

SERVICES FOR INTERNATIONAL EDUCATION MARKETING

CONFERENCE 2012



## Massive Open Online Courses (MOOCs)

New learners? New Business Model? Or just a flash in the pan?

Professor Jeff Haywood Vice Principal, CIO and Librarian University of Edinburgh

Sponsored by





## **Massive Open Online Courses**

- What are MOOCs?
- ☐ Why such a fuss?
- ☐ What place will they take in HE, FE & Schools?
- ☐ Should universities, colleges & schools enter this new

educational 'space'?



## **Massive Open Online Courses**

#### MOOCs ....

- are open to anyone no mandatory qualifications
- have learners who are not students of universities
- are fully online
- are very lightly tutored & supported
- do offer assessment (in various forms)
- □ have low study hours per week modules not degree programmes
- offer certificates of completion rather than credits (but see later...)
- are a different business model to traditional HE



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Jan 28th 2013

5 weeks long

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#### Artificial Intelligence Planning Gerhard Wickler, Austin Tate

The course aims to provide a basic grounding in artificial intelligence techniques for planning, with an overview of the wide spectrum of different problems and approaches, including their underlying theory and their applications.



Critical

#### Astrobiology and the Search for Extraterrestrial Life Charles Cockell

Learn about the origin and evolution of life and the search for life beyond the Earth.

#### Critical Thinking in Global Challenges Celine Caquineau, Mayank Dutia

In this course you will develop and enhance your ability to think critically, assess information and develop reasoned arguments in the context of the global challenges facing society today.



#### E-learning and Digital Cultures

Jeremy Knox, Sian Bayne, Hamish Macleod, Jen Ross, Christine Sinclair This course will explore how digital cultures and learning cultures connect, and what this means for e-learning theory and practice.

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#### **Equine Nutrition**

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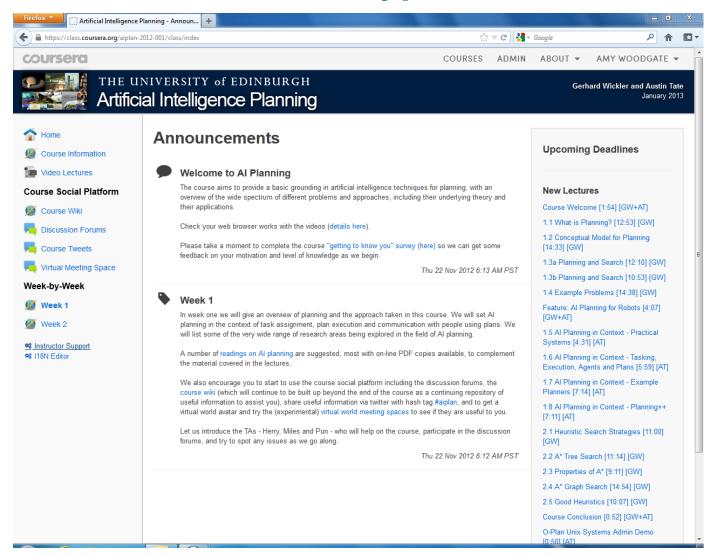
7 weeks long



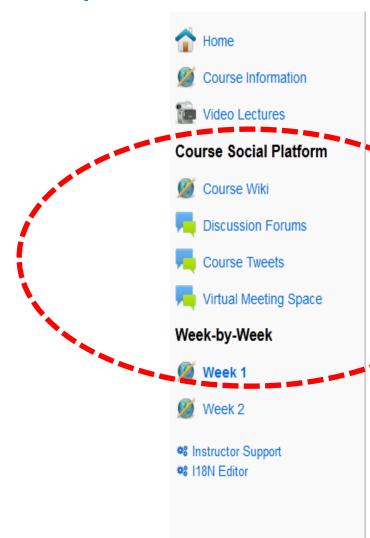
#### Introduction to Philosophy

Dave Ward, Duncan Pritchard, Michela Massimi, Suilin Lavelle, Matthew Chrisman, Allan Hazlett, Alasdair Richmond This course will introduce you to some of the most important areas of research in

## ... lots of the features of typical online courses



## ...online spaces for learners to self support + light touch oversight



#### Course Information

Course participants are encouraged to use other course members. Please do not give

