

Open Matters

MIT OpenCourseWare news and information.

A Mission to Mongolia

Posted on **December 3, 2019** by **Peter Chipman**

Professor Michael Short travels from MIT to Central Asia—and finds that OCW is already there.



— A hillside outside Ulaanbaatar, the capital of Mongolia. Photo courtesy of **notthatdark** on Flickr. License: CC BY-NC-SA.

*By Peter Chipman, OCW Digital Publication Specialist and **OCW Educator Assistant***

In early June of this year, Professor Michael Short returned from a trip to Mongolia sponsored by the International Atomic Energy Agency. His mission? To work with the National University of Mongolia to assess and improve its nuclear education curriculum. The university has a small nuclear science sub-department within its School of Engineering, and the administrators there are eager to update the nuclear science program.

When he got to Mongolia, Professor Short learned that the country's educational system has a strong emphasis on theory, a legacy of its Soviet past. As he describes it, "The lecturers blast you with theory, fill blackboards with information, and it's up to the students to figure it out. And the professors aren't always that accessible, either in terms of being available to answer students' questions, or in terms of the way that they present the material. They explain it the way they know it, and it makes sense to them, but it doesn't necessarily make sense to today's students. The current folks in the nuclear department there recognize this. Mongolia has classically been a powerhouse of nuclear science and theory, and they want to hold on to that. But they know they want to change, though they don't exactly know how to do it."

A needs assessment

Professor Short's goal was to help his Mongolian counterparts figure out another way of doing what they want to do, to articulate their learning objectives and see how many of those objectives they're meeting. He guided them through an exercise to figure out what Mongolia wants out of a nuclear program. "They're not necessarily going after a fusion program," he says, "but they do have major initiatives for which knowledge of nuclear science can help the people."

First, there's the development of nuclear power. Even in the capital city, Ulaanbaatar, many people burn coal in their houses, and at present most of the electricity supply is generated in coal-fired power plants. As Professor Short learned, many policymakers in Mongolia see nuclear power as a way forward. But outside of Ulaanbaatar the population is widely scattered, so instead of gigantic, gigawatt-size power plants it would be useful to have a larger number of much smaller reactors. There's thus a need to train people to build and operate reactors for Mongolia's partly-urban, partly-nomadic society.

Mongolia has also suffered environmental contamination in many areas, from current and past mining and industrial activities. "Sampling soils and checking radiation contamination levels is of paramount importance for purposes of public health. The people need to know they're safe and that there are experts trained to monitor the environment and remediate any contamination," Professor Short says. Lastly, there are the issues of nuclear materials and nuclear medicine, both of which call for specialized training in the nuclear science curriculum.

"So we assessed their needs," Professor Short explains. "We examined which of their courses are teaching what."

Sharing innovations in nuclear science education

Professor Short says that when he started looking into the courses in the Mongolian nuclear science program, he noticed that the first thing on the required reading lists for many of them was [MIT OpenCourseWare materials](#)—lecture notes, problem sets, exams, and the like. “So OpenCourseWare has already strongly influenced Mongolian science education in the older teaching system, and it’s about to do that more in the newer system,” he says. “I’m really excited that everyone at the National University of Mongolia is so forward-thinking, so interested in reaching out for help. They know what they don’t know, but they know where to get it. At first when I went on this mission I was wondering why they chose me. I’m just 35. I’ve only been at this job for six years. Who can call me an expert? But by the end I understood why they asked me. Because they saw what we’ve done at MIT, and they said, “Yeah, we want that!”

“OpenCourseWare has already strongly influenced Mongolian science education in the older teaching system, and it’s about to do that more in the newer system.” –Professor Michael Short

Professor Short’s courses on OCW

Whether you’re a nuclear science instructor (in Mongolia or elsewhere!), a student, or a self-learner, you might like to check out Professor Short’s courses on OCW:

- [22.01 Introduction to Nuclear Engineering and Ionizing Radiation](#)
- [22.THT Undergraduate Thesis Tutorial](#)
- [22.14 Materials in Nuclear Engineering](#)
- [22.S902 Do-It-Yourself \(DIY\) Geiger Counters](#)
- [22.033/22.33 Nuclear Systems Design Project](#)

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A wealth of OCW content from Nobel Prize-winning MIT economists Duflo and Banerjee

Posted on [October 15, 2019](#) by [curtnewton3oer](#)



— MIT economists Abhijit Banerjee and Esther Duflo. (Photo by Bryce Vickmark.)

