

Lean MOOC production

Ignacio Despujol
Universitat Politècnica de València







UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

UPV

- ▶ Public academic institution since 1971
 - ▶ 3 campuses
 - ▶ 13 colleges
 - ▶ 45 research centers
 - ▶ 35 bachelor degrees
 - ▶ 58 master degrees
 - ▶ 30 PhD Programs
 - ▶ 35.000 students
 - ▶ 2,500 teachers
 - ▶ 1,500 staff





poli [Media]  UNIVERSITAT POLITÈCNICA DE VALÈNCIA





Buscar en Internet

7 semanas
16 de enero de 2013



Valoración de Futbolistas


3 semanas
16 de enero de 2013



- 3 technologies (Google, MiriadaX, OpenedX)
- 3 platforms (upvx.es, edx.org, miriadax.es)

NEW

Bases Matemáticas: Integrales →



edx.org

NEW

Experimentos de electromagnetismo para ingeniería →



edx.org

NEW

Introducción a la gestión de proyectos →




28/09

30/11

edx.org

Aplicaciones de la Teoría de Grafos a la Vida Real (I) →



$d_{x,y} = \min\{n \mid A^n(x,y)\}$

edx.org

Excel →



edx.org

Tecnologías para la educación →




edx.org

Viewing 35 results matching

upvalencia


upvalencia x CLEAR ALL

Refine your search		
Availability		
Current		20
Starting Soon		6
Self-Paced		25
Archived		9
Subjects		
Business & Management		4
Chemistry		4
Communication		1
Computer Science		11
Economics & Finance		1
Education & Teacher Training		1
Electronics		1
Engineering		3
Food & Nutrition		2
MORE...		-
Courses & Programs		
Verified Courses		33
XSeries Programs		9
High School		6
Schools & Partners		
Choose a Site		
Level		
Advanced		1
Introductory		27
Intermediate		7
Language		
English		7
Spanish		28




Bases matemáticas para estudiar Ingeniería
Revisión de los conceptos matemáticos básicos para

UPValenciaX
Current




Preparing for CLEP Information Systems
Prepare for the CLEP IT exam.

UPValenciaX
Current




UPValenciaX ICQ201x.1
Aplicaciones de la Teoría de Grafos a la Vida Real II

Current
Self-Paced




UPValenciaX ICQ101x
Bases Matemáticas: Integral

Current
Self-Paced




UPValenciaX ICQ101.3x
Formulación y nomenclatura de compuestos químicos

Starting Soon
Starts: May 17, 2016 - Self-Paced




UPValenciaX ICQ101x
Bases Matemáticas: Integrales

Starting Soon
Starts: June 7, 2016 - Self-Paced




UPValenciaX IC101.2x
Fundamentos de Electromagnetismo para Ingeniería

Starting Soon
Starts: June 7, 2016 - Self-Paced




UPValenciaX ICPT01x
Introducción a la gestión de proyectos

Starting Soon
Starts: June 14, 2016 - Self-Paced




UPValenciaX ICQ201x.2
Aplicaciones de la Teoría de Grafos a la vida real II

Starting Soon
Starts: June 28, 2016 - Self-Paced




UPValenciaX ICQ101.4x
Reacciones Químicas y Cálculos Estequiométricos

Starting Soon
Starts: June 28, 2016 - Self-Paced



UPValenciaX IC101.1x
CLEP Information Systems and Computer Applications, Part 1: IT


Current
Self-Paced



UPValenciaX ICSP101x
Learn Spanish: Basic Spanish for English Speakers


Current
Self-Paced

- 42 courses, 145 editions
- 485.000 enrollments
- 10,5% completion rate




UPValenciaX IC101.2x
CLEP Information Systems and Computer Applications, Part 2: Hardware

Current
Self-Paced




UPValenciaX IC101.3x
CLEP Information Systems and Computer Applications, Part 3: Software

Current
Self-Paced




UPValenciaX IC101.4x
CLEP Information Systems and Computer Applications, Part 4: Programming

Current
Self-Paced




UPValenciaX IC101.3x
CLEP Information Systems and Computer Applications, Part 3: Software

Current
Self-Paced




UPValenciaX IC201.1x
Introducción a la Estructura de la Materia

Current
Self-Paced




UPValenciaX IC201x
Android: Introducción a la Programación

Current
Self-Paced




UPValenciaX ICQ201x
Fundamentos de Óptica

Current
Self-Paced



UPValenciaX IC201x
Redes de la Agricultura y la Alimentación en el Siglo XXI

Current
Starts: April 9, 2016



UPValenciaX ICQ101.2x
El enlace Químico y las Interacciones Moleculares

Current
Self-Paced

UPV [X]
Formación Online

Cursos masivos online de la UPV
para cualquiera, en cualquier lugar, en cualquier
momento.

NEW
Bases Matemáticas: Integrales →



edxorg

NEW
Fundamentos de
electromagnetismo para
ingeniería →




edxorg

NEW
Introducción a la gestión de
proyectos →



edxorg

Aplicaciones de la Teoría de
Grafos a la Vida Real (I) →



$d_{x,y} = \min\{n \mid A^n(x,y)\}$ edxorg

Excel →



edxorg

Tecnologías para la educación →



edxorg



UNIVERSITAT
POLITÀCNICA
DE VALÈNCIA

[Back to schools and partners](#)

The Universitat Politècnica de València (UPV) is a public educational institution that offers modern, flexible degrees designed to meet the demands of society, as well as official postgraduate programmes that are subject to demanding educational quality control systems.

