP Basic Authentication, choose HTTP Basic Authentication from the Security pop-up menu and specify a username and password in the fields provided. iTunes U uses the [credential](#) information to authenticate both the podcast feed URL and the actual content when users attempt to download content.
 - **Signature.** To enable download authentication, choose Append SHA-256 Signature from the Signature pop-up menu. iTunes U appends a SHA-256 Signature to both the podcast and enclosure URLs. Specifically, iTunes U appends:
`time=${TIME}&userID=${USER_IDENTIFIER}&signature=${SIGNATURE}`, where:
 - `${TIME}` is the time, in seconds, when the URL was generated. Specify time as the number of seconds from the epoch (midnight January 1, 1970), normalized to GMT.

- ❑ `{USER_IDENTIFIER}` is the unique identifier (`userIdentifier`) passed to iTunes U in the identity string for the user who created the Feed group.
 - ❑ `{SIGNATURE}` is the SHA-256 signature based on the string containing the first two arguments (`'time={TIME}&userID={USER_IDENTIFIER}'`), signed with the shared secret used in your [transfer script](#).
- “Check for changes.” To check the feed for updates on a daily basis, choose Daily from the “Check for changes” pop-up menu and provide an email address in “Feed owner email.” iTunes U uses the email address to report errors when the non-interactive check of the podcast feed URL fails for any reason. When these periodic checks fail 10 times, iTunes U stops checking the feed and no longer updates the group content.
To manually update a podcast feed, edit the group and click Apply. iTunes U creates new tracks for new items, updates existing tracks, and deletes tracks no longer included in the podcast feed.
 - Status. Displays status details regarding the last time iTunes U attempted to update the Feed group. iTunes U displays either date and time information for the last time new content was added to the group from the specified podcast feed URL or an error message if iTunes U encountered a problem while attempting to check the feed URL for changes.
6. Click Apply to save changes.
 - Click Revert to revert any changes you made since the last save.
 7. Click the Save icon in the tab controls section to save the new group.

For an example of a well-formed RSS feed, see [“Really Simple Syndication Feed Sample”](#) (page 100).

Notes:

- If your RSS Feed contains the iTunes `<itunes:explicit>` tag, iTunes U applies the advisory label setting and displays an advisory graphic for the group or track as appropriate. For example:
 - ❑ No `<itunes:explicit>` tag indicates that the explicitness of the content is unknown. iTunes U does not apply an advisory setting.
 - ❑ An `<itunes:explicit>` tag with a “no” value indicates that the content is not explicit. iTunes U applies the setting, but does not display an advisory graphic. Apple recommends using a “no” value when a group or track is not explicit but should not have the Clean icon advisory graphic because the group or track does not contain alternate versions of content from an explicit group or track (‘yes’). Use “no” to implicitly indicate content is clean.
 - ❑ An `<itunes:explicit>` tag with a “yes” value indicates that the content is known to be explicit and you want iTunes U to apply an “explicit” setting. iTunes U applies the setting and displays the Explicit icon advisory graphic.
 - ❑ An `<itunes:explicit>` tag with a ‘clean’ value indicates that the content is known to be non-explicit and you want iTunes U to apply a “clean” setting. iTunes U applies the setting and displays the Clean icon advisory graphic. Apple recommends that you use ‘clean’ only if the group or track contains alternate versions of content from an explicit group or track (“yes”).

If you use the tag at the channel level, iTunes U displays the advisory graphic in the Course page. If you use the tag on an item, iTunes U displays the advisory graphic in the track list for the specific track.

- iTunes U copies relevant information and data from your [RSS feed](#) and automatically populates your Feed group track content based on the podcast feed URL information and the details you specify. When users subscribe to the feed, they are subscribing to the copied information and data, not your RSS feed directly. Because iTunes U does not use your your RSS feed directly, iTunes U cannot update Course page track content at the same time the RSS feed is updated. If you choose Daily from the “Check for changes” pop-up menu, iTunes U can update the Feed group content on a daily basis. If you want to force a Feed group update you can:
 - Send a request to `http(s)://deimos.apple.com/WebObjects/Core.woa/PingPodcast/site.name` with an id, [handle](#), or feedURL parameter. You can pass the parameter on the query string for an HTTP GET, or pass it as an HTTP POST parameter using a content type of `application/x-www-form-urlencoded`. For example:
`https://deimos.apple.com/WebObjects/Core.woa/PingPodcast/itunesu.edu?handle=876546541`.
 - Use the iTunes U UpdateGroup Web Service operation. For more information, see [“UpdateGroup”](#) (page 153).