The [Nobel Prize in Economics](#) just awarded to MIT economists Esther Duflo and Abhijit Banerjee (along with Harvard colleague Michael Kremer) recognizes the transformational results of their antipoverty research and relief efforts. Their work exemplifies the power of creative and practical new approaches to the world’s biggest problems, backed with experimental rigor and analytical insight—all qualities found in much MIT research and the MIT education.

As MIT News [wrote](#):

The work of Duflo and Banerjee, which has long been intertwined with Kremer’s, has been highly innovative in the area of development economics, emphasizing the use of field experiments in research in order to realize the benefits of laboratory-style randomized, controlled trials. Duflo and Banerjee have applied this new precision while studying a wide range of topics implicated in global poverty, including health care, education, agriculture, and gender issues, while developing new antipoverty programs based on their research.

Duflo and Banerjee also co-founded MIT's Abdul Latif Jameel Poverty Action Lab (J-PAL) in 2003, along with a third co-founder, Sendhil Mullainathan, now of the University of Chicago. J-PAL, a global network of antipoverty researchers that conducts field experiments, has now become a major center of research, facilitating work across the world.

J-PAL also examines which kinds of local interventions have the greatest impact on social problems, and works to implement those programs more broadly, in cooperation with governments and NGOs. Among J-PAL's notable interventions are deworming programs that have been adopted widely...

Duflo, 46, is the second woman and the youngest person ever to receive the Nobel in economic sciences.

"We're fortunate to see this kind of work being recognized," Duflo told MIT News, noting that their work was "born at MIT and supported by MIT." She called the work in this area a "collective effort" and said that "we could not have created a movement without hundreds of researchers and staff members." The Nobel award, she said, also represented this collective enterprise, and was "larger than our work."

MIT OpenCourseWare is proud to share with you these courses and resources by Professors Duflo and Banerjee.

- **14.73 The Challenge of World Poverty**

This undergraduate course, featuring complete video lectures, is for those who are interested in the challenge posed by massive and persistent world poverty, and are hopeful that economists might have something useful to say about this challenge. The questions we will take up include: Is extreme poverty a thing of the past? What is economic life like when living under a dollar per day? Why do some countries grow fast and others fall further behind? Does growth help the poor?...

- **14.771 Development Economics: Microeconomic Issues and Policy Models**

This graduate course, featuring complete lecture notes and taught with co-instructor Benjamin Olken, covers the productivity effects of health, private and social returns to education, education quality, education policy and market equilibrium, gender discrimination, public finance, decision making within families, firms and contracts, technology, labor and migration, land, and the markets for credit and savings.

- **Abdul Latif Jameel Poverty Action Lab (J-PAL) Executive Training: Evaluating Social Programs 2009**

This five-day program, led with co-instructor Rachel Glennerster, provides a thorough understanding of randomized evaluations and pragmatic step-by-step training for conducting one's own evaluation. The OCW site features complete lecture videos (including one lecture by Nobel Prize co-winner Michael Kremer) and a set of case studies.

- **Abdul Latif Jameel Poverty Action Lab (J-PAL) Executive Training: Evaluating Social Programs 2011**

A complementary version of the J-PAL five-day program, with other case studies and exercises.

OCW also has two other courses by Professor Duflo:

- **14.74 Foundations of Policy Development**

This undergraduate course explores the foundations of policy making in developing countries. The goal is to spell out various policy options and to quantify the trade-offs between them. We will study the different facets of human development: education, health, gender, the family, land relations, risk, informal and formal norms and institutions...

- **14.11 Putting Social Sciences to the Test: Field Experiments in Economics**

This undergraduate course, co-taught with Prof. David Autor, is about field (that is, 'in situ') and laboratory experiments in the social sciences – both what these experiments have taught and can teach us and how to conduct them.

And if all this great content on OCW leaves you wanting even more, there's the **MITx MicroMasters Program in Data, Economics, and Development Policy**, specifically focused on the methodologies and teaching of Professors Duflo and Banerjee.

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Shake Up Your Teaching with OCW Instructor Insights

Posted on **September 13, 2019** by **Peter Chipman**

When you're faced with an unexpected teaching challenge, OpenCourseWare's Instructor Insights can help.