It is the only Spanish technological University ranked among the best in the world, according to the Shanghai Academic Ranking of World Universities (ARWU). It is also ranked among the 100 best universities in the world that are less than 50 years old (Times Higher Education Index).

Currently, its academic community comprises more than 36,000 students, almost 2,500 teachers and researchers, and 1,500 administration and services professionals. It is composed by three campuses, located in València, Alcoi and Gandia.

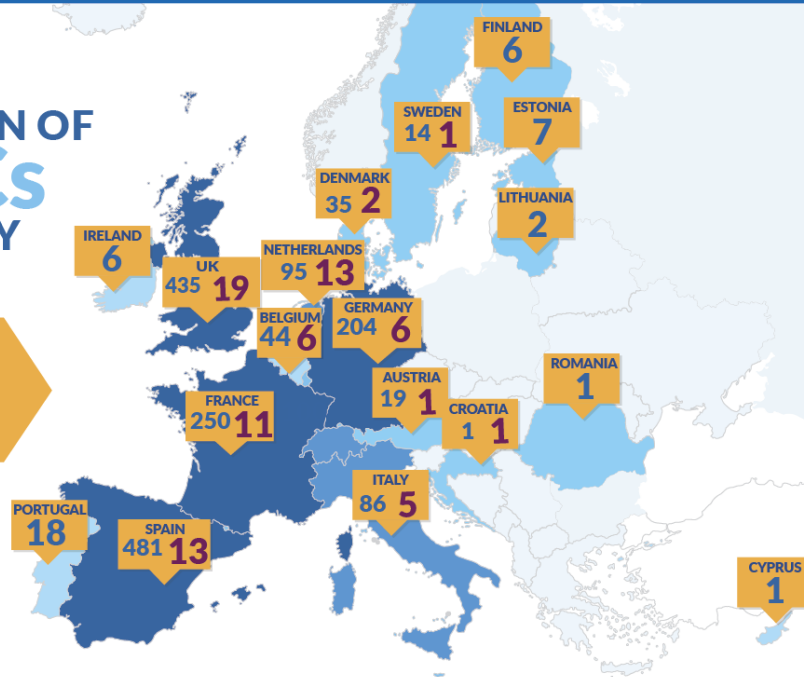
Europe November 2015

The EUROPEAN MOOCs SCOREBOARD Last updated 30.11.2015

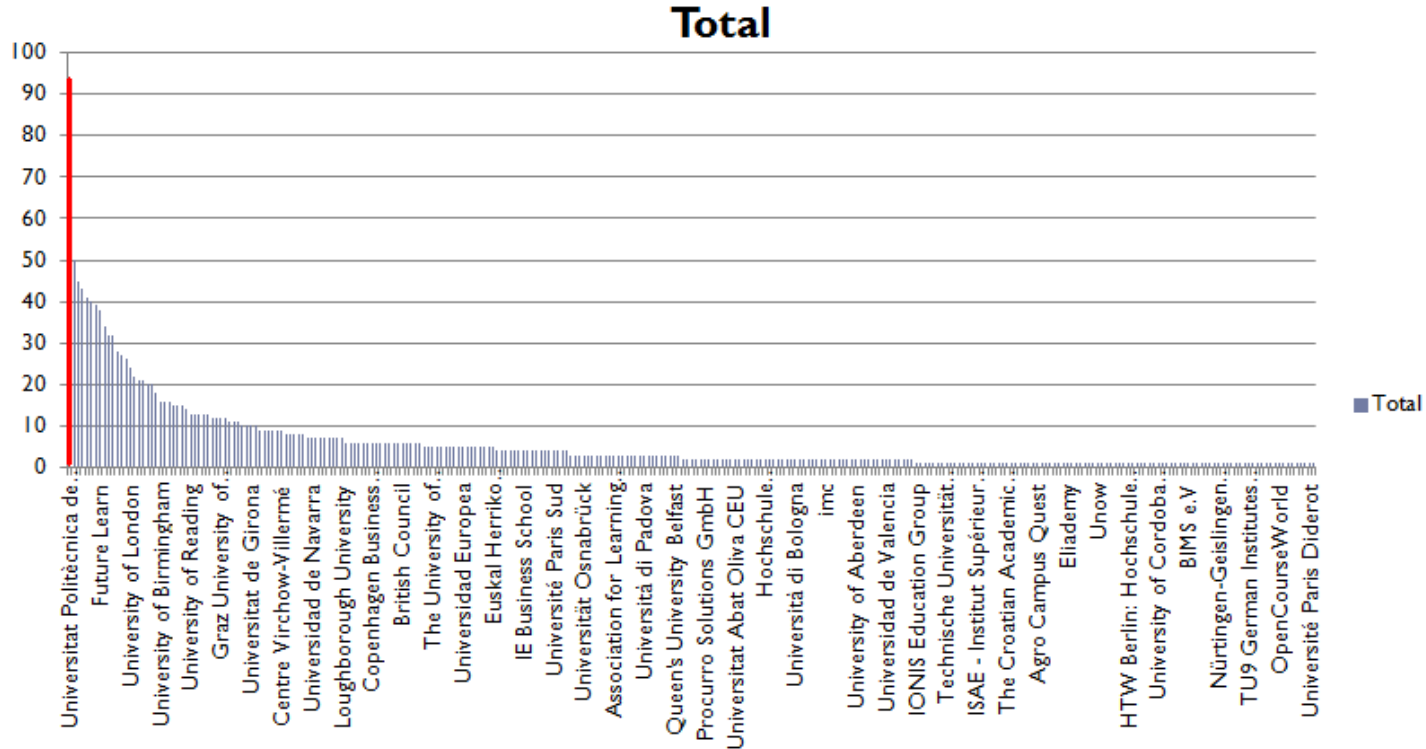
DISTRIBUTION OF MOOCs PER COUNTRY

EUROPEAN MOOCs
1705 **78**

- MOOCs in our database
- Upcoming MOOCs



Europe (course editions Nov 2015)