The Sourse Twitter Tag is #aiplan. The cour

The course scial platform, including an ex

Coursera Meetupalso lets participants sug

### Week-by Week

Week 1: Introduction and Planning in Conte

Week 2: State-Space Search: STRIPS and

Week 3: Plan-Space Search and HTN Plan

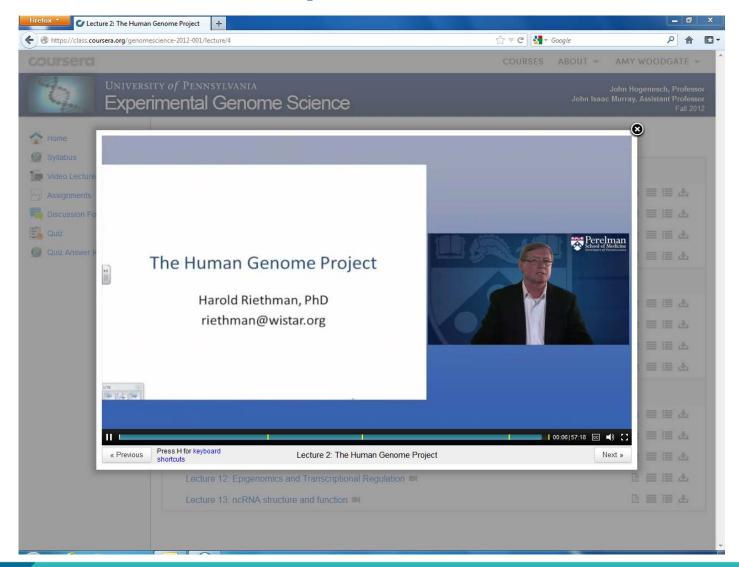
Week 4: Graphplan and Planning Graph He

Week 5: Plan Execution and Applications

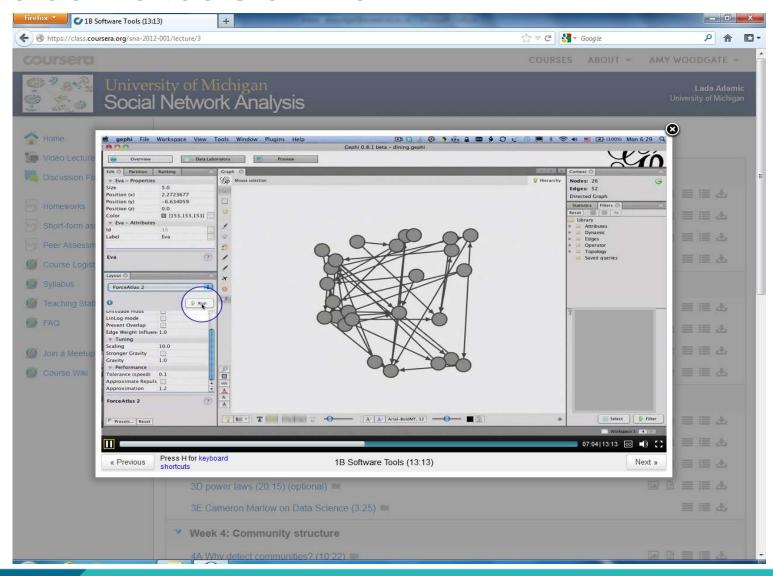
### **Recommended Backg**

The course is at an introductory level, but y

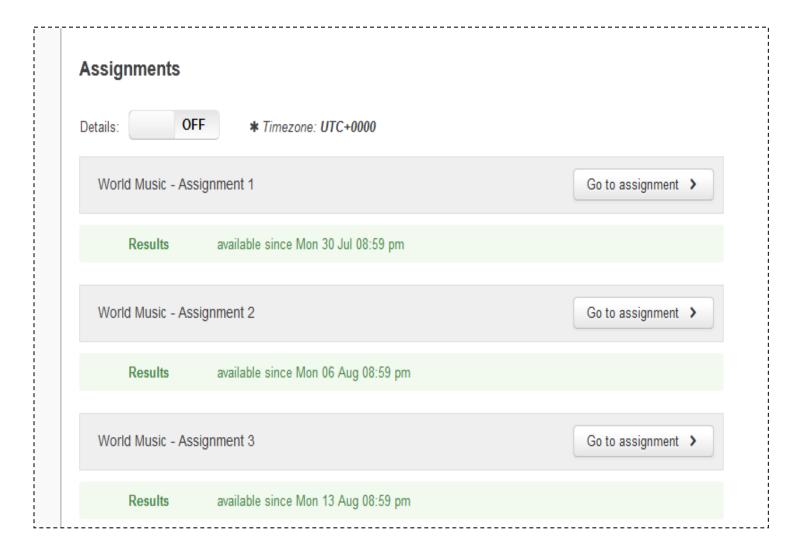
## ...lots of short videos & presentations