— Photo courtesy of [ladylong](#) on Flickr. License: CC BY-NC

By Peter Chipman, OCW Digital Publication Specialist and [OCW Educator](#) Assistant

Imagine: You're an experienced math instructor at a respected university, and you've just heard some alarming news. The university's president has announced a new initiative to improve students' communication skills by incorporating writing assignments into the curricula of introductory-level courses in all departments. One of your standby courses, *Intro to Non-Euclidean Multidimensional Geometry*, falls under the new policy.

What are you to do? For the past fourteen years you've taught the course in a tried-and-true format that works for you, with straightforward lectures, weekly problem sets, and regular quizzes and exams. How are you supposed to go about incorporating writing assignments?

Acting on the advice of a colleague at another institution, you pay a visit to MIT's OpenCourseWare website. At the OCW [Educator](#) portal, you search for Instructor Insights on the topic of "Teaching Communication"—specifically, on the subtopic of "Writing." To your surprise (and delight), the search results turn up three OCW math courses featuring Instructor Insights on that very topic:

Search Educational Resources

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Student Insights

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Teaching Communication

Teaching Novices

Teaching Problem Solving

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Oral Communication

Presentations

Science Communication

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Writing

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Course Number

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Undergraduate

Course #	Course Title	Level
8.06	Quantum Physics III (Spring 2016)	Undergraduate
11.016J	The Once and Future City (Spring 2015)	Undergraduate
11.124	Introduction to Education: Looking Forward and Looking Back on Education (Fall 2011)	Undergraduate
18.310	Principles of Discrete Applied Mathematics (Fall 2013)	Undergraduate
18.821	Project Laboratory in Mathematics (Spring 2013)	Undergraduate
18.904	Seminar in Topology (Spring 2011)	Undergraduate
22.033	Nuclear Systems Design Project (Fall 2011)	Undergraduate

Structuring the Course

The Instructor Insights page for [18.310 Principles of Discrete Applied Mathematics](#) includes links to three subpages on which Michel Goemans, Peter Shor, Lorenzo Orecchia, and Susan Ruff discuss aspects of how they designed the course to teach students the fundamental principles of writing papers in mathematics. They explain how the course's [recitation sections](#) help students develop a critical appreciation of writing in mathematics by examining the mathematical content of a writing sample and discussing how the content is communicated. They also reveal how they've structured the [final term paper](#) assignment in the past and how they might change it in the future. Finally, they discuss how they use norming meetings and other techniques to ensure consistency in [assessing students' writing](#).

Giving Feedback and Encouraging Revision

In the “Writing” section of the OCW site for [18.821 Project Laboratory in Mathematics](#), Professor Haynes Miller and Lecturer in Writing, Rhetoric & Professional Communication Susan Ruff describe the criteria for good mathematical writing and the components of the writing workshop, and they explain how students use [feedback](#) on earlier drafts of their writing to improve later drafts. This section also features links to two actual [student papers](#) from the course, including the first drafts, Miller’s and Ruff’s comments on those drafts, a video of a “debriefing meeting” for the first draft of one of the papers, and the final versions of both papers.

Teaching the Elements of Mathematical Style

Dr. Andrew Snowden, the instructor for [18.904 Seminar in Topology](#), shares his insights into ways of teaching students to give mathematical presentations and [write mathematical papers](#). As added resources, he includes links to two .pdf documents that he provided to his students: a guide to writing papers using the [LaTeX document preparation system](#) and a general style guide to [common student mistakes in writing math papers](#) and how to avoid them.

Moving On to Future Challenges

The resources above represent OCW’s offerings on a very specific topic, the teaching of writing in math courses. We hope you’ll return to the [Educator portal](#) many times in the future when you’re facing a new pedagogical challenge or even when you just feel the need to shake things up and enrich your teaching with new techniques!

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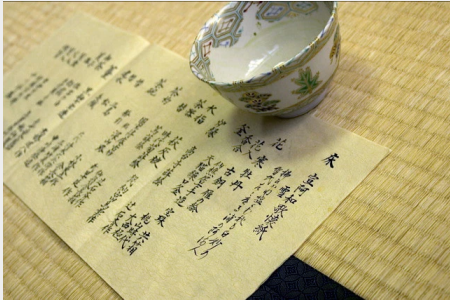
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A Panoply of Language Offerings at MIT and on OCW

Posted on [August 29, 2019](#) by [Peter Chipman](#)



— Studying Japanese culture goes hand in hand with studying the Japanese language. (Image courtesy of [Jennifer Pack](#) on Flickr. License CC BY-NC.)

