# Lessons from MOOC Integration at the University of Colorado Boulder



Cory Pavicich
Digital Learning Initiatives
Program Manager
University of Colorado Boulder

### **Barriers to MOOC Integration?**

How do we realize the promise of MOOCs without killing the MOOC?

A history of MOOCs at the University of Colorado Boulder

Three lessons from our early MOOC efforts

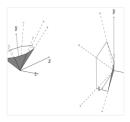
Dual strategies for long and short term investments in MOOCs



Introduction to Power Electronics



Comic Books and Graphic Novels



Linear and Integer Programming



Physics 1 for Physical Science Majors



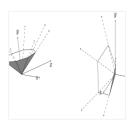
Gut Check: Exploring Your Microbiome



Introduction to Power Electronics



Comic Books and Graphic Novels



Linear and Integer Programming



Physics 1 for Physical Science Majors



Water in the Western United States



Graphic Design



**Business Writing** 



Successful Presentation



Effective Communication Capstone Project



Kinematics: Describing the Motions of Spacecraft



Kinetics: Studying Spacecraft Motion



Control of Nonlinear Spacecraft Attitude Motion



Gut Check: Exploring Your Microbiome



Science of Exercise



Intro to Embedded Systems Software and Development Environments



Comic Books and Graphic Novels



Introduction to FPGA Design for Embedded Systems



Principles of fMRI 1



Principles of fMRI 1



Physics 1 for Physical Science Majors



Communicating Business Analytics Results



Predictive Modeling and Analytics



Introduction to
Data Analytics for
Business



Business Analytics for Decision Making



Advanced Business Analytics Capstone



The Dynamics of Group Communication



Linear and Integer Programming



Giving Helpful Feedback



Magnetics for Power Electronic Converters



Converter Control



**Converter Circuits** 



Capstone Design Project in Power Electronics



Introduction to Power Electronics



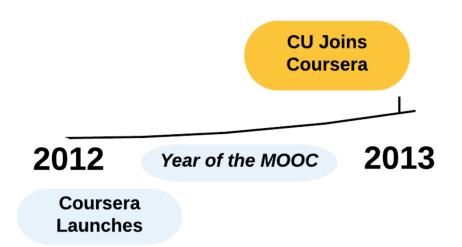
Advanced Converter Control Techniques

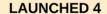


Water in the Western United States



The Sun and the Total Eclipse of August 2017





Comic Books & Graphic Novels
Intro Physics
Power Electronics
Linear Programming
1.0

### LAUNCHED 4

Comic Books & Graphic Novels
Intro Physics
Power Electronics
Linear Programming
2.0

