

# iTunesU @ the NYU College of Dentistry

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This past fall, NYU's College of Dentistry (NYUCD) debuted its iTunesU interface. Capturing lectures for later reference is not a new practice, and universities have distributed such recordings on videocassette and via video conferencing for years. However, with the rise in popularity of small audio recording devices and mp3 players, lecture capture has become a commonplace practice.

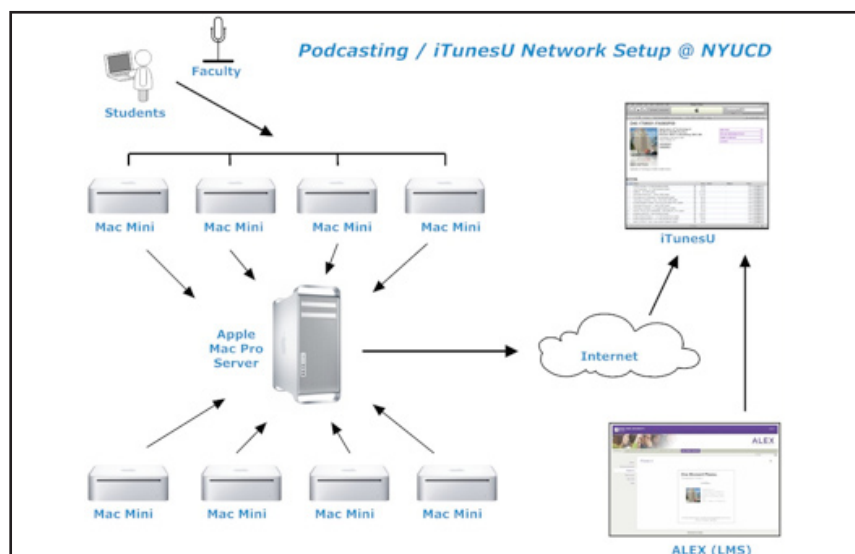
At NYUCD, many of our students were already recording lectures on their own devices to provide a means of reviewing the information later, outside of the classroom. An early pilot study indicated that students wanted a more coordinated approach that would ensure that the lecture material was available to all. In September 2006, our first-, second-, and third-year classes in the predoctoral program were given iPods and adaptors that could be connected to the AV systems in our lecture halls and large classrooms. Students had control of the recording process — they began and ended the recordings, compressed and converted them to mp3 files, and uploaded the files to class websites.

## iTunesU @ NYUCD

In early 2008, Apple Computer, Inc., introduced updated server software, which included Apple's Podcast Producer program, allowing for a more automatic process and direct upload to iTunesU. In August 2008, Apple Mac mini computers were installed in eight of the largest classrooms and lecture halls at NYUCD and were connected to the network and to the AV systems in these rooms.

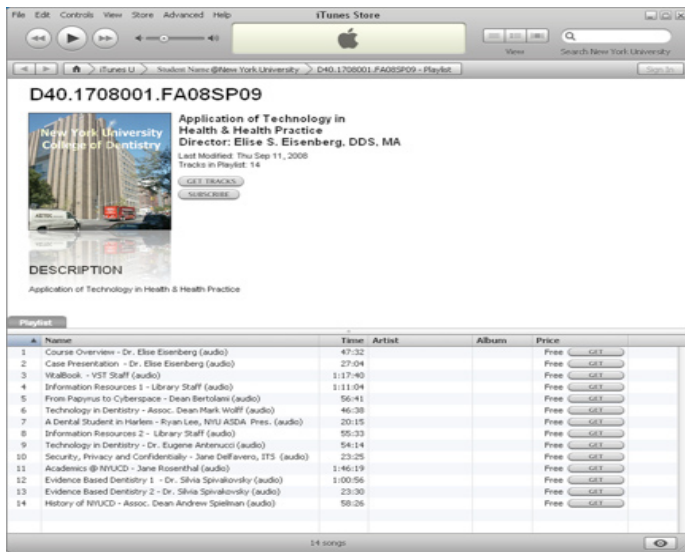
Three students in each class are responsible for starting and stopping the recordings using a customized web page created by the NYUCD Office of Informatics. The recording process workflow has several steps.

- First, students begin recording the lecture in the room they're in.
- The recording is then stored on the Mac mini.
- At the conclusion of the lecture, students specify the course in which the lecture was given and the title of the lecture.
- Finally, the recording is transferred to the Mac OS X server, processed, and uploaded directly to iTunesU.



Apple Mac mini computers installed in eight NYUCD classrooms and lecture halls are connected to the network and to these rooms' AV systems.

*Dr. Eisenberg is the Director of Informatics & Digital Support Services and Clinical Professor of Epidemiology & Health Promotion at the NYU College of Dentistry.*



The course page for one of the NYUCD courses in iTunesU.

Audio files are available for download within 30 to 60 minutes. Each begins with a copyright notice identifying the recording as property of NYUCD and for the use of only students and faculty of NYUCD as part of its educational program.