There’s more to learning a language than just working your way through a textbook, say these MIT instructors.

By [Peter Chipman](#), OCW Digital Publication Specialist and [OCW Educator](#) Assistant

Aside from English, MIT offers courses in Chinese, French, German, Italian, Japanese, Korean, Portuguese, Russian, and Spanish. (MIT students wishing to study a language not on this list, such as Arabic, Irish, Swahili, or Tibetan, can do so by cross-registering for courses at Harvard or Wellesley.) Many of MIT’s language course offerings are represented on [OpenCourseWare](#), and several of their OCW course sites include Instructor Insights either in text or video form. Here are five OCW offerings that feature Instructor Insights on approaches to teaching languages:

21G.101 Chinese I (Regular)

Haohsiang Liao believes strongly that, as he puts it, “the way you behave in a second culture is as important as your use of the language.” In the videos on the Instructor Insights page for this course, which are presented in both English and Chinese, Dr. Liao says that this is why [cultural competence](#) is a core part of MIT’s Chinese curriculum. He also explains the importance of [creating an immersive classroom environment](#), and the rationale behind the curriculum’s covering [speaking and listening before reading and writing](#). Among the helpful details Liao shares in the videos are explanations of how he uses a [daily grading system](#) to provide continuous feedback to students, how students can develop their ear for a language by listening to [audio files](#), and why he asks struggling students [to physically show him how they prepare for class](#).

“The way you behave in a second culture is as important as your use of the language.”
-Haohsiang Liao

21G.1007 Chinese I (Streamlined)

In Min-Min Liang's **Instructor Insights videos**, which like Haohsiang Liao's are offered in both English and Chinese, she discusses her philosophy of teaching ("The main philosophy for me is to have a welcoming environment to help students to speak the language, not to talk about the language") and explains why the curriculum and structure of the streamlined course is well suited for heritage learners of Chinese. She also shares practical details about how using an online tool makes it easier for students to practice and receive feedback on their pronunciation, how she assesses student learning, and how authentic texts might supplement the somewhat contrived material presented by language textbooks.

"The main philosophy for me is to have a welcoming environment to help students to speak the language, not to talk about the language."

-Min-Min Liang

21G.410 Advanced German: Professional Communication

— Peter Weise engaged in conversation in his office on the MIT campus. (Photo by OCW.)

When Peter Weise set out to teach an advanced German course on the kinds of language used in professional settings, he discovered that there was no textbook available for the kind of course he wanted to teach. "It's much easier for students to learn language through content they find relevant and engaging than it is through textbook materials," he observes. In his written Instructor Insights, he describes how he assembled a **customized curriculum** based on authentic texts, how he uses **video recording and native speakers** to provide feedback on students' speaking skills, what role **guest speakers** can play in modeling authentic speech and speech behaviors, and how he uses **reflective practice and student feedback** to improve his teaching.

"It's much easier for students to learn language through content they find relevant and engaging than it is through textbook materials."

-Peter Weise

21G.503 Japanese III

The Instructor Insights page for this course features English and Japanese videos in which Takako Aikawa discusses various aspects of how she and her co-instructor Emiko Rafique approach the teaching of Japanese, using separate **grammar sessions and drill sessions**, daily grades along with two **interview tests** to assess students' fluency, the incorporation of **body language lessons and cultural tips** in each grammar lesson, and community **social events** that give students opportunities to interact with native speakers.

"Language needs to be learned together with context."

-Takako Aikawa

21G.711 Advanced Spanish Conversation and Composition

— Life in European cities, like elsewhere around the world, has been radically transformed by technologies such as smartphones. (Image courtesy of [Simona](#) on Flickr. License CC BY-NC.)

Like Peter Weise, Margarita Ribas Groeger finds that the best way to motivate students to develop their ability to write and speak in a second language is to give them something to write and talk about that they'll find relevant and interesting. On the [Instructor Insights](#) page for this course, she describes how "looking at Spanish-speaking societies through the ways they have been affected by science and technology offered an alternative thematic focus to the fifth or sixth semester Spanish language curriculum." She also lists the recurring questions that the course explored, all themed around the social and cultural impact of technology in Hispanic societies.

"Looking at Spanish-speaking societies through the ways they have been affected by science and technology offered an alternative thematic focus to the fifth or sixth semester Spanish language curriculum."

