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European Maturity Model for Blended Education

Course interaction

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Modern War and Philosophy

Description

The course consists of a MOOC combined with face-to-face on-campus course. In the MOOC students are introduced to different philosophical reactions to the first world war through discussion and analysis of texts, documents, images, artworks, film and music. In class the students reflect on the material and discussions in the MOOC. The in-class students brought topics that were discussed in class back into the discussions in the MOOC.

Objectives

After successfully completing the MOOC student learns:

- Basic knowledge of important philosophical reactions to the first world war;
- Conceptual understanding of philosophical and literary texts;
- Historical understanding of the war and its cultural impact;
- A clearer grasp of the complex ways in which philosophy and the great war intersected.

Structuring

The physical classroom activities are intertwined with the online activities:

- Three hour lecture per week – consulting MOOC for readings
- MOOC lectures – discussions in the MOOC – physical discussion

Tools

MOOC on EDX platform:
https://www.edx.org/course/great-war-modern-philosophy-kuleuvenx-graphx-0

The MOOC consists of texts, video, discussion assignments and peer-to-peer assignments.

This is complemented by recordings of the in-class lectures (both for the enrolled face-to-face students and for other MOOC participants):
https://www.youtube.com/watch?v=Um4iqbi-Nc8&list=PLIuIRSariuij_EiYvlpEt8N61Z1S021gA

Face-to-face sessions: Lecture and discussion about what is happening in the MOOC (material, discussions, etc.)

Transition

The course used to be a traditional course (face-to-face lectures). In 2014 the university's policy makers were looking for MOOC pilots. They launched a call for proposals. The course was then submitted and chosen. The course designer received a budget to develop the MOOC. In the academic year 2015-2016 the MOOC was introduced in the course.

Architecture and Modelling of Management Information Systems

Description

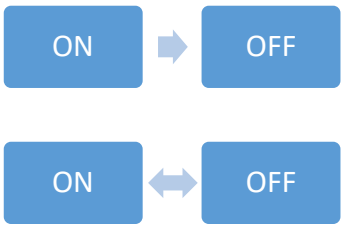
The goal of this course is to familiarize the students with modern methods and techniques of software engineering for Business Information Systems, to let them understand the relation between an information system and the organizational aspects of an enterprise, and to let them acquire sufficient skills to enable them developing an enterprise model as basis of a business information systems

Objectives

Upon completion of this course, the student:

- understands the role of RE in the software development process
- is capable of organizing requirements in a layered architecture
- is capable of performing a requirements analysis to create an enterprise model
- is able to evaluate alternative enterprise models against their impact on the (work) organization and their impact on information system services
- is able to create a high level view of information system services
- is able to relate the enterprise model and the information system services to a business process model.
- knows about modern software development techniques to transform analysis models into working code.

Structuring



As well as being structured as a duplication (in casu face-to-face lectures are recorded and made available as web lectures). The course can also be seen as an example of flipping the classroom where the online activities precede the physical classroom activities.

Tools

Recordings of the in-class lectures are available online (Youtube), use of Videolab and a MOOC on EdX that precedes the course. Students without the necessary prior knowledge can, in preparation of the course start of by following this MOOC.
https://www.edx.org/course/uml-class-diagrams-software-engineering-kuleuvenx-umlx-1

Half of the course is online – students make exercises in an online environment (JMermaid). It's a tool where students can draw a plan for an enterprise information systems according to user requirements. Then students can generate code according to the drawn plans and can as such immediate see the result of their modeling. The tool generates automatically feedback to students.

Face-to-face sessions: Theoretical sessions
Lab sessions: Practical assignments in a computer lab

Transition

This course represent the ongoing process of reflection of the teacher on her teaching. Students were facing difficulties in making the exercises, because they weren't able to 'see' what they had designed. In 2005 the course designer started with the development of a tool that 1) would include feedback on the quality of the created models and 2) could simulate the work of the students by generating code, so they could actually see what they had designed. Since 2011 the tool also generates feedback in the generated code in an automatic way, thereby improving a student's interpretation of the simulation and stimulating reflection on the cause-effect link between the drawn model and the application's behavior.