Viewing 96 results matching

MITx

MITx x



Aerodynamics
Explore fundamental mechanics and their

MITx
Current

Viewing 79 results matching

harvardx

"harvardx" x



China and the Modern World
Learn about China's present, and future.

HarvardX
Current

Viewing 47 results matching

berkeleyx

"berkeleyx" x



Agile Development Ruby on Rails
Learn the Ruby program language and the Ruby

UC BerkeleyX
Starting Soon

Viewing 35 results matching

upvalencix

"upvalencix" x

CLEAR ALL



Bases matemáticas para estudiar ingeniería
Revisión de los conceptos



Preparing for CLEP Information Systems
Prepare for the CLEP IT exam.



UPValenciaX TGV201x.1
Aplicaciones de la Teoría de Grafos a la Vida Real (I)

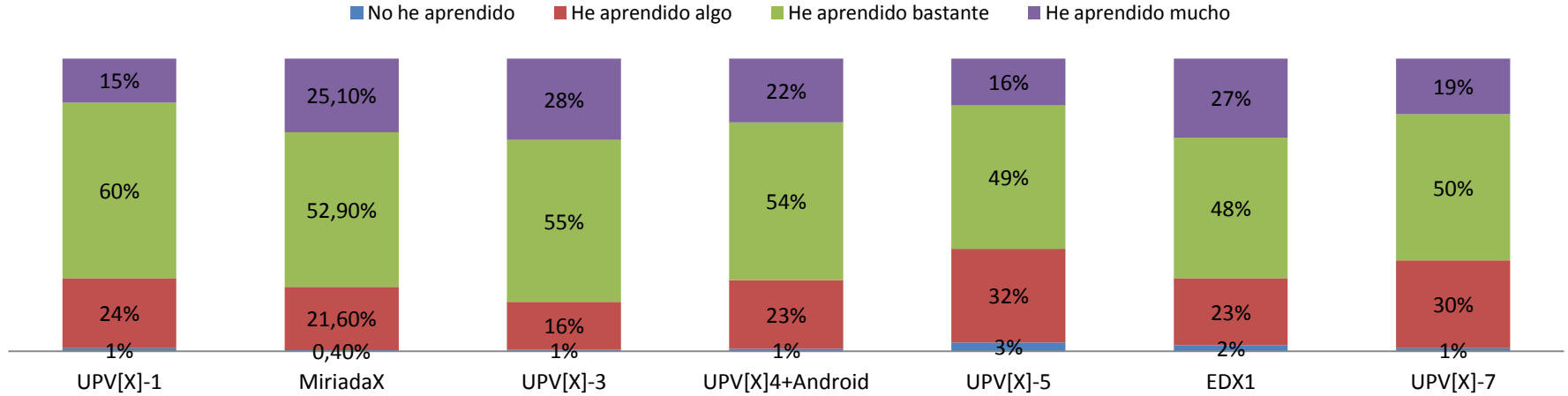
Refine your search

Availability	
Current	20
Starting Soon	6
Self-Paced	25
Archived	9

Subjects

•99 institutions
•1000 courses

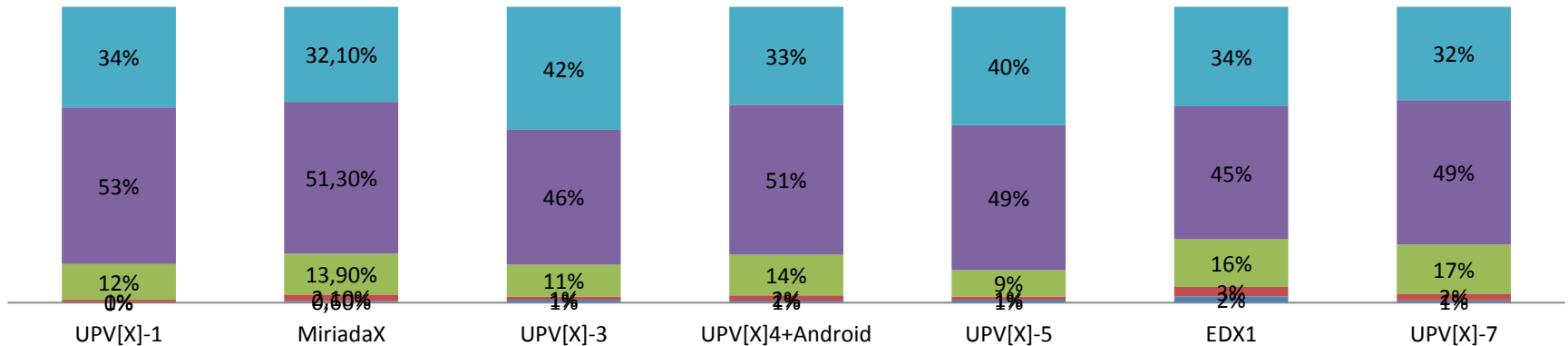
Learning



Expectations

■ 1 ■ 2 ■ 3 ■ 4 ■ 5

4,05/5 on average



- 14 courses in 4 months
- 1 platform coordinator, 1 teaching assistant
- March 2013 for MiriadaX



CURSOS
POLITECNICA
DE VALÈNCIA

Ciudad Valencia

Pais España

Listado de cursos

Cómo implantar grupos de mejora de procesos

Curso cerrado



En el curso veremos las fases de la mejora de procesos, las características de un equipo ideal y técnicas para trabajar en grupos de resolución de problemas.

