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### MITx News



#### White House cites MITx MOOC as key tool for bringing innovations to market more effectively

*3.086x Innovation and Commercialization listed by OSTP as resource for improving US innovation competitiveness*

CAMBRIDGE, MA, June 24, 2013 — The White House Office of Science and Technology Policy released a fact sheet today citing the upcoming MITx massive open online course (MOOC) 3.086x Innovation and Commercialization as a key resource for bringing innovation to market more effectively. Taught by MIT Professor Eugene Fitzgerald and Dr. Andreas Wanknerl, the course is developed out of an innovation approach described in their 2010 book *Inside Real Innovation* (World Scientific).

The course, offered on the edX platform starting September 16, is intended for inventors, entrepreneurs, corporate decision-makers, investors and policy-makers. It provides a new model for understanding the innovation process as highly iterative rather than linear. The course and related book were developed out of Professor Fitzgerald's years of experience bringing new silicon chip technologies to market and share much of that real-world experience.

> [Read the complete press release](#)

**New MITx online physics course combines latest in learning technology with classic videos by Walter Lewin**

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*MOOC pairs cutting edge online assessments with legendary lectures and demonstrations by renowned MIT professor*

CAMBRIDGE, MA, May 30, 2013 -- Much attention is given to the automated assessments that play a key role in allowing massive open online courses (MOOCs) to scale, and rightly so, as these tools permit hundreds of thousands of learners to receive an unprecedented level of feedback on their work. A new MIT MOOC starting September 9, 2013, [8.01x Classical Mechanics](#), combines these cutting edge assessments with lectures that have an unmatched pedigree in digital learning history.

"With this course, we are creating a whole new experience for the millions who have enjoyed my lectures," remarked Professor Walter Lewin. "Where before they got only the experience of sitting in the classroom and watching, now they can really test how well they understand the concepts. They can communicate with other students and even get occasional help from the course team."

> [Read the complete press release](#)

## New Courses

- [4.112 Architecture Design Fundamentals I: Nano-Machines](#)
- [7.340 Unusual Biology: The Science of Emerging Pathogens](#)
- [7.345 Evolution of the Immune System](#)
- [7.346 Virus-host Interactions in Infectious Diseases](#)
- [15.229 Managing Global Integration](#)
- [21A.01 How Culture Works](#)
- [21H.007J Empire: Introduction to Ancient and Medieval Studies](#)
- [STS.009 Evolution and Society](#)

## Updated Courses

- [2.96 Management in Engineering](#)
- [14.461 Advanced Macroeconomics I](#)
- [15.761 Introduction to Operations Management](#)
- [21H.244 Imperial and Revolutionary Russia: Culture and Politics, 1700-1917](#)

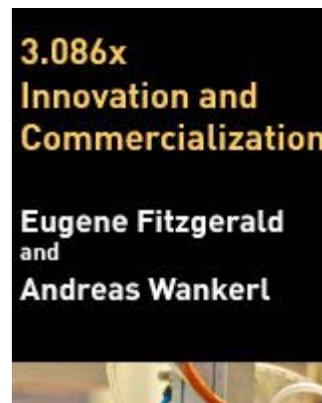
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## Highlights for High School



Click to [see the image](#).

We are very excited to announce that the Highlights for High School website is getting a new look!

We've redesigned the site to be easier to navigate and have added content like expanded introductions for students and teachers. Look for it in the coming months!

Here's a [sneak peek](#).

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## Current Events in Context: When agility trumps speed



Image of a cheetah. Photo by [Mara 1](#).

The cheetah is the fastest mammal on earth, clocked at speeds exceeding 60 miles per hour while in captivity. Although it's much harder to measure their speed in the wild, experts have long assumed that swiftness is what makes them such formidable hunters. But scientists from London's Royal Veterinary College have recently discovered that a cheetah's true talent lies more in its agility and maneuverability.

They actually hunt their prey at somewhere much closer to 30 miles per hour, only slightly faster than a human at top speed. Yet in stark contrast with human biomechanics, cheetahs can quickly stop, change directions, and accelerate with startling effectiveness.

The key to the discovery was the perfection of a lightweight, solar-powered collar—a tracking device ten



years in the making—that contained a GPS module, accelerometer, magnetometer and gyroscope to precisely track the movement of these animals in three-dimensional space.

Five cheetahs in Botswana were outfitted with the collars and tracked for 18 months in the wild. Data from a total of 367 runs were recorded with remarkable precision, allowing a rich portrait of these animals to emerge.

We learned, for example, that cheetahs hunt as much in dense shrub as open fields, and they will hunt throughout the day, rather than just in the morning, as was commonly believed.

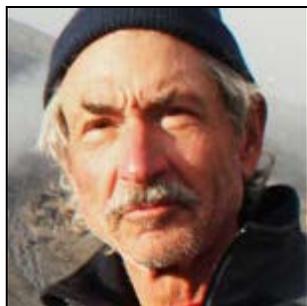
What the data revealed about the cheetah's locomotor skills was most impressive: They can accelerate by 7 miles per hour in a single stride—four times quicker than the fastest human, Usain Bolt. They can also reduce their speed by almost 9 miles per hour in a single stride, which greatly increases their ability to sharply change direction.

The experiment opens up new possibilities in several disciplines, from biomechanics to ecology, and OpenCourseWare offers a broad spectrum of courses to learn more about them. Here's a small sample:

- [9.20 Animal Behavior](#) covers various approaches to the study of animals and their adaptive behavior, including habitat selection, feeding, learning and reproduction.
- [6.832 Underactuated Robotics](#) applies biomechanical principles to the design of autonomous, moving robots.
- [2.003J Dynamics and Control I](#) covers the science of kinematics, a branch of classical mechanics that describes the motion of points, bodies and systems of bodies—the geometry of motion.

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## Views from Supporters



"I have been drawing upon OCW resources as a self-learner ever since OCW was started over ten years ago.

The availability of educational resources from OCW was instrumental in my decision to retire early and commence a self-learning program in areas in which I have great interest, and which are unrelated to

my prior profession.

Currently, I am using OCW resources in conjunction with MOOCs, such as edX, to further my education in subjects such as quantum computation and game theory.

"

- Ronald, MIT Alumnus, USA

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Tell us what you think of OCW at [ocw-feedback@mit.edu](mailto:ocw-feedback@mit.edu).



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MIT OpenCourseWare is located at: One Broadway, Cambridge, MA 02142