-Margarita Ribas Groeger

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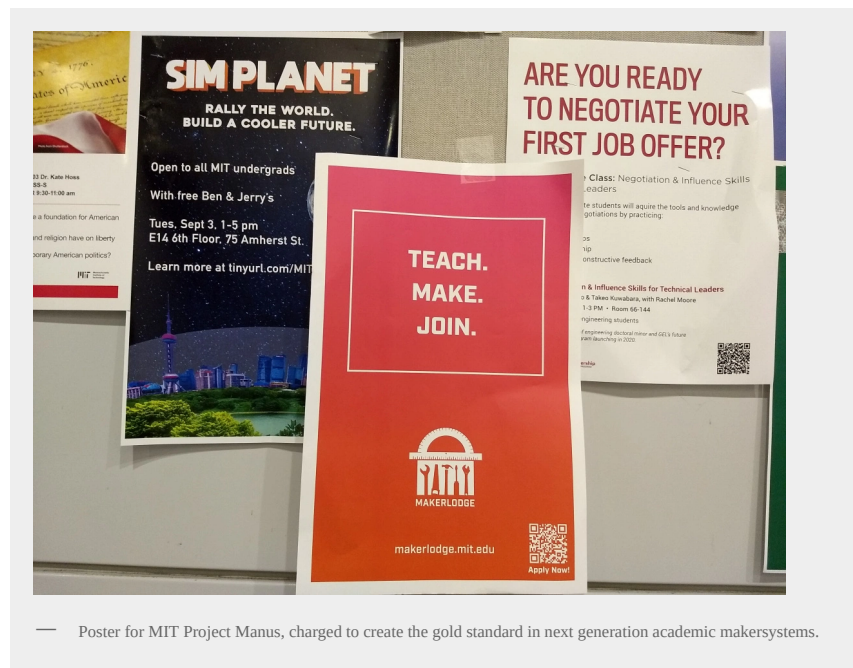
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How You Can Make Almost Anything

Posted on [August 28, 2019](#) by [Yvonne Ng](#)



— Poster for MIT Project Manus, charged to create the gold standard in next generation academic makersystems.

Teaching and learning can take place beyond the traditional classroom, sitting at desks, giving or listening to lectures and doing paper assignments. MIT students and faculty know that some of the most important learning comes from doing stuff with your hands, designing and building things in the real world.

The growth of a vibrant "maker" culture is the MIT motto *mens et manus* (mind and hand) in action. Use these OCW courses to inspire your own hands-on explorations.

From building a printing press to building your own camera or wearables, OCW offers quite a few courses to help you hone your skills and engineering know-how. What will you make today?

Girls Who Build Cameras

The Girls Who Build Cameras workshop for high school girls is a one-day, hands-on introduction to camera physics and technology (i.e. how Instagram works!) at the [MIT Lincoln Laboratory Beaverworks Center](#). The workshop includes tearing down old DSLR cameras, building a Raspberry Pi camera, and designing Instagram filters and Photoshop tools. Participants also get to listen to keynote speakers from the camera technology industry, including Kris Clark who engineers space cameras for NASA and MIT Lincoln Laboratory, and Uyanga Tsedev who creates imaging probes to help surgeons find tumors at MIT. During lunch, representatives from the [Society of Women](#)

Engineers and the Women's Technology Program at MIT will present future opportunities to get involved in engineering in high school and college.

CMS.608 Game Design

This course is built around practical instruction in the design and analysis of non-digital games. It provides students the texts, tools, references, and historical context to analyze and compare game designs across a variety of genres. In teams, students design, develop, and thoroughly test their original games to better understand the interaction and evolution of game rules. Covers various genres and types of games, including sports, game shows, games of chance, card games, schoolyard games, board games, and role-playing games.

21H.343J / CC.120J Making Books: The Renaissance and Today

This course explores the impact of new technology on the recording and distribution of words and images at three different times: The invention of the printing press ca. 1450; the adaptation of electricity to communication technology in the 19th century (telegraph, telephone, phonograph); and the emergence of digital media today. Assignments include essays and online projects. Students also participate in the design and construction of a hand-set printing press.

Collaborative Design and Creative Expression with Arduino Microcontrollers

This is a 9-day hands-on workshop about collaboration, design, and electronics prototyping. No previous experience with computer programming or electronics is required. Beginning students will be taught everything they need to know and advanced students will be challenged to learn new skills. Participants will learn about microcontroller programming using Arduino, collaborative software development using GitHub, solderless electronics prototyping, electronic sensors, rapid prototyping, and small team management.