CU Joins Coursera

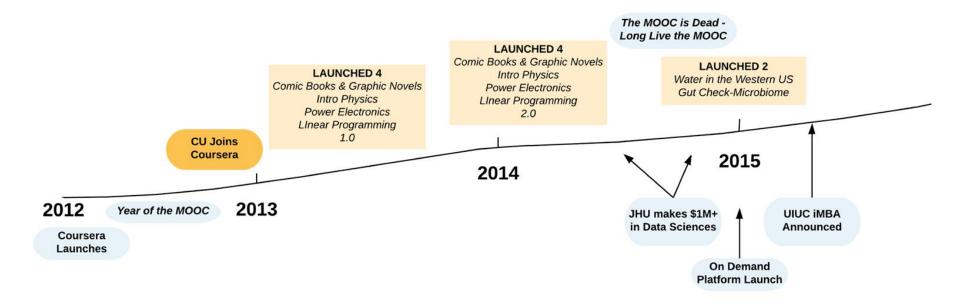
2014

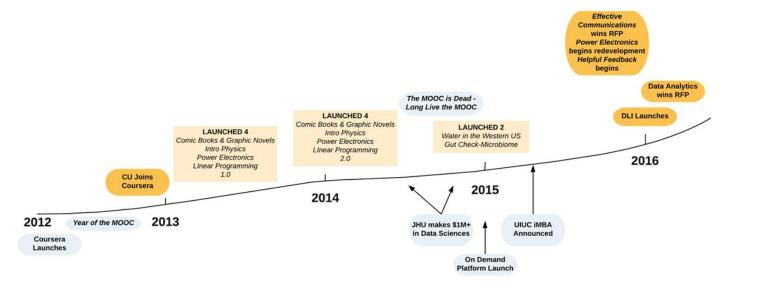
2012

Year of the MOOC

2013

Coursera Launches

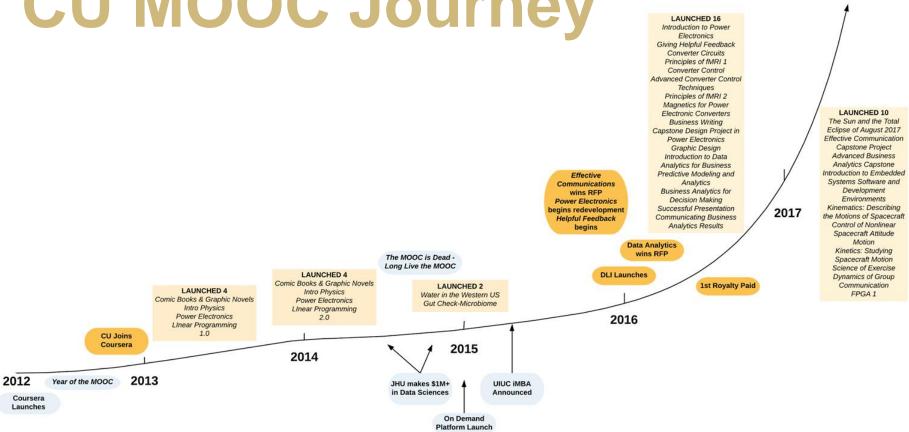


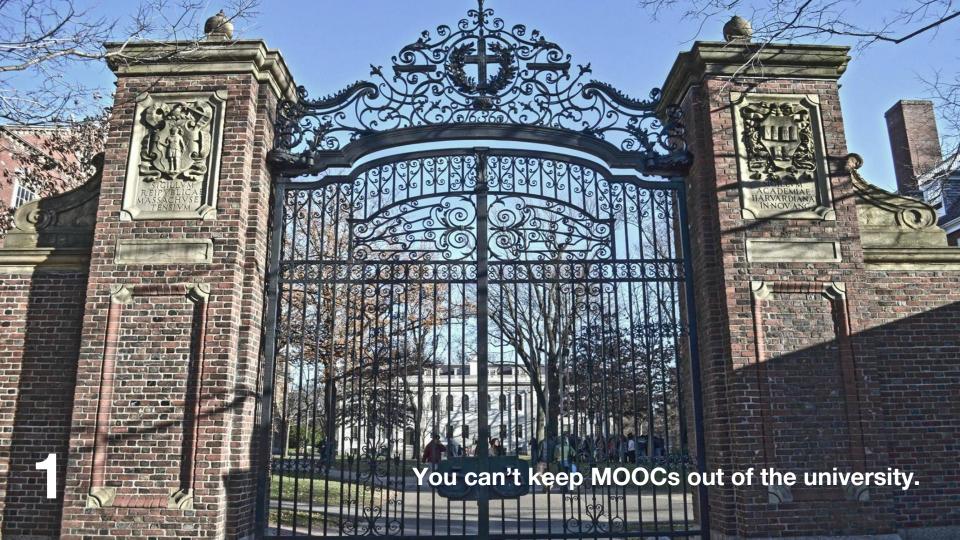


### **MOOCs** to Market

### **Content Strategy 2016-early 2017**

"In order to create new revenue streams for the University, establish non-credit MOOCs focused on areas of high demand professional education."





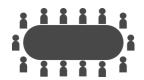




Universities abhor a revenue/profit driven model.

# Return to the University

DLI aligns MOOCs with the core mission of the University.



