Lesson Files
A couple of CDs from your personal CD collection

Tools
iTunes, Internet connection (optional)

Time
Approximately 45 minutes

Goals
Play CDs in iTunes
Import all or a portion of a CD into the iTunes Library
Add or adjust CD information about albums or songs
Browse and search efficiently through your music library
Create and customize personal playlists of your favorite music
Make custom CDs
Lesson 1

Making a Custom CD from Your Music Collection

Imagine having instant access to songs you have always loved but haven’t played in eons (because they were buried on albums you generally didn’t like). Imagine setting up what amounts to your own private radio station—playing all your favorite tunes for hours on end (days, even). iTunes makes this possible. CDs, those silvery discs that have become the center of your musical world, are about to become archaic. It’s time to start thinking of a CD as an *archive*, a safe backup. To really enjoy your media, you want it readily accessible and malleable as only a digital creation can be.

Although this lesson demonstrates a fundamental aspect of iTunes—that is, getting your CDs into your computer, organizing them, and burning a custom CD of your favorite songs—it has a broader goal. Somewhere near where you’re sitting right now are probably dozens, perhaps hundreds of CDs that you’ve been purchasing for the last many years. The idea of this lesson is to initiate the ambitious project of moving that entire collection from discrete CDs into a single, massive jukebox—an enormous body of acoustic joy!
As discussed in the “Getting Ready” chapter, you’re going to follow three characters through their adventures with iLife. In this lesson, let’s begin by seeing what Christopher, the father of the birthday girl, is up to. He’s working with his daughter to make a special birthday party CD as a gift to her guests. You’ll start by working with just a few CDs to get into the groove.

**Starting iTunes**

As with many Apple programs, you have multiple ways to launch iTunes. You might double-click the application file on your hard drive, located in the Applications folder. You could simply insert a music CD into your drive, which will automatically start iTunes. For the purposes of this lesson, single-click the iTunes icon that resides in the Dock.

![iTunes Icon](image)

**First-Time Use**

Christopher uses iTunes all the time. But if this is the first time you’ve launched iTunes, the program’s iTunes Setup Assistant will direct you through a series of windows.

1. Click the iTunes icon in the Dock.

2. Click Agree in the software license agreement window (but only if you mean it).

3. Click Next in each window to use iTunes’ default settings. These settings, by the way, are pretty smartly selected. The only one you might want to skip is the one asking if you want to go to the Apple Music Store. You don’t need to go there now, and can easily go later to download songs when you’re ready.

4. Click Done. This concludes the set up and will take you right into iTunes—a clean, empty space where you can begin your lesson.
Getting Songs from CDs into iTunes

Getting Songs from CDs into iTunes

There’s a lot to look at in the iTunes interface—but perhaps the best way to get familiar with it is simply by putting a CD into your drive and seeing what happens. You can follow along with your own CD as you watch Christopher begin the process of making a CD for the birthday party.

When you insert an audio disc into your Mac’s ComboDrive (or SuperDrive; it works for both CDs and DVDs), your CD will show up as a “source” in the left column, and details about it—a list of songs and their durations, among other things—will appear on the right if you’re connected to the Internet. Christopher begins with a little Sheryl Crow.

Playing Songs and CDs

Once your CD is onscreen, you can use iTunes as a simple CD player. You don’t have to do anything fancy with iTunes in order to listen to it. The fast way to play a song is to double-click a line item in the song list. But if you want to see what you’re doing, follow these steps.

1  Using your pointer, single-click a song title. A blue bar will highlight it.

2  Click the Play button.

The play and volume controls are together on the top left of the window. While a song is playing, the Play button turns into a Pause button (press it again to pause the song).

NOTE  The spacebar on your keyboard also acts as a Play/Pause button.
Also, while a song is playing, a speaker icon appears in the leftmost column of the list of songs.

As the song plays, look around at the iTunes window. At the top of the window is the album and song information, along with a bar representing the length of the song. A little black diamond shows what part of the song is playing. You can grab this diamond and scan backward or forward in the song.

There are also forward and reverse buttons alongside the Play/Pause button. Click either of these to skip to the next (or previous) track. Click and hold to scan through the track you’re listening to.

When the song you initially selected is done playing, iTunes moves on to the CD’s next track. Notice, however, that the blue selection bar stays where you started, although the speaker icon hops to the next song. This can be confusing at times.

If you want to know what song you’re listening to, look for the speaker icon and ignore the blue bar.