The tool also logs the student's modeling process, and these processes have been analyzed by means of process mining techniques for discovering modeling patterns associated to good and bad model quality.

As an added step to this continuing process the course designer started a SPOC (containing the web lectures) as a step up to a MOOC.

Teaching Methodology: Behavioral Sciences and Education

Description

This course is taught university-wide as well in behavioral sciences as in sciences. The contents of the course is grouped into different themes. In each theme a translation is made from the general theory to the broad domain of behavioral sciences and education.

- The teacher in behavioral sciences
- The teacher as organizer and coach of teaching and learning processes
- The teacher in relation to his/her students
- The teacher as evaluator of teaching and learning processes
- The professional development as teacher in behavioral sciences

Objectives

After successfully completing the course the student learns to:

- show insight into the relevant frameworks of reference about learning and teaching in the fields of psychology, educational sciences and other related domains.
- demonstrate knowledge of the reflective experiential learning as a didactic framework forming the basis of the practical training in the teacher training behavioral sciences.
- reflect critically upon the basic principles and significance of specific didactical practices in education in behavioral sciences.

Structuring

The course starts off with an introductory face-to-face lecture and ends with a face-to-face round up session. In between these lectures, activities (comprised of individual and group assignments) are online. These activities are supported by as well face-to-face individual and group feedback sessions as feedback via skype.

Tools

Online learning environment in university LMS: knowledge and skills students need in order to make the assignment. combination of video, presentations, articles, FAQ, discussion forum, group blog

Course text (this is the core of the study material)
Face-to-face sessions: Introductory lecture and round up lecture. Individual and group feedback to monitor the learning process

Transition

This course started as the first distance education course at the university, where students were expected to independently process the course material. Three years ago the didactic team decided to redesign the course towards a blended approach, because of the scaling up in the multi campus context of the development of the educational master. The student numbers can increase to 1000.

Online publishing

Description & objectives

In this course, we will familiarize ourselves with state-of-the-art online publishing techniques and relevant cultural issues. This entails both a technical and theoretical component: hands-on practice with online publishing tools are balanced by a meaningful theoretical reflection on the phenomena discussed. The students will learn to plan, create, setup and manage a website.

Structuring

The course consists of two parts: Part 1 consists of lecture to introduce the theoretical concepts. Part 2 are practical sessions where students get support to design a website by using a CMS (in this case DRUPAL). The online serves as an extension to the offline activities. So it is used to put on more information, background information, weblectures,…

Tools

Course on Toledo
Open course online on http://www.informatiewijzer.be/online_publishing_0
Use of free available webtools
Weblectures
Online documentation for the CMS (Drupal)
Interactive Q & A sessions

Face-to-face sessions: Part 1: Lectures
Part 2: Support for the web design assignment in groups

Transition

The course has been a blended course from the start. The course designer has a long record in working with ICT in education. He was one of the first presidents of the task force that introduced the educational platform (TOLEDO) in the university. He is constantly adapting the course in terms of less lectures and more online material that students can consult.

Acute and Chronic Diseases

Description

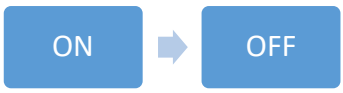
The course contains both theoretical and residential elements and is aimed at providing the students with a medical research-based knowledge of acute and chronic diseases that enables them to diagnose, treat and, rehabilitate patients with common acute and chronic diseases.