Really Simple Syndication Feed Sample

The following is an example of a well-formed iTunes Really Simple Syndication (RSS) feed.

At this time, iTunes U does not ingest data from all of the tags used in this RSS feed sample (for example, link, copyright, itunes:category).

```
<?xml version="1.0" encoding="UTF-8"?>
<rss xmlns:itunes="http://www.itunes.com/dtds/podcast-1.0.dtd"
xmlns:itunesu="http://www.itunesu.com/feed" version="2.0" >
  <channel>
    <title>RSS with the best</title>
    <link>http://www.apple.com/</link>
    <language>en-us</language>
    <copyright> & © 2008 Apple</copyright>
    <itunes:subtitle>A podcast series on RSS</itunes:subtitle>
    <itunes:author>Jane Doe</itunes:author>
    <itunes:summary>Creating a well formed RSS feed is important for
iTunes U. This weekly series follows the methods to ensure your
success.</itunes:summary>
    <description>Creating a well formed RSS feed is important for
iTunes U. This weekly series follows the methods to ensure your
success.</description>
    <itunes:owner>
      <itunes:name>Jane Doe</itunes:name>
      <itunes:email>jdoe@example.com</itunes:email>
    </itunes:owner>
    <itunes:image href="http://images.apple.com/pr/images/rotation
/leopardbox.jpg"/>
    <itunes:category text="Technology">
      <itunes:category text="Podcasting"/>
    </itunes:category>
    <itunes:category text="Technology"/>
    <itunes:explicit>no</itunes:explicit>
    <item>
      <title>XML Basics</title>
      <itunes:author>Jane Doe</itunes:author>
```

```

<itunesu:category itunesu:code="101102" />
<itunes:subtitle>A short primer on RSS and XML</itunes:subtitle>
<itunes:summary>The basics of RSS is XML. This episode will
assist in the development of the RSS shell used for iTunes U
RSS feeds.</itunes:summary>
<enclosure url="http://nowhere.com/podcasts/RSS-Basics.m4a"
length="234233" type="audio/x-m4a"/>
<guid>http://nowhere.com/podcasts/RSS-Basics.m4a</guid>
<pubDate>Tue, 17 Jun 2008 19:00:00 GMT</pubDate>
<itunes:duration>7:04</itunes:duration>
<itunes:keywords>rss, itunesu, xml, tutorial,
training</itunes:keywords>
</item>
<item>
<title>Namespaces Demystified</title>
<itunes:author>Jane Doe</itunes:author>
<itunes:subtitle>Understanding how to extend XML through
namespaces.</itunes:subtitle>
<itunesu:category itunesu:code="101102" />
<itunes:summary>Namespaces allow the extension of RSS to suit the
needs of particular systems. iTunes U uses a custom
namespace too.</itunes:summary>
<enclosure url="http://nowhere.com/podcasts/RSS-Namespaces.mp3"
length="289894" type="audio/mpeg"/>
<guid>http://nowhere.com/podcasts/RSS-Namespaces.mp3</guid>
<pubDate>Wed, 18 Jun 2008 19:00:00 GMT</pubDate>
<itunes:duration>4:34</itunes:duration>
<itunes:keywords>xml, namespace, rss, tutorial,
training</itunes:keywords>
</item>
<item>
<title>Adding content & keywords</title>
<itunes:author>Jane Doe</itunes:author>
<itunes:subtitle>Filling out your RSS feeds.</itunes:subtitle>
<itunesu:category itunesu:code="101102" />
<itunes:summary>Now we have our structure in place, we will add
item information and metadata</itunes:summary>
<enclosure url="http://nowhere.com/podcasts/RSS-content.mp3"
length="4989537" type="audio/mpeg"/>
<guid>http://nowhere.com/podcasts/RSS-Content.mp3</guid>
<pubDate>Thu, 19 Jun 2008 19:00:00 GMT</pubDate>
<itunes:duration>3:59</itunes:duration>
<itunes:keywords>itunesu, xml, rss, tutorial, training,
keywords, item</itunes:keywords>
</item>
</channel>
</rss>

```

Apple recommends using <http://feedvalidator.org/> to validate your feeds before sending them to iTunes U.