The checkmark next to each song title indicates that you want iTunes to play that song (if the opportunity arises) or import that song (in the event that you’re pulling music into your Mac). Unselect a title, and iTunes will ignore
the song—either skipping it when you import or, if it’s already in your computer, skipping it when you’re playing a list of tunes.

Using Automatic CD Album Information
What if you insert a CD and it shows up on your Desktop merely as “Audio CD?” What if your CD shows up in iTunes but is clearly devoid of key information—namely, song and album titles? It surprises many people to learn that the song info you see in iTunes doesn’t come from the CD. It comes from somewhere external to your Mac.

Here’s the deal: Although your Mac can certainly tell that this is a music CD, and one that has, say, 11 songs of varying lengths, it doesn’t know anything more specific about the album and its contents. And that is why you want to
be connected to the Internet. Your Mac alone can’t tell you this information, but a wonderful online database (called the Gracenote Compact Disc Database, or CDDB) is available to help. iTunes can gather this information automatically if you set it up to do so (which you did when you went through the Setup Assistant the first time you launched iTunes). If you loaded your favorite CD and the screen looked too blank for you, make sure you are connected to the Internet, and then do the following.

1. Go to iTunes > Preferences.

2. From the General panel that opens, make sure “Connect to Internet when needed” is checked.

   That will allow iTunes to automatically go online and get disc data when you insert a CD into your Mac.

3. Click OK.

4. Select the Audio CD in the Source column.
5 Go to Advanced > Get CD Track Names.

This will access the Internet and find the information you seek from the CDDB.

Once the process is complete, the iTunes window should look similar to before, but with lots of useful data on the screen.

Now that you can play the CD in your Mac using iTunes, it’s a good time to take a closer look at other sources in iTunes and how you work with them.

**Understanding iTunes Sources**

When you open iTunes the first time, you’ll see a big, empty table that you’ll use to organize and ultimately play your music.

The organizational structure of iTunes is similar to that of iPhoto; you may even recognize it as similar to that of the Mac OS. On the left side of the window is a Source column. Your CD is a source. Choose a source, and details about its contents appear on the right side (although your other iTunes sources may not yet have any contents to reveal).
And just as the Mac OS offers a handful of different kinds of sources (hard disks, CDs and DVDs, connected servers, and so on), each with its own distinct icon, iTunes has a few of its own sources as well.

- **CDs** show up in the Source column only when you have a CD in your Mac. Eject a CD and it will disappear from this list.

- **Library** is the big container that will hold all of the audio files (songs, albums, downloads) you put on your Mac, including, of course, the songs you import from CDs. You’ll make subsets of this potentially enormous collection to make it easy to find the songs you’re looking for. When you move songs from CDs into iTunes, you’re loading music into your Library.

- **Music Store** is the oft-mentioned Apple Music Store, where you can (legally!) download songs or albums directly into your iTunes collection—streamlining the process of building your Library.

- **Playlists** are malleable, expandable collections of songs that you build yourself. They are the heart and power of iTunes. Since you make them yourself, you won’t see any playlists in the Source column when you start up, but soon you’ll have many.

**NOTE** There are, of course, other sources, although you can ignore them for the time being. **Radio** uses your Internet connection to bring you online music channels for your listening pleasure. **60’s Music, My Top Rated, Recently Played, Top 25 Most Played, and Party Shuffle** (which selects songs from your Library or chosen playlist) are special sources that are built for you. These automatically generated playlists are signified by a small round gear in the Source icon. It’s easy to explore them on your own, but you can disregard them for this book.
Selecting and Importing Songs and Entire CDs

Getting music from a CD into your Mac is pretty simple. In the parlance of hipsters everywhere, the act of importing songs is called *ripping*.

The time it takes to import an album (or song) depends on a few factors—notably the speed of your Mac (a dual-gigahertz G5 will import an album faster than an 800 MHz G3, for instance). Import speed is measured by how much faster it is to import a song than to play it. A 10X import, for instance, will rip a five-minute song in 30 seconds, or a 60-minute album in six minutes.

**NOTE** Casual observation indicates that a 300 MHz G3 rips at around four times faster than real time; a dual-gigahertz G4 rips at around 10X; and a dual-gigahertz G5 at 20X. For one or two songs, those differences are relatively small. But if you’re moving 300 CDs into your music collection, the difference between ripping four albums per hour and ripping 20 per hour is significant and will radically impact your productivity—and probably your enjoyment of this experience.