Learn to Build Your Own Videogame with the Unity Game Engine and Microsoft Kinect

This is a 9-day hands-on workshop about designing, building, and publishing simple educational videogames. No previous experience with computer programming or videogame design is required; beginning students will be taught everything they need to know and advanced students will be challenged to learn new skills. Participants will learn about videogame creation using the Unity game engine, collaborative software development using GitHub, gesture handling using the Microsoft Kinect, 3D digital object creation, videogame design, and small team management.

Girls Who Build: Make Your Own Wearables Workshop

The Girls Who Build: Make Your Own Wearables workshop for high school girls is an introduction to computer science, electrical and mechanical engineering through wearable technology. The workshop, developed by MIT Lincoln Laboratory, consists of two major hands-on projects in manufacturing and wearable electronics. These include 3D printing jewelry and laser cutting a purse, as well as programming LEDs to light up when walking. Participants learn the design process, 3D computer modeling, and machine shop tools, in addition to writing code and building a circuit.

22.S902 Do-It-Yourself (DIY) Geiger Counters

This experimental one-week course is a freshman-accessible hands-on introduction to Nuclear Science and Engineering at MIT. Students build and test their own Geiger Counter, and so doing, they explore different types and sources of radiation, how to detect them, how to shield them, how to accurately count / measure their activity, and explore cryptographical applications of radiation. This course is meant to be enjoyable and rigorous at the same time.

16.810 Engineering Design and Rapid Prototyping

This course provides students with an opportunity to conceive, design and implement a product, using rapid prototyping methods and computer-aid tools. The first of two phases challenges each student team to meet a set of design requirements and constraints for a structural component. A course of iteration, fabrication, and validation completes this manual design cycle. During the second phase, each team conducts design optimization using structural analysis software, with their phase one prototype as a baseline.

20.219 Becoming the Next Bill Nye: Writing and Hosting the Educational Show

Becoming the Next Bill Nye is about using video production techniques to develop your ability to engagingly convey your passions for science, technology, engineering, and / or math. You'll have the opportunity to script and on-screen host 5-minute YouTube science, technology, engineering, and / or math-related shows to inspire youth to consider a future in science.

2.007 Design and Manufacturing I

This course is a first subject in engineering design. This course will expose you to interesting material, challenging you to think deeply, and providing skills useful in professional practice. A major element of the course is design of a robot to participate in a challenge that changes from year to year. From its beginnings in 1970, the 2.007 final project competition has grown into an Olympics of engineering. This year, the theme is cleaning up the planet as inspired by the movie *Wall-E*.

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IAP: A Fusion of Fun and Learning at MIT

Posted on **July 29, 2019** by **Yvonne Ng**

— A Texas Hold'em game from a player's point of view. (Courtesy of Peter Hopper on Flickr. License CC BY-NC.)

Every January, MIT students, faculty, and staff come together and design a special learning experience. Infused with creativity, inventiveness and fun, the four week term, known as Independent Activities Period (IAP), gives rise to some of the most ingenious courses that aren't all part of the MIT curriculum.

From beekeeping to Japanese archery and computational law to academic resilience storytelling, the variety of workshops and sessions are created and organized by MIT members passionate about their subject area.

On OCW, there are more than 100 IAP courses that are available for you to work through at your own pace. The following are a sample of IAP courses, but you can [find all of the IAP courses on OCW](#).

15.S50 Poker Theory and Analytics

This course takes a broad-based look at poker theory and applications of poker analytics to investment management and trading.

This course is offered during the Independent Activities Period (IAP), which is a special 4-week term at MIT in January. IAP provides members of the MIT community including students, faculty, staff, and alums with an opportunity to organize, sponsor and participate in a wide variety of activities and topics that are often outside of the regular MIT curriculum.

18.S097 Applied Category Theory

Category theory is a relatively new branch of mathematics that has transformed much of pure math research. The technical advance is that category theory provides a framework in which to organize formal systems and by which to translate between them, allowing one to transfer knowledge from one field to another. But this same organizational framework also has many compelling examples outside of pure math. In this course, we will give seven sketches on real-world applications of category theory.

6.S095 Programming for the Puzzled

This class builds a bridge between the recreational world of algorithmic puzzles (puzzles that can be solved by algorithms) and the pragmatic world of computer programming, teaching students to program while solving puzzles. Python syntax and semantics required to understand the code are explained as needed for each puzzle.