Objectives

For ordinary patients, after completing the course, the student should be able to:

1. Receive and correctly communicate with both acute and chronically ill patients
2. Perform the necessary and correct first aid
3. Could record sufficient patient history
4. Perform proper and adequate objective examination of the patient
5. Set up and perform an initial study and treatment program
6. Ordinate necessary paraclinical studies
7. Analyze paraclinical study results
8. Diagnose and treat the most common simple internal medical, general medical, dermatological and orthopedic diseases
9. Could inform patient and relatives about the prognosis of the disorder, the risk of treatment given and the preparation of relevant rehabilitation programs
10. Set up a geriatric investigation program for a complex geriatric medical / surgical patient
11. Ordinate pain treatment and palliation of elderly patients as well as refer to home treatment at the geriatric team
12. Evaluate the symptoms and diseases to be diagnosed and treated in general practice, in the secondary healthcare system, and which require rehabilitation efforts involving other sectors, such as social, labor and education sectors
13. Describe human behavior, reaction patterns and coping strategies and treatment based on biomedical, psychological, social and cultural prerequisites
14. Describe the theory and principles of health promotion, disease prevention, early disease detection and rehabilitation in general practice.

Structuring



The course is an example of the flipped classroom approach. Students consult the online material before attending the face-to-face activities. Dermatology is part of the course. in order to scaffold the students' preparation prior to meeting with the teacher, a large number of videos were produced. These were focusing on explaining essential knowledge and skills in dermatology. Thus, making room for including and discussing relevant clinical cases in the in-class activities.

Tools

Explanatory videos focusing on explaining essential knowledge and skills in dermatology. The videos are posted on the university's platform (Blackboard). Face-to-face sessions: discussion on relevant clinical cases.

Transition

The course was redesigned in 2016. before this transformation the in-class activities in dermatology were primarily based on teacher-centered lectures linked closely to the syllabus. The course designers wanted to change this approach in order to be able to accommodate for the fact that students want to study at other times than curriculum contact hours.

Global Transaction and Intercultural Competence

Description

The course is particularly focussing on the intercultural challenges deriving from global transactions and the intercultural insights and competences needed to act in these challenging contexts. To develop these competencies it works with real cases from the international business world.

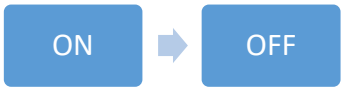
On the basis of theories and methods developed within intercultural communication, cross-cultural interaction and ethnography, the course provides analytical competencies, skills and tools.

Objectives

The objective of this course is that you develop:

- knowledge about global transactions in a changing world
- knowledge about theories on cultural encounters and intercultural communication
- ability to apply appropriate theories and methods to real cases involving intercultural complexities
- intercultural competencies to propose solutions to cases and situations characterized by a high degree of cultural complexity

Structuring



Due to the fact that students attend the course from all over the world the actual face-to-face on-campus time is limited to two weeks. The course has online activities as preparatory activities for the face-to-face activities and, as such, is an example of a flipped classroom approach. After two weeks of face-to-face contact the students go home with assignments (as well home as exam assignment) that are mentored and supervised online.

Tools

Blackboard as a learning management tool (communicator, discussion board, Short 8 minutes videos with lectures, on-hour online sessions uses video and chat function), e-mail, blogging.

Transition

It is a new course and it ran for the first time in 2017.

Design: Theory, Method and Practice

Description

The aim of the course is to enable the student to complete an IT-didactic design process, taking into account the context, target group, values, purpose and use. The result of the design process must be an IT-didactic concept that takes the form of a product, a prototype, a sketch, a plan or the like. The course is interdisciplinary and takes its analytical view into key theories, methods and models in design and IT didactics and IT education. The course contains a clear practical and experimental dimension.

Objectives

Academic goals: In assessing the student's performance, emphasis is placed on the extent to which the student can:
Knowledge:
explain and demonstrate an overview of key design theories and methods with particular relevance to the IT didactic field explain and demonstrate an overview of selected IT-didactic or IT-pedagogical theories and concepts in order to concatenate the design design and didactic concepts of the subject with a targeted IT-didactic design process.

Skills: independently identifying and qualifying a concrete problem within the IT didactic field in order to make it the basis for an IT didactic design process select, justify and apply relevant scientific and design-related methods to create an empirical basis for the design process. design elements of an IT-didactic technology, taking particular account of the context's target audience, values, purpose and use analyze and justify the product's didactic design with reference to known theories in the fields of didactics, pedagogy and design analyze and reflect critically on the design elements with particular focus on the relationship between design intent, design elements and context change can present and disseminate it-didactic design (using selected media and dissemination forms), as well as reflecting its theoretical, methodological and contextual framework.