1. Select your CD as your source.
2. Make sure there’s a checkmark next to the titles of all of the songs you want to import into iTunes, and uncheck any songs that you don’t want to import; those will remain on the CD, never to see the inside of your computer.
3 Click Import.

Notice that once a song begins to import, the information bar at the top of the iTunes window indicates the song being imported, the speed of the import, and the time remaining to complete the task.

While importing, iTunes places a small orange import icon on the leftmost column of your track list, where the speaker is when you’re playing a song.

By default (as set in the preferences), when you start to import tracks, iTunes will also start to play them. (It can do both simultaneously.)

NOTE Although playing while importing is generally an okay thing to do, it can be confusing too. The song that’s playing is not necessarily the one being imported, and vice versa. Casual importers may find themselves waiting for the album to finish playing, not realizing it finished importing long before. If you want to stop songs from playing, click the Stop button (or the spacebar); this won’t affect the importing. Keep an eye on the import icon and the track info at the top of the window to see your progress.

When a song has been completely imported, iTunes changes the import icon into a green checkmark. When the entire CD is done importing, it will “bing” politely.
Now that you’ve ripped your first CD, eject it and insert another. Rip a few more CDs, and then move on to the next section.

**NOTE**  By default, iTunes creates AAC audio files, which are considered an excellent audio format with good sound quality and small file size. Unfortunately, some MP3 players don’t support it, and you might want to have MP3 audio files instead. You have control over the method and quality of compression that iTunes uses to copy a song. To adjust the settings, go to Preferences > Importing. From there, you can adjust the Import Using pop-up menu and select an audio format.

AAC is also known as MP4 (the successor to the MP3 format). You might recognize it as the format of the songs that you purchase from the Apple Music Store as well as from streaming music providers such as XM and Sirius. Other formats include AIFF and WAV, which are standard audio formats that provide very high sound quality but generate large files. Commercial CDs tend to contain AIFF sound files.

**Change Info**

Let’s say you’ve finished ripping a handful of CDs and had no hitches. When iTunes automatically looked up information on the Internet about each CD you placed into your Mac, it loaded a bunch of data into a database it keeps in your iTunes Library. In most cases, you won’t need to mess around here, but if the CD data doesn’t come up the way you want it to—either because you don’t have an Internet connection, because the data doesn’t exist for your CD, or you simply don’t agree with some of the characterizations the CDDB database offered—you’ll need to add or adjust information. It’s easy to do, and as you get more advanced with iTunes, you’ll learn many interesting ways you can catalog and organize your collection.

**NOTE**  The Gracenote CDDB is compiled through user submissions and not from record companies. Consequently, there may be some errors or subjective opinions about data included.
Adjusting Information Before Importing

Let’s begin by adjusting information for a CD you haven’t yet imported into your computer. Follow these steps if you have a CD with “problem” information.

1. Insert a new CD.

If the CDDB has info on this album, it will show up in the iTunes window.

In this example, the album is *Rock ’n’ Roll Gumbo*—an album from New Orleans great Professor Longhair. The CDDB has information on the album but considers it to be in the blues genre. As far as I’m concerned, zydeco is a better genre classification. So let’s change it.

2. Select the CD Source icon.
3 Choose File > Get Info.

The CD Info window opens and gives you an opportunity to adjust basic info before you import. If you add info prior to importing, the data will follow the songs into iTunes automatically. If the Cddb did its job correctly, all this data should be filled in. In my example, I just want to change the genre.

4 Add or change information in the fields.

Christopher changed the “Blues” genre to “Zydeco.”

5 Click OK when you’re done.
Adjusting Information After Importing

Adjusting information prior to importing is good for data that’s related to entire albums, but it’s not the end of the process if you still need to add data about individual songs. In particular—say, for a custom CD that a friend has provided or for an arcane CD that isn’t yet in the CDDB—you might need to add or change more info for the disc.

To do that, let’s import our albums and check out the same Get Info function on albums and songs, this time using it in the Library. It looks similar to the way it did a moment ago, but now there are more fields and options.
Here's the Library after a few albums have been imported. One of them was not recognized by the CDDB, and its tracks were sorted to the bottom of the list of songs.

See the five tracks at the bottom of the list with missing information? Since Christopher didn't input new info prior to importing, he'll have to do it now. First, he's going to add information that is common to all the songs—the album info.

1 Select all five tracks. To do this, click Track 01, then hold down the Shift key and click Track 05.

All the tracks from 01 to 05 will be selected together.
2 Choose File > Get Info.