6.057 Introduction to MATLAB

This is an accelerated introduction to MATLAB® and its popular toolboxes. Lectures are interactive, with students conducting sample MATLAB problems in real time. The course includes problem-based MATLAB assignments. Students must provide their own laptop and software. This is great preparation for classes that use MATLAB.

21W.794 Graduate Technical Writing Workshop

This course is designed to improve the student's ability to communicate technical information. It covers the basics of working with sources, including summarizing and paraphrasing, synthesizing source materials, citing, quoting, and avoiding plagiarism. It also covers how to write an abstract and a literature review. In addition, we will cover communication concepts, tools, and strategies that can help you understand how engineering texts work, and how you can make your texts work more effectively.

Learn to Build Your Own Videogame with the Unity Game Engine and Microsoft Kinect

This is a 9-day hands-on workshop about designing, building, and publishing simple educational videogames. No previous experience with computer programming or videogame design is required; beginning students will be taught everything they need to know and advanced students will be challenged to learn new skills. Participants will learn about videogame creation using the Unity game engine, collaborative software development using GitHub, gesture handling using the Microsoft Kinect, 3D digital object creation, videogame design, and small team management.

Climate Action Hands-On: Harnessing Science with Communities to Cut Carbon

This course explores how citizen science can support community actions to combat climate change. Participants will learn about framing problems, design ways to gather data, gather some of their own field data, and consider how the results can enable action. Leaks in the natural gas system—a major source of methane emissions, and a powerful contributor to climate change—will be a particular focus.

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Understanding the past to prepare for the future

Posted on **June 25, 2019** by [Yvonne Ng](#)



OCW covers 17 MIT special subject areas in History

Theodore Roosevelt once said, "I believe that the more you know about the past, the better you are prepared for the future."

At MIT, the study of History teaches different ways to think critically about the past, present and future of the world. Students develop a rich, empathetic understanding of the people, events, and circumstances that ultimately prepares them to be active members of their local communities and an increasingly global society today.

Tailored to put the modern world in historical perspective, MIT History subjects explore the social, cultural, economic, and political transformations that shape the present.

On OCW, you can browse lists of courses on 17 History subtopics:

[African History](#)

[American History](#)

[Ancient History](#)
[Asian History](#)
[Comparative History](#)
[European History](#)
[Historical Methods](#)
[Historiography](#)
[History of Science and Technology](#)
[Intellectual History](#)
[Jewish History](#)
[Latin American History](#)
[Medieval History](#)
[Middle Eastern History](#)
[Military History](#)
[Modern History](#)
[World History](#)

OCW has recently published these history courses:

21H.102 American History Since 1865, Spring 2018

This course examines the social, cultural, political, and economic history of the United States, from the Civil War to the present. It uses secondary analysis and primary documents, such as court cases, personal accounts, photographs, and films, to examine some of the key issues in the shaping of modern America, including industrialization and urbanization, immigration, the rise of a mass consumer society, the emergence of the US as a global power, and the development of civil rights activism and other major social movements.

21H.132 The Ancient World: Rome, Spring 2017

This course covers the history of Rome from its humble beginnings to the 5th century A.D. The first half covers Kingship to Republican form; the conquest of Italy; Roman expansion: Pyrrhus, Punic Wars and provinces; classes, courts, and the Roman revolution; Augustus and the formation of empire. The second half covers Virgil to the Vandals; major social, economic, political and religious trends at Rome and in the provinces. There is an emphasis on the use of primary sources in translation.

21H.357 South Asian Migrations, Spring 2018

This course provides a global history of South Asians and introduces students to the cultural, social, economic, and political experiences of immigrants who traveled across the world. It studies how and why South Asians, who have migrated to America, Europe, Africa, the Caribbean and the Middle East, are considered a model minority in some countries and unwanted strangers in others. Through literature, memoirs, films, music, and historical writing, it follows South Asian migrants as they discovered the world beyond India, Pakistan, and Bangladesh.

21H.155 Modern Japan: 1868 to Present, Spring 2017

This course surveys Japanese history from the establishment of the Tokugawa shogunate in 1603 to the present and explores the local and global nature of modernity in Japan. It highlights key themes, including the emergence of a modern nation-state, the rise and fall of the Japanese Empire, the development of mass consumer culture and the middle class, and the continued importance of historical memory in Japan today.

[>Peruse all History courses on OCW](#)

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