## ...interactive tools online



## ...timed assignments throughout the course



## ...automated assessment – computer marks test

STS markers M and N appear to be very closely spaced on a Radiation Hybrid map of chromosome 19, but much farther apart on a meiotic linkage map of the same chromosome. What might explain this? A. Expansion of the RH map around the centromere B. A meiotic recombination cold spot between M and N C. A meiotic recombination hot spot between M and N D. All of the above Submit Skip

## -required readings, in the MOOC and externally

#### CHAPTER 3

## **Propositional Proofs**

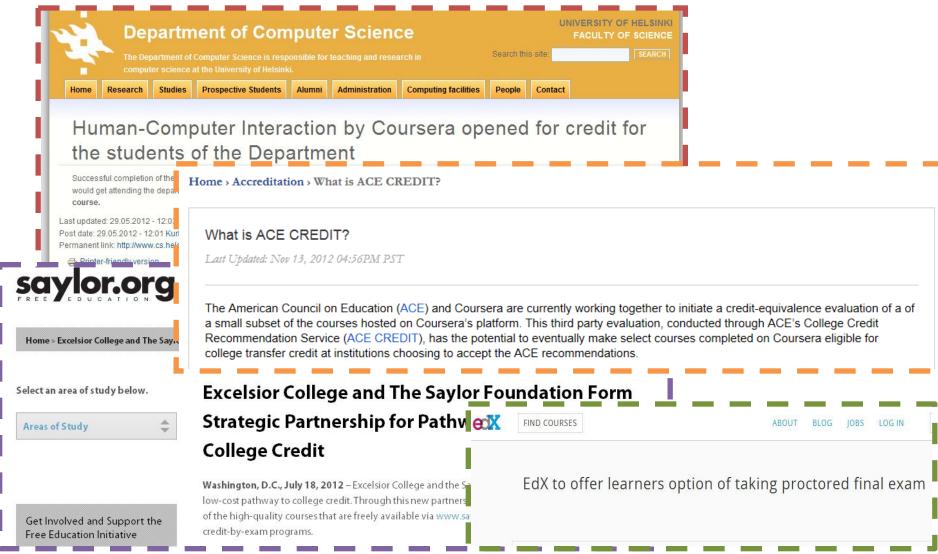
#### 3.1 Introduction

Checking logical entailment with truth tables has the merit of being conceptually simple. However, it is not always the most practical method. The number of truth assignments of a language grows exponentially with the number of logical constants. When the number of logical constants in a propositional language is large, it may be impossible to process its truth table.

Proof methods provide an alternative way of checking logical entailment that addresses this problem. In many cases, it is possible to create a proof of a conclusion from a set of premises that is much smaller than the truth table for the language; moreover, it is often possible to find such proofs with less work than is necessary to check the entire truth table.

We begin this lesson with a discussion of simple, linear proofs. We then move on to hierarchically structured proofs, where proofs can be nested inside of other proofs. Once we have seen both linear and structured proofs, we show how they are combined in the popular Fitch proof system. We finish with definitions for soundness and completeness - the standards by which proof systems are judged.

## Credit for MOOCs is arriving...



## Why such a fuss?



13 February 2012 Last updated at 16:37



## MIT launches free online 'fully automated' course

#### By Sean Coughlan

BBC News education correspondent

Massachusetts Institute of Technology (MIT), one of the world's top-rated universities, has announced its first free course which can be studied and assessed completely online.

An electronics course, beginning in March, will be the first prototype of an online project, known as MITx.

The interactive course is designed to be fully automated, with successful students receiving a certificate.



MIT is creating an online "MITx", offering courses to students anywhere in the world. Pic: Jon Fildes

The US university says it wants MITx to "shatter barriers to education".

This ground-breaking scheme represents a significant step forward in the use of technology to deliver higher education.