Since it’s a little unusual to modify information for more than one track, iTunes will pop up a warning to make sure you intend to do this. If you’re confident of your Mac skills, you could select “Do not ask me again”; however, it’s a good rule to keep the safety on. Either way, click Yes in the warning window.

iTunes will now open the information window, in this case entitled Multiple Song Information. If the CDBB didn’t recognize the CD, the window will start out blank. Fill in as much data as you can.
3 Click OK and check out your Library.

The songs have been updated, sorted by artist.

iTunes still doesn’t know anything about the individual tracks. For that you’ll need to go through song by song.
4 Select Track 01.

5 Choose File > Get Info.

Notice this is the third time we’ve chosen Get Info, and it has behaved slightly differently each time. First it was for a CD prior to importing, then it was for multiple tracks after importing, and now it’s for a single track. What you see initially is the Summary tab of information. Four tabs appear along the top of this window.

6 Select the Info tab, opening up an area in which you can enter a variety of important tidbits about your track.
7 Change the name of Track 01 and click OK.

Track 1 is really called “Sweet Baby’s Arms.”

8 Repeat these steps for all unnamed tracks.

Before you know it, your Library is complete and looks something like this:
If you can’t see all the information about a track in the window, you can change the width of the column. When you move the pointer over the lines that separate columns, the cursor changes. You can drag the column border to the right or left to enlarge or narrow a column, respectively.

**Browsing and Viewing Your Tunes**

Pouring all your CDs into iTunes isn’t enough. Being able to find songs you’re looking for is critical. Clicking any column in the iTunes Browser will sort that column alphabetically. Generally, an alphabetical arrangement by artist is pretty useful.

In the top of the window is a Search field; just start typing, and iTunes will do its best to find songs that you are describing—whether the letters you type are part of the name of a song, an artist, or an album. One particularly cool aspect of the search feature is that it starts looking as you type so you don’t have to type an entire word, and you never need to press Return.

**TIP** By default, when you’re searching for music, iTunes checks the Artist, Album, Composer, and Song Name fields. You can narrow your search by choosing just one of these fields. To do so, click the search icon (the magnifying glass) to the left of the Search field, choose the category you want to search, and then type your criteria in the Search field.

After Search, the most useful method of browsing a large collection is the built-in Browser. See that eye in the top corner of the window? Click it. The track info area will rearrange itself into some useful quadrants.

In this view, simply select one of the items in any of the three columns and you can quickly drill down any search through the collection. If you select All
in any column, you get the full Library. Browsing by genre creates an experience that is akin to the way you might wander down aisles in a music store. If your tastes are more eclectic, you could skip genre and focus on artist.

1. Click an artist’s name and only songs by that artist show in the window below.
Two albums from this artist are displayed together. Select one of the albums, on the right, and the search is narrowed even further:

To get back to the full Library, select All Artists (or All Genres) and you’ll see all the songs again.

**TIP** If you don’t want to browse with the Genre column visible—say you simply never use this very general criterion—you can make the column invisible in the Browser. Choose iTunes Menu > Preferences > General, unselect “Show genre when browsing,” and then click OK.

Now that you’ve seen how to import and browse, you’re ready for the key feature of iTunes: the capability to pull together songs from different albums and different artists based on whatever criteria you feel are important. It all comes down to playlists.
Make Playlists

In the good ol’ days, when you wanted to listen to music, you listened to a whole album. A CD was a nice, functional unit of music. Still, if you had the time, it was generally preferable to make a party tape or disc—a compilation of your favorites. New technologies produce new opportunities; introducing the playlist. It creates an experience akin to an instant, malleable, best-of CD.

A playlist is a set of songs that you build and sequence yourself. By making a playlist, you are not affecting your iTunes Library at all. The Library is where all the songs live; the playlist is just a convenient way to access some of them. It’s also an essential building block if you want to burn a CD of some tracks (as Christopher wants to do for the birthday party), add a bunch of tunes to a slide show in iPhoto, or organize your music collection for your iPod.

1. Click the + button at the bottom of the Source column. This adds an untitled playlist to your Source list.

2. Type a name for the playlist. (Christopher calls his “Jessica’s Birthday,” which you may also want to do to make it easier to follow the lesson steps.) Click the new playlist in the Source column, and notice that there
is nothing on the right side of the window. It’s empty, since you haven’t added any songs.

3 Click Library.

The main window shows the songs you’ve imported so far.