Duración: 6 Semanas (18 horas de estudio estimadas)

Universitat Politècnica de València

Temática: **Económicas**

[Ficha del Curso >>](#)

Aplicaciones de la Teoría de Grafos a la vida real

Curso cerrado

How did we do it?



- Making things simple for teachers
- Simplifying, Standardizing, Automating

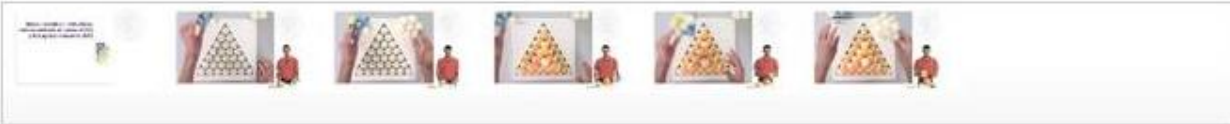


03:00

03:12 10:10



poli [Media] Estadístiques





Faculty used to technology

Easy video production tool

UNIVERSITAT DE VALÈNCIA

Categorías estela turbulenta

PESADA (H) > 136.000 kg
 MEDIA (M) > 7000 kg y < 136.000 kg
 LIGERA (L) < 7.000 kg

pollMedia

MOOC Integración - Moodle Editor

Advertencia de seguridad: Se han deshabilitado las conexiones de datos. Opciones...

id	type	unit_id	title	release_date	now_available	value (decimales con . y 00)
1	U		1 Concepto y propiedades de función primitiva	Disponible 18 de febrero	True	
2	A	unidad01	Preguntas unidad 1	True	0,08	
3	U		2 Primitivas Pseudoinmedias	Disponible 25 de febrero	True	
4	A	unidad02	Preguntas unidad 2	Disponible 4 de marzo	True	0,08
5	U		3 Primitivas Tipo Arcotangente	Disponible 4 de marzo	True	0,08
6	A	unidad03	Preguntas unidad 3	Disponible 4 de marzo	True	0,08
7	U		4 Primitivas de funciones Racionales	Disponible 11 de marzo	True	0,08
8	A	unidad04	Preguntas unidad 4	Disponible 11 de marzo	True	0,08
9	U		5 Cálculo de Áreas, Integral Definida	Disponible 18 de marzo	True	0,08
10	A	unidad05	Preguntas unidad 5	Disponible 18 de marzo	True	0,08
11	U		6 Integración por partes y cambio de variable.	Disponible 25 de marzo	True	0,08
12	A	unidad06	Preguntas unidad 6	Disponible 25 de marzo	True	0,52
13	A	Final	Examen final			