#### Automated university

There are already online degree courses, but the MIT proposal is unusual in that it is inviting students anywhere in the world, without

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Coursera adds Columbia, Brown, and more to its roster of univer education

Digital Trends | September 19, 2012



Online Higher-Education Startup Coursera Is Taking Over the W

Slate | September 19, 2012

## TE Techcrung Coursera raises \$16M for free online education for the masses



The New Hork Time

THE WALL STREET JOURNA



## Why is University of Edinburgh doing this?

- Reputation early adopter of educational technology
- Exploration of a new pedagogical 'space' to inform practice
- ☐ Wish to reach as widely as we can with our courses
- ☐ Sharing experiences with peer universities
- ☐ Fun!





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#### Course and degree finder



Degree information

News Abou

#### Subject area: Online learning programmes

#### **Taught programmes**

Africa and International Development (Online Distance Learning)

Architectural Project Management (Online Distance Learning)

Biodiversity, Wildlife & Ecosystem Health (Online Distance Learning)

Clinical Education (Online Distance Learning)

Cognitive Ageing Research Methods for Medical Scientists (Online Distance L

Conservation Medicine (Online Distance Learning)

Creative Writing (Online Distance Learning)

Dementia: International Experience, Policy and Practice (Online Distance Lea

E-Learning

Educational Leadership (Online Distance Learning)

Equine Science (Online Distance Learning)

General Surgery (Online Distance Learning)

Global Development Challenges (Online Distance Learning)

Global Environment Challenges Certificate (Online distance learning)

Global Health Challenges (Online Distance Learning)

## How does a MOOC compare to the University's Online Postgraduate Programmes?

The University of Edinburgh has a substantial offering of high-quality Online Postgraduate Programmes, with 42 programmes available from 2012/13. More information about these credit-bearing postgraduate qualifications is available on the online learning postgraduate site:

#### Postgraduate online learning - all programmes

Massive Open Online Courses (MOOCs) complement the University's existing online learning offering, providing students with another opportunity to experience a University of Edinburgh education through flexible delivery methods online.

The following table highlights the differences between a MOOC and an online taught postgraduate programme at the University of Edinburgh.

	MOOC	Online Postgraduate Programmes
Cost	is levied for	The fees for these programmes varies depending on the subject area. The level of fees for each is available here: http://www.ed.ac.uk/studying/postgraduate/online-distance-learning/finance
Qualification	MOOCs are not certified they do not constitute a formal credits or qualification from the University.	A variety of qualifications are available (for example, PG Cert, PG Diploma, MSc, MA), each carrying a defined number of SQCF Level 11 Credits.
Study-Level	University entry-level (SCQF level 9)	Postgraduate level (SCQF 11)

## Online education @ Edinburgh

- Online & on-campus = 'e-learning'
- ☐ Online & off-campus = online distance learning 'ODL'
- ☐ Online and no-campus = MOOCs, OER, informal learning, ≡ LLL?

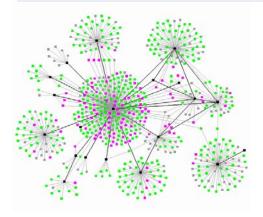
We apply to same rigorous approval and quality assurance processes to all

## What place will they take in HE, FE & schools?

Here to stay or flash in the pan?

My predictions (evidence-free at present!)

Нуре	$\downarrow \downarrow \downarrow \downarrow$	Enrolments / MOOC	$\Psi\Psi$
\$\$s per MOOC	$\downarrow \downarrow \downarrow \downarrow$	No's MOOCs	<b>ተ</b> ተተተተ
Variety of MOOCs	<b>^</b>	MOOC 'platforms'	<b>ተ</b> ተተ
Use for marketing	<b>^</b>	Routes to entry	<b>ተ</b> ተተ
Flex for curricula	<b>↑</b>	Credit for MOOCs	<b>↑</b>
R-intensive U's	Same or $lacksquare$	Other U's, colleges	<b>^</b>



## Should universities, colleges & schools enter this new educational space?

## Know your reasons for being in or staying out!!

☐ They are free to take but not free to provide, and publicity is everything for reaching Massive (or even big)

If 'In', then choose one or both of:

#### □ Offer MOOCs

✓ Part of curriculum; entry route; general marketing; profile; income; R&D;...

#### ☐ Use others' MOOCs

✓ Part of curriculum; high reputation courses; internal economies; overcome lack of capacity/capability; tasters; profile; ...

## **Questions**