Skills: with increasing self-esteem, can take responsibility for self-learning and reflect on the interaction between own strengths and weaknesses and the study strategies used can reflect on their own norms and values and how they influence the designed product.

Structuring

The course is mainly conducted as online group work in relation to on-site projects somewhere over the country. It consists of only two face-to-face events on campus: one at the beginning of the course (where some students are even only present online) and one at the end (set up as a student conference). After this second face-to-face gathering students work online on their final exam (an exam paper). In between, students are connected to each other via google-apps (google docs, google drive).

Tools

Google-apps: Google docs, google drive, google hangout. Face-to-face sessions: Course introduction through a practical seminar. Final gathering in a conference form.

Transition

The course was transformed from a traditional face-to-face course to a blended course in 2012. It is well established as a blended learning course at the university.

Change and project management methods

Description & objectives

Premise: the story of this course is about different and sometimes conflicting views to strategy, change, and project management

Protagonist: you are the heroes and heroines to take the journey into the unknown world of management

Conflict: good management vs. bad management. you need to free the “beautiful princess” (your organization) from the “dragons cave” (bad management).

The course will give you weapons to fight the dragons you will meet along with your journey.

Structuring

The course is part of a program where students are an international group, who only meet face-to-face in (name of country) twice a year. During the first meeting (a two-hour lecture) the course designer provides an introduction to the course.

The learning philosophy was based on collaborative learning and connectivism. Collaboration during the course was intense and both synchronous and asynchronous methods were applied. Basically three different types of activities were used: o Collaboration in small groups of 4 to 8 people from different timezones. Before engaging into a video call the students familiarized themselves with the topics by reading literature and articles. Then the small group arranged an online video meeting, most often by using Zoom as the tool. Finally the group compiled detailed minutes of the meeting for the other students. Total 3 of tasks of this type.

o Individual assignment based on literature and articles, type 1. The students sent their reflections to

their work context to the teacher, who gave them individual feedback online. Total 5 of tasks of this type.

o Individual assignment based on literature and articles, type 2. The students brought the outcome of their assignments on a discussion forum where their peers read and commented those online. Total 6 of tasks of this type.

Tools

moodle: the backbone of the course in weekly based format. delivery of the course content. discussion areas for asynchronous collaboration. assignments for student – teacher collaboration.

facebook: online socialization and info sharing.

video conference technology of choice: synchronous online small group collaboration any other tools which the students used (e.g. youtube)

Face-to-face session: two hour lecture as introduction to the course

Transition

First implementation with slightly different content in 2014. it was 80% conventional and 20% online (using moodle and blogger, but no synchronous collaboration). The name was then “strategic thinking in project management” with less emphasis on change management. The second implementation in 2016 was similar to the first one. In 2017, the course was turned into an online implementation and the content was modified to better fit in another master’s program. In the future, the course will be reduced to seven weeks instead of a whole semester in order to accommodate the students who were complaining about the workload due to courses that ran at the same time.

Risk management in international operations

Description

This course familiarizes the students with Risk Management as the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events. Special emphasis is put on practical risk management tools and latest concepts. Course consists of 1 face-to-face meeting and online activities (individual & team work).

The course is targeted to students who have at least 3 years working experience and are studying while working. The course is trying to enhance collaborative learning, sharing experiences and learning from each others, which brings some challenges into blended model.

Objectives

When the student has passed this course he/she will know:

- Core terms and notions related to risks and risk management
- Different risk types and profiles in different business environments
- Risk management process phases
- Risk identification techniques
- Risk assessment tools
- Risk management linkage to other management disciplines
- Trends in academic risk management research

Structuring

OFF ON

The course consists of one face-to-face meeting (a three hour contact class) and online activities. The exam is also administered online. The online activities were divided in four modules and consisted of individual and team work. The purpose of the face-to-face meeting was to get to know each other and make the online team work easier.