Automation and training



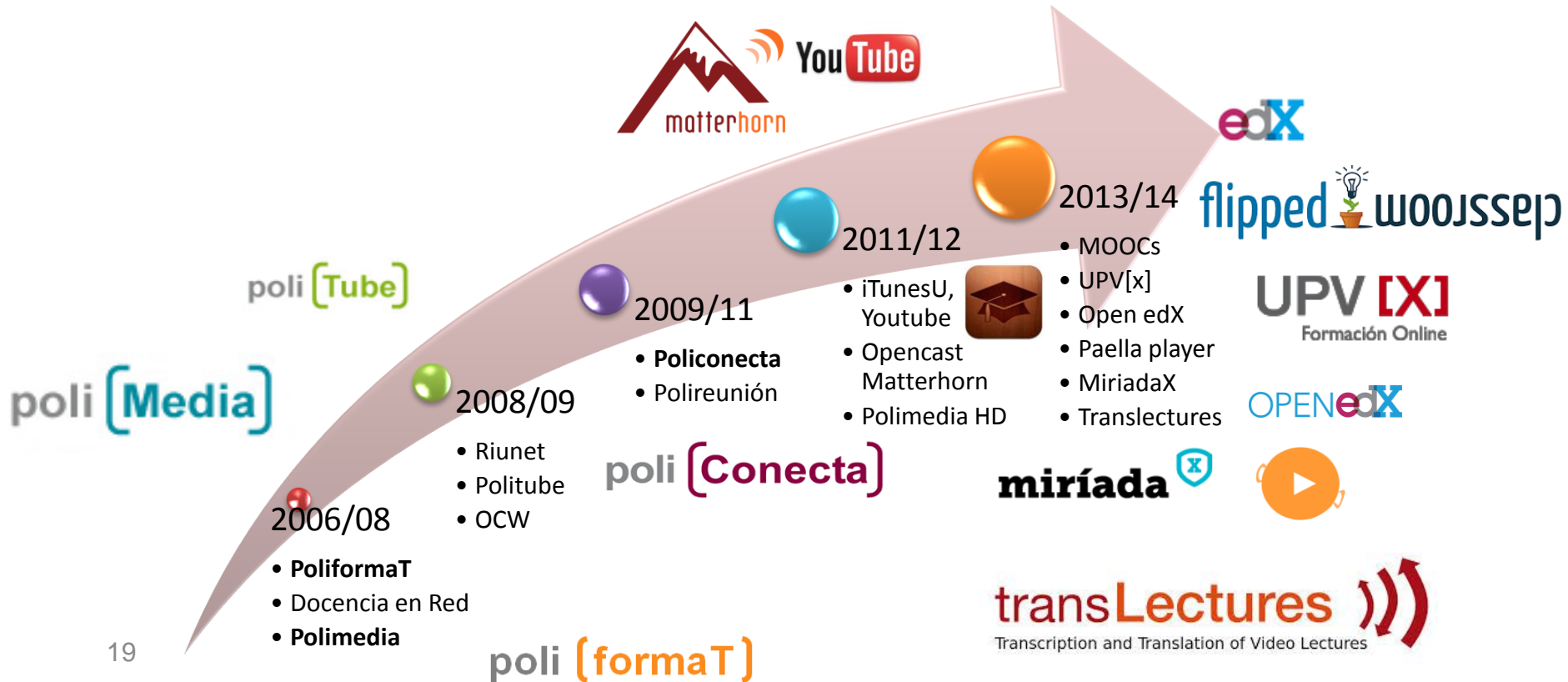
Open call for courses

Common support team



Personalized support

Educational technology evolution in UPV



DOCENCIA EN RED plan

Call for assets

Digital Objects, Learning Modules, OCW courses

Preparation

Teacher training, Class preparation

Production

6 Production studios

Quality Control

Peer review at schools

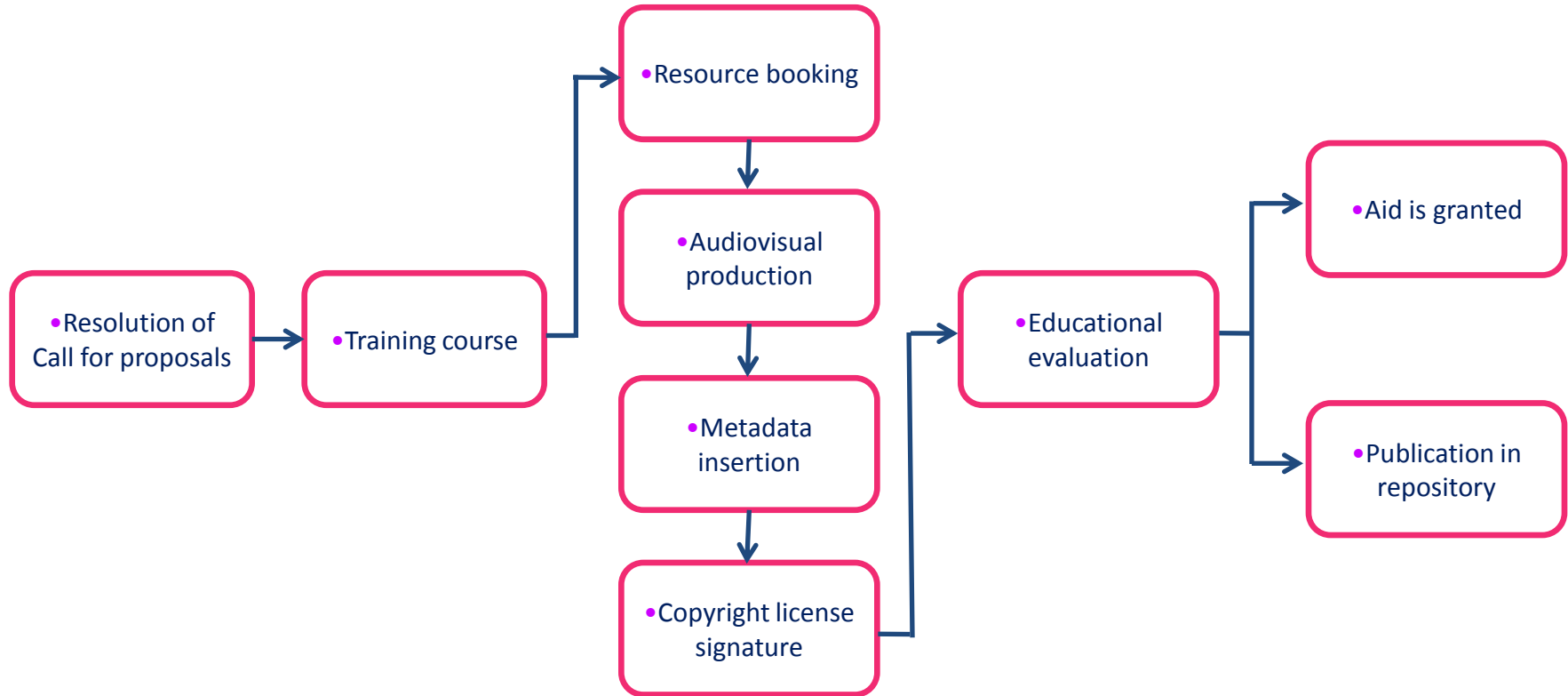
Publication in Library

University Institutional Repository RIUNET

Type of materials

- Learning Objects and their transcriptions
 - Polimedia recordings
 - Screencast recordings
 - Educational videos
 - Numerical simulations with interactive calculation (Virtual Laboratories)
 - Educational articles
- Learning Modules
- OCW courses
- MOOC
- Recording of Lectures (Opencast Matterhorn)

