Reimagining Teaching and Learning in a Digital Age

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CIT Showcase, Oct. 13, 2014
The technology changes, but how about higher education?
“The Big Idea That Can Revolutionize Higher Education: MOOC”
The Atlantic – May 11, 2012

“Report Warns of 'Avalanche' Approaching for Global Higher Education”
Inside Higher Ed – Mar. 11, 2013

“MOOCs: Been There, Done That”
Chronicle of Higher Education, Jan. 21, 2014
Massive, multiplayer epidemic game simulation

Developed by scientists at the Center for Infectious Disease Dynamics at Penn State University

Used in Fall 2013 and again in Fall 2014

https://www.moocdemic.com/
Epidemics – the Dynamics of Infectious Diseases

Malaria, HIV/AIDS, Influenza, Measles - we’re in a constant battle against infectious diseases. This is a course about the dynamics of such diseases - how they emerge, how they spread around the globe, and how they can best be controlled.

https://class.coursera.org/epidemics-002

• Connected to MOOCDEMIC game
• “Ask us anything” videos – panels of experts respond to questions from discussion forum
• Co-developed by 8 faculty

http://bit.ly/1uZNdOg
Mobile

GAME on phone

W1V4 Transmission Types

- W1V3 Infection and Disease
- W1V4 Transmission Types
- W1V5 Reproductive Number
- W1V6 Epidemic Curve
- W1V7 Micro-organisms

COURSE on phone

But if you happen to be so unlucky to stand close enough to the sneezing person.
Six hours after game launch, 6,000+ cases had been spotted throughout the U.S. and Asia. Eighteen hours later, 10,000. Marcel Salathé, course instructor for the course and infectious disease biologist at Penn State says cases have since been discovered "pretty much every place other than Antarctica."
Anette @AnnaBarna13 · 8h
I just isolated 2 disease cases in moocdemic - 67,881 cases worldwide. Fight the outbreak at moocdemic.com

The MOOC Student @themoocstudent · Oct 11
'Moocdemic' starts spreading Se via @examinercom

moocdemic @moocdemic · Oct 10
Urgent Update — Agent M confirmed

moocdemic @moocdemic · Oct 9
Media report indicates patient being M — location is being withheld until M is located

moocdemic @moocdemic · Dec 23
Moocdemic: The major treatment locations, by @toddlobnar
Open

From Epidemics course description:

Recommended Background

No background is required; all are welcome.

Suggested Readings

We will provide you with links to relevant scientific articles in the field that are freely available as open access articles. Examples:

- Digital Epidemiology
- How to Make Evolution-Proof Insecticides for Malaria Control
- A Low-Cost Method to Assess Individual Importance in Controlling Infectious Disease Outbreaks
- The Effect of Vaccination on the Evolution and Population Dynamics of Avian Paramyxovirus-1
Epidemics - the Dynamics of Infectious Diseases

Instructor: Marcel Salathé, Ottar Bjørnstad, Rachel Smith, Mary Poss, David Hughes, Peter Hudson, Matthew Ferrari, Andrew Read
School: The Pennsylvania State University
Course Provider: Coursera
Price: Free
Next Session: In session

Course Provider

Reviews

314 Reviews for Epidemics - the Dynamics of Infectious Diseases

by Marcus Sellers  ★★★★★  Completed 10 months ago
I have several years of graduate work in molecular genetics, microbiology and ecology as well as some Immunology.
This is the first course like this I’ve taken, so n=1 is not a valid sample size
Likes: The information was solid, the papers and additional readings were extremely useful and using a multiple lecturer model where the experts from their own fields of expertise really helped convey the information. This course was excellent at presenting
Personalization

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- The Data Scientist's Toolbox
- Reproducible Research
- Preparation for Introductory Biology: DNA to Organisms
- Auf Deutsch: Communicating

https://www.teeays.com/
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Thank you!

Questions?