Tools

MOODL platform, selected online working tools (via Tabula LMS)

Transition

The course was implemented first as a conventional course in 2014 and 2015, then transformed into blended. The course is constantly adjusted on the basis of student feedback which is very important to the course designer. Students, for example, came up with the idea of creating their own cases that their peers had to solve.

Chemistry 1A

Description

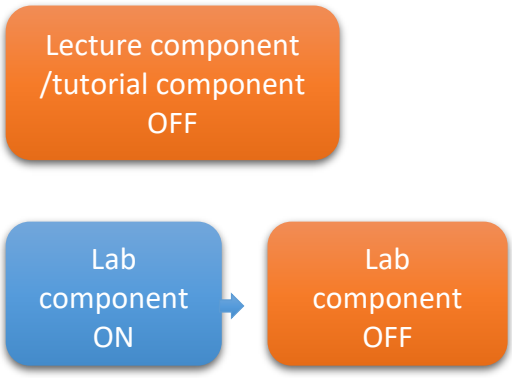
The Chemistry 1A and 1B 20-point courses together provide the first year course for students taking chemistry-based degrees. They also serve as a foundation in chemistry for other physical science students. These courses are designed to take students with diverse backgrounds and provide them with thorough grounding in the fundamentals of chemistry and provide a basic training in the essential laboratory skills for practical chemistry. The courses consist of lectures, tutorials, workshops and laboratory classes in inorganic, organic and physical chemistry.

Objectives

On completion of this course, the student will be able to:

1. appreciate how to build knowledge in chemistry through an increased awareness of the effectiveness of different modes of teaching and learning.
2. understand, describe and account for: the fundamental principles of atomic structure and the periodic table; bonding and molecular orbital theory; understanding of the constitution, structure and stereochemistry of organic molecules; spectroscopic characterisation involving uv/vis, ir and nmr spectroscopies; the concept of organic reaction mechanisms; the principles of thermodynamics.
3. participate in small group discussions both in a laboratory and in a tutorial setting.
4. use data sets using suitable software to formulate meaningful scientific arguments.
5. use laboratory equipment under supervision in a safe manner in order to perform simple synthetic procedures and spectroscopic characterisations, and write clearly structured, word-processed laboratory reports.

Structuring



The course is mainly traditional whereby only a small part is done in flipped classroom mode. The course has a lecture component, a laboratory component and a tutorial component. The blended-learning elements are specific to the lab practice, experiment 2, where students were required to watch 4 exemplar videos on Learn (VLE), complete a prelaboratory quiz, and then demonstrate particular techniques to peers while filming themselves.

Tools

videos, Learn (virtual learning environment), youtube, vimeo, media hopper, digital badges (hosted on the mozilla open badges platform).

Transition

The incorporation of blended learning elements into the lab practice together with peer assessment is a fairly new approach in this course.

Reproductive Biology Honours

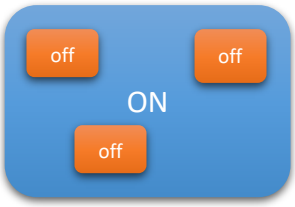
Description

The blended approach in this course is used in a couple of ways, including getting all students to work in groups to write wikipedia pages and develop a critical appraisal of a topic using wordpress as a platform.

Objectives

The aim of the course is to provide general support and advice on personal and professional development, including the opportunity for students to consider their own weaknesses and strengths.
On completion of this course, the student will be able to:
1. Accept the personal attributes and behaviours required of a professional
2. Engage in reflective activity in terms of self-appraisal
3. Recognise the importance of good communication
4. Recognise sources of stress and methods for mitigating it.
5. Develop effective time management, independent learning and study skills and Appreciating the value of giving and receiving constructive feedback

Structuring



The course is structured based on the SLICC principle (Student-Led Individually Created Courses: https://www.ed.ac.uk/employability/slicc/about) whereby individual reflection is of the essence. Students have very few offline sessions. The backbone to the course is an e-portfolio.

Tools

e-portfolio of learning (Pebble Pad), wikipedia

Transition

The blended approach has been used in the student selected components at the medical school for about 15 years, so it is a very well established practice. More than one course has adopted this approach.