Docencia en Red process diagram



Educational production incentives (2015)

Economic incentives (maximum €400 per teacher)

- From €20 to €30 per object (depending on type and publication rights)
- €70 per learning module
- €150 for the recording of the lectures of a course with Matterhorn
- €250 per one OCW course or MOOC

Exceptional quality mentions

- Diploma and additional economic incentive for distinguished materials

Additional incentive for the use of materials

- Additional economic incentive for most used materials

Curricular recognition

- Content production gives Academic Activity Index points

Assets produced

	2007	2008	2009	2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2007 - 2015
	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Total
Period	October to February	May to November	May to November	May to November	January to June	January to June	January to June	January to June	January to June	
Endowment	150,000	150,000	75,000	63,750	55,000	63,750	10,000	10,000	20,000	
Incentives granted	48,550	77,650	59,850	45,070	44,890	46,130	10,000	10,000	10,000	342,140

Learning Objects

Polimedia	547	455	436	323	319	304	363	526	327	3600
Video	44	35	90	37	39	33	33	80	32	423
Virtual Labs	188	261	212	151	111	100	100	98	36	1269
Educational articles			35	32	86	76	91	188	69	577
Screencast				66	48	37	66	82	106	405
Other	92									
Total objects	871	751	728	596	624	556	661	974	570	6331

• More than 600 teachers

Learning Modules

	51	42	34	25	21	23	44	24	264
--	----	----	----	----	----	----	----	----	-----

OCW complete courses

	30	34	26	9	10	10	21	5	145
--	----	----	----	---	----	----	----	---	-----

Opencast courses

	7	11	12	13	15	58
MOOC				35	8	43
Translectures -transcription			29	83	43	155

Video formats

I. RECORDING LOCATIONS

Where to go.

STUDIOS



VIEW EXAMPLES 

OFFICES



VIEW EXAMPLES 

LECTURES



VIEW EXAMPLES 

OTHER LOCATIONS



VIEW EXAMPLES 

2. PRESENTATION METHODS

How to behave.

FACING THE AUDIENCE



VIEW EXAMPLES 

FACING BOARDS



VIEW EXAMPLES 

INTERVIEWS



VIEW EXAMPLES 

CONVERSATIONS



VIEW EXAMPLES 

DISCUSSIONS

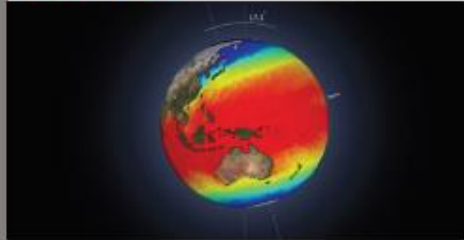


VIEW EXAMPLES 

3. SUPPORTIVE CONTENT

What to show.

ANIMATIONS



VIEW EXAMPLES 

OBJECTS



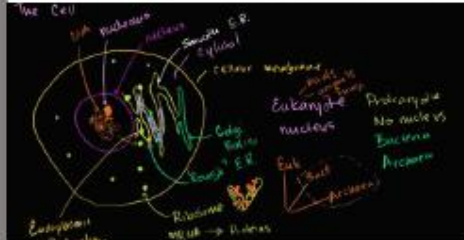
VIEW EXAMPLES 


BOARDS



VIEW EXAMPLES 


KHAN ACADEMY STYLE CAPTURINGS



VIEW EXAMPLES 

SCREEN CAPTURINGS



VIEW EXAMPLES 

poli[Media]

poli [Media]



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

What is Polimedia?