### **Boardroom**

- Multi-year development and higher cost investments requiring heavy lifts for administrators and faculty.
- Envisioned as for-credit courses, certificates, micro-masters, postbacs, and/or degrees.
- Design for revenue and university growth.



Garage

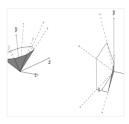
- Smaller teams, rapid deployment cycles, smaller investment
- Envisioned as courses or specializations, either non-credit or for-credit.
- Design to recover investments
- Facilitate innovative faculty to explore new ways to teach, promote the university, and contribute to a better world.



Introduction to Power Electronics



Comic Books and Graphic Novels



Linear and Integer Programming



Physics 1 for Physical Science Majors



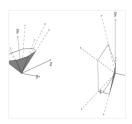
Gut Check: Exploring Your Microbiome



Introduction to Power Electronics



Comic Books and Graphic Novels



Linear and Integer Programming



Physics 1 for Physical Science Majors



Water in the Western United States



**Graphic Design** 



**Business Writing** 



Successful Presentation



Effective Communication Capstone Project



Kinematics: Describing the Motions of Spacecraft

**FPGAs** 



Kinetics: Studying Spacecraft Motion



Control of Nonlinear Spacecraft Attitude Motion



**Gut Check: Exploring Your** Microbiome



Science of Exercise



Intro to Embedded Systems Software and Development Environments



Comic Books and **Graphic Novels** 



Introduction to FPGA **Design for Embedded** Systems



Principles of fMRI 1



Principles of fMRI 1



Physics 1 for Physical Science Majors



Communicating **Business Analytics** Results



Predictive Modeling and Analytics



Introduction to **Data Analytics for** Business



**Business Analytics** for Decision Making



Advanced **Business Analytics** Capstone



The Dynamics of Group Communication



Linear and Integer Programming



Giving Helpful Feedback



Magnetics for Power Electronic Converters



**Converter Control** 



**Converter Circuits** 



Capstone Design **Project in Power** Electronics



Introduction to Power Electronics



Advanced **Converter Control Techniques** 



Water in the Western **United States** 



The Sun and the Total **Eclipse of August** 2017







Effective Communication







Physics 1 for

Physical

Science Majors

Giving Helpful











....

.

Advanced

**Business Analytics** 

Capstone













Science Majors





Physics 1 for













**Graphic Novels** 



Principles of fMRI 1

Group

Advanced

Converter Control

Kinetics: Studying

Spacecraft Motion

Principles of fMRI 1

The Dynamics of

Group













**Business Analytics** 

for Decision

Making

Capstone Project







The Dynamics of

Group

Advanced

Converter Control

Techniques





Linear and

Integer

Programming

0

WATER

Water in the

Western

United States



Giving Helpful

Feedback



The Dynamics of

Group



Motion

Linear and

Integer

Programming

0

Water in the

Western

United States



Physics 1 for

Physical

Science Majors

Giving Helpful

The Sun and the Tota

**Eclipse of August** 

2017











Converter Control

**Business Writing** 





Project in Power

Effective

- 4

**Business Analytics** 

Electronics



Introduction to

Power Electronics

Kinematics:

Describing the

Motions of Spacecraft

.

Advanced

Introduction to FPGA

Design for Embedded





Principles of fMRI 1







Communicating

**Business Analytics** 





Predictive

Modeling and

Analytics



Introduction to

Data Analytics for

Business





Capstone Project

Capstone Design



Introduction to

Power Electronics







The Sun and the Total

**Eclipse of August** 

2017



Advanced

Converter Control









.

Communicating

Business Analytics

Magnetics for

Power Electronic





Successful









Control of Nonlinear

Spacecraft Attitude



Physics 1 for





Exercise









Advanced

**Business Analytics** 





Linear and

Integer





1

Linear and

Integer

Programming





Feedback



Power Electronic

Convertors



Predictive



Introduction to







Linear and

4



100



.





Introduction to





**Business Analytics** 

for Decision

- 4







The Dynamics of

Group



4





THE .

Giving Helpful

Advanced Converter Control Techniques

The Dynamics of

Group

Communication