4 Drag a song from the list of tracks on the right and drop it on Jessica’s Birthday.
5 It may not look like anything happened at first, but if you select Jessica's Birthday you'll see your song in that playlist.

6 You can add more than one song at a time. Common to many Macintosh applications is Command-click—which lets you select a series of disconnected items at the same time. Go back to your Library, click one song, then hold down the Command key and click a second song from that list. Both songs will be selected. Drag the pair of songs to your playlist.

**NOTE** Shift-clicking works for selecting groups of contiguous songs.
Click an album from the Album column and drag it to Jessica’s Birthday.

All of the songs from that album are added at once.

You can add individual tracks or whole albums in many ways. This represents just the basics. No matter the method you use, before you know it the Jessica’s Birthday playlist has a number of songs that you can play back-to-back.

You can include a song in multiple playlists. You can even add songs to one playlist from another simply by dragging songs across the playlists.

Deleting a song from a playlist will not delete it from your Library. Deleting from the Library, however, will remove it from your computer. You’ll get a warning dialog, but be careful when you delete.

Play a Playlist and Adjust Song Order
Whenever you select a playlist, iTunes will display some key information at the bottom of the screen: how many songs are in the list, how long it takes to play the entire list straight through, and (in case you care) how many bytes of data it represents. (This last bit of info is most useful when you want to burn the songs in a playlist to a CD.)

Playing the playlist is much like playing a CD. Choose a song and click Play (or just double-click the song), and the rest of the songs follow in the order they appear in the playlist.
Random Play
Sometimes you want to be surprised by a song. Particularly with large playlists (or your Library), you just want iTunes to choose a song for you and play it. The Shuffle button at the bottom of the Source column handles this for you.

1 Select a playlist to play.
2 Click the Shuffle button.

It will turn blue when it’s shuffling your music.

Clicking Shuffle will reorder the songs in your playlist (temporarily, and randomly). If you don’t like the new order, click the Shuffle button again, and iTunes will restore the sequence of songs. You can always try again.

Changing Order
But what if you don’t like random playing, and you don’t like the order in which you’ve dropped songs into your playlist? It’s simple to change the order of your playlist in a more permanent way.

1 Click and drag a song within the playlist.
Notice the black line that indicates where the song will go if you release the mouse button.

2 Release the mouse button when the song is where you want it.

**Burn a Custom CD**

Once you have arranged a playlist, you might want to burn a CD for yourself. Once the Jessica’s Birthday playlist is ready, all her father needs to do is alert iTunes he wants to burn a disc.

1 Click Burn Disc icon at the top of the window.

The button will transform into a warning icon—alerting you it’s ready to go, live and “hot.” The information window will direct you to insert a blank CD into your Mac’s combo drive.
2 Insert a blank CD.

iTunes will check to see if the disc is good and that the songs on the
playlist will fit on it.

The size of the playlist (in megabytes; MB), noted at the bottom of the
screen, is critical. A CD will hold only around 650 MB of music. iTunes
is smart enough to coach you through splitting up your playlist over a
couple CDs if it happens to be too big, or you could do it yourself.

NOTE ▶ iTunes measures sizes by the actual file size of the audio file. But
when you burn a CD, iTunes converts all your files, regardless of their for-
mat to the CD standard format, which may be larger (or smaller) than
what iTunes reports for your playlist. A 650 MB CD holds about 70 min-
utes of music regardless of how compressed your MP3 files are.
3 Click the Burn Disc icon.

iTunes will begin the process, spinning the Burn Disc icon as it works, and keeping you posted as to the burning status in the info window at the top of the screen. In a few minutes, the disc will be complete, and your Mac will eject it automatically.

Custom CD Labels
The best complement to a custom CD is a custom label. Many software packages are available to streamline the label-making process. Some go so far as to insert photos (from iPhoto) and the list of songs (from your playlist in iTunes). They also provide cover art for your jewel case, as well as a label to affix to your CD.
What You’ve Learned

► Double-click the title of a song on a CD to play the song.
► Click Import to rip CDs to iTunes.
► Unselect the titles of songs you don’t want to import.
► To adjust song and album information, use Get Info either before or after you import.
► Use iTunes’ Browser and Search field to find songs.
► Create a new playlist with the + button.
► Drag one or multiple songs from the Library to a playlist to add them to that list.
► Drag tracks up or down in a playlist to change their order.
► Click the Burn Disc button visible in each playlist window to record all of those songs to a CD.