SCREENCAST + NON VERBAL
VIDEO COMMUNICATION

Introducción

Objetivos

- Determinar la tercera propiedad de la desigualdad

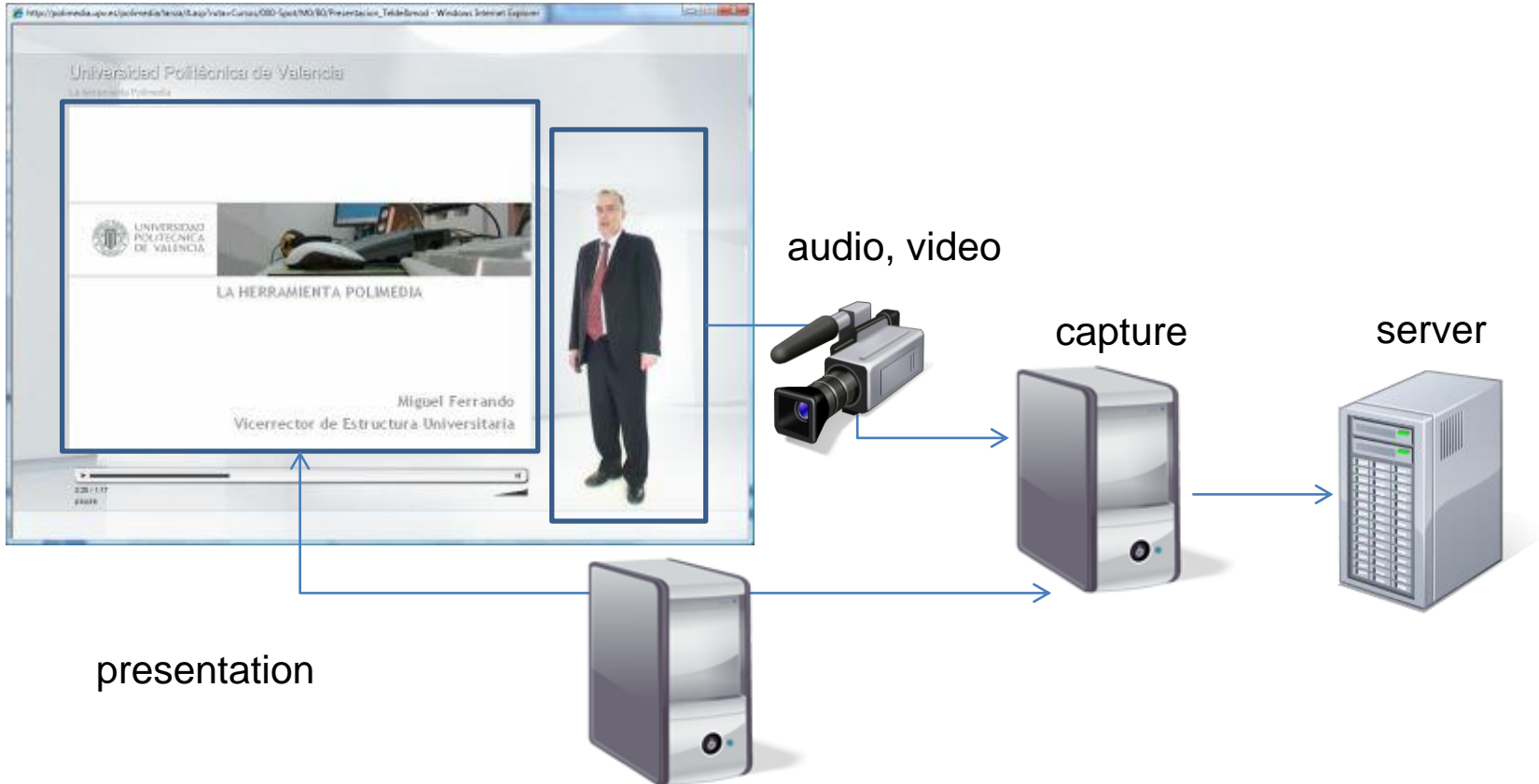
Contenidos Conceptuales

- Propiedad de la desigualdad al multiplicar o dividir por un número negativo a ambos miembros



<https://www.youtube.com/watch?v=-n7ODDK76WI>

poli[Media]



poli[Media]

- Luma key



- No adjustments
- No editing



- One non skilled operator

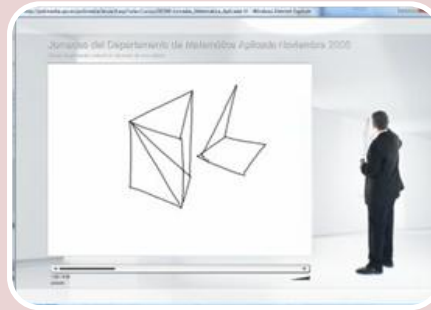


poli[Media] Presentation formats



Screen

- Presentations
- Web browsers
- Graphics
- Videos
- Software demos



Whiteboard

- Whiteboard capture
- Graphics pad integration



Video

- Zenith Camera
- Real world objects
- Experiments

poli[Media]

- Technical Characteristics
 - PRODUCTION
 - Separate capture of video, audio and computer sources
 - Synchronization of multimedia streams
 - Storing of high quality files for every source (1280x720 4 Mbps)
 - DISTRIBUTION
 - Internet format: MPEG4
 - High Resolution: 1280x720 2 Mbps coding rate
 - PUBLICATION
 - Streaming or files
 - Digital library storage (media.upv.es)
 - Easily integrated with Sakai, Moodle, WebCT
 - Exporting to Youtube



poli[Media]

“A customer can have a car painted any color he wants as long as it’s black”

poli[Media]

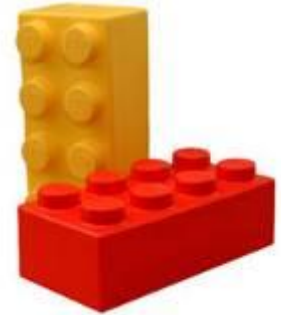
► Numbers



1.717 teachers



2.713 hours

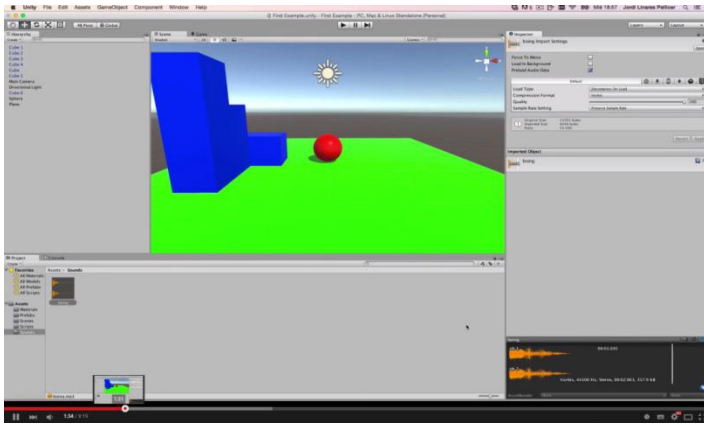


12.385 objects

Some institutions using poli[Media]