Between September 28, 2008, and March 1, 2009, there were more than 121,000 audio track downloads of lectures recorded and stored as part of iTunesU @ NYUCD. In addition to audio files, faculty can supplement the recordings by uploading files in a variety of formats. NYUCD has updated its system to capture

PowerPoint slides as video recordings. These recordings are available 60 to 90 minutes after lectures are completed.

### Connecting to iTunesU

Students are given access to iTunesU through an NYU learning management system (LMS) called ALEX (Advanced Learning Exchange). ALEX provides functionality similar to that of NYU's more widely used LMS, Blackboard, but is developed by Sakai ([sakaiproject.org](http://sakaiproject.org)), an open-source community of developers

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Dr. Eisenberg speaking on the NYUCD iTunesU deployment, this past March 26th at the Massachusetts Institute of Technology, in one of the sessions of *AcademiX 2009 — Beyond the LMS: Innovations in Higher Ed Teaching & Scholarship* ([maclearning.org/2009/03/mit2.html](http://maclearning.org/2009/03/mit2.html)). Photo: Nelson Chin

## A Brief History of iTunesU

iTunesU is an environment within iTunes that allows students at participating universities to retrieve mp3 podcasts of class lectures. Apple launched iTunesU in August 2004, around the same time that Duke University began to distribute iPods to all incoming freshmen.

In the fall of 2005, Stanford University became the first institution of higher learning with a public iTunesU site. Apple added a link to iTunesU from within iTunes in the summer of 2007. At that time, 16 universities were listed on the site with more than 12,000 audio and video files.

By November 2008, there were 600 active iTunesU sites, both public and private, spanning 18 countries. There are now more than 250 iTunesU public sites and more than 125,000 free audio tracks.

iTunesU also contains a section called "Beyond Campus," which offers links to non-University websites, including those of libraries and museums.

— Elise Eisenberg

## Podcasting & iTunesU at the NYU School of Medicine

For nearly 40 years, the NYU School of Medicine has regularly recorded faculty lectures. In 2006, in an effort to keep pace with the evolving technology driving the video and audio lecture recording, students initiated a podcast-recording project. When ALEX (the learning management software also employed by NYU College of Dentistry, see pp. 6-8) was introduced in 2007, it allowed students streamlined, convenient access to these podcasts via iTunesU. This innovation changed the way faculty members taught their courses — and the way medical students learned from them.

Today, all NYU School of Medicine students, faculty, and residents can listen to and download over 1,500 of these podcasts from over 300 faculty members. Half of the recordings are in mp3 format. Half are full-video lectures, featuring audio tracks accompanied by screencasts of the lecture slides. Almost all are 40-60 minutes long. On average, students download 1,400 podcasts a week.

### Multiple Methods

While most NYU School of Medicine podcasts are recorded during class lectures, others are recorded ahead of time. Some faculty members record themselves on their computers. They then upload their podcasts to iTunesU before class so students can download and listen to them beforehand. Instead of using class time for the lecture, they are able to use that hour for small-group exercises or simulations.

### Podcasting Benefits Both Faculty and Students

NYU School of Medicine students and faculty have hectic schedules, which is why the ability to capture and revisit lectures via podcasts is especially valuable. Podcasts free up classroom time, allowing learners to go through the lecture at the pace that best suits their study needs. Additionally, students can access iTunesU 24 hours a day to download any podcasts they need. Many transfer them to mp3 players for later listening.

Dr. Marc Triola, the Director of the Division of Educational Informatics, oversees the use of educational technology and educational informatics research and development for the NYU School of Medicine and Graduate Training Programs. In his opinion, podcasting is immensely valuable. “Because students and faculty are rarely in one place at one time,” Dr. Triola observes, “the asynchronous nature of podcasts helps us deliver learning content to the classroom, the dorm room, and the bedside. It empowers the students by offering improved access to their learning materials.”

### The Future

Podcasting at the NYU School of Medicine is still a relatively young practice, and Dr. Triola sees great promise in it. “I think the next step here for podcasting is that soon, the recordings will become a primary means for delivering didactics, and classroom and lab contact time will be reserved more for smaller group problem-solving or simulation exercises.”

— Dana Rasso

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primarily from higher education institutions.

Students log in to ALEX with their NYU accounts. They then select from a course menu, which opens the course material within iTunesU. Each course page in iTunesU contains all the recordings for the course.

Students can download recordings one at a time, or they can “subscribe” to courses and receive

the latest podcasts for each course to which they are subscribed, automatically, when they open iTunes.

### Supplementing In-Class Lectures

In addition to their coursework, students at the College of Dentistry serve in a variety of settings outside of NYUCD as well as participating in outreach programs. With iTunesU, students can review any lecture they might miss.

iTunesU allows us to interact more with our students during lectures. By providing lecture material ahead of time, we can use the lecture time to cover material in a more applied and interactive format and to review clinical cases and advanced concepts. §