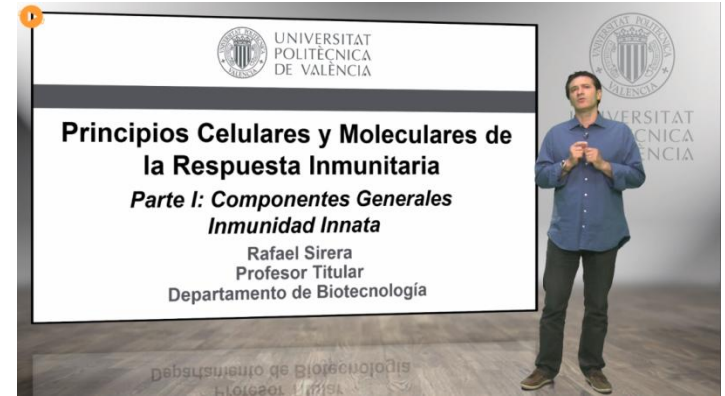


Video format



Screencast

Polimedia



Green Screen Studio



Spreadsheet Template

MOOCIntegrales.xlsm - Microsoft Excel

- Direct upload into OpenedX
- Transchapter tool

	A	B	C	D	E	F	G
1	id	type	unit_id	title	release_date	now_available	value (decimales con . y no c
2	1	U		1 Concepto y propiedades de función primitiva	Disponible 18 de febrero	True	
3	2	A	unidad1	Preguntas unidad 1		True	0.08
4	3	U		2 Primitivas Pseudoinmediatas	Disponible 25 de febrero	True	
5	4	A	unidad2	Preguntas unidad 2		True	0.08
6	5	U		3 Primitiva Tipo Arcotangente	Disponible 4 de marzo	True	
7	6	A	unidad3	Preguntas unidad 3		True	0.08
8	7	U		4 Primitivas de funciones Racionales	Disponible 4 de marzo	True	
9	8	A	unidad4	Preguntas unidad 4		True	0.08
10	9	U		5 Cálculo de Áreas. Integral Definida.	Disponible 11 de marzo	True	
11	10	A	unidad5	Preguntas unidad 5		True	0.08
12	11	U		6 Integración por partes y cambio de variable.	Disponible 18 de marzo	True	
13	12	A	unidad6	Preguntas unidad 6		True	0.08
14	13	A	final	Examen final	Disponible 25 de marzo	True	0.52
15							
16							
17							
18							
19							
20							
21							
22							

Content automation tools

XNF

Neutral format



iversity



miriada



edX



U

UDACITY



coursera

A top-down view of five LEGO minifigures sitting around a white circular table. The minifigures are diverse in appearance, including one with a black helmet and another with a large orange head. The scene is set against a plain white background.

Common support team

- Course development
- Course review
- Transcription correction
- Forum and email support
- Post-course survey
- Statistics

transLectures

Transcription and Translation of Video Lectures



UNIVERSITAT POLITÈCNICA DE VALÈNCIA

poliMedia

00:02 / 16:12

Source language: Español

Target language: English

Ingeniería Aeroportuaria

TEMA 4: CARACTERÍSTICAS DE LOS AVIONES

hola en este tema vamos a hablar de las características de los aviones	Hello on this topic we are going to talk about the characteristics of aircrafts
que nos afectan a la hora de diseñar un aeropuerto, bien	That affect us at the time of designing an airport
empezaremos	We will start
aquí vamos a ver	here we are going to see
un poco una clasificación de aviones de las muchas que hay	A little bit of a classification of aircraft from the many that there are
comentaremos varias	We will discuss several of them
luego las nuevas tendencias en aviación comercial y corporativa	Then the new trends in corporate and commercial aviation
ei actuaciones en tierra pesos importantes y dimensiones que vamos a tener que tener en cuenta	ground manouvres, important weights and dimensions that we are going to take into account

BRITONS

- Open call for MOOC
- MOOCs announced when finished



MÓDULO 1 / SEMANA 1

Secuencia 1



Secuencia 2



...

Secuencia n

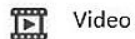
Examen Módulo 1

MÓDULO 2 SEMANA 2

...

MÓDULO n / SEMANA n

EXAMEN FINAL



Video



Texto



Preguntas de refuerzo

Documentation & training

Módulo 1: ¿Qué es un MOOC?

Módulo 2: Conocer edX

Módulo 3: Reutilización de material de Internet. Licencias Creative Commons y atribución

Módulo 4: Algunos consejos para la creación de material online de calidad

Módulo 5: Las funciones de profesor del instructor

Módulo 6: Usando la herramienta para generar un curso

- What is a MOOC?

- Knowing edX as a learner

- Reusing Internet content

- Some recommendations to create online learning

- edX LMS instructor interface

- Generating a course with the spreadsheet

- Studio, edX authoring tool

VER LA UNIDAD EN STUDIO

Objetivo: Conocer el apartado de calificaciones

INFORMACIÓN DE DEPURACIÓN PARA LOS ADMINISTRADORES

Grading

What can I do on this page?

Has hecho algunos cambios
Tus cambios no surtirán efecto hasta que guardes tu progreso.

Guardar Cambios

<https://upvx.es/courses/POC/creaciondeMOOC/2015-01/about>

Personalized support

Thank you very much

ndespujol@cc.upv.es