Teaching entrepreneurial competences

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The e-DESK programme is targeted for the HEI teachers to skill up entrepreneurship education competence in online teaching methods/practices and to develop their online teaching skills and to enhance the entrepreneurial competences for their learners.

Planned ECTS: 2

Number of learners: 50

Mode of delivery: Online

Status: IN PLANNING

Course public access: Private

Contributors:
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Course learning outcome	Level	Weight
Describe pedagogical approaches, teaching and assessment methods that enhance students' engagement to develop students' entrepreneurial competences in online learning environment.	Understanding	10
Identify what entrepreneurial competences students need in the contemporary world to seize and create opportunities and meet challenges to generate value.	Analysing	15
Identify relevant pedagogical approaches to support students to analyse the impacts of ideas, opportunities, actions, created values and ethical implications in the selected real-world environment.	Analysing	15
Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills.	Applying	10
Evaluate individual and group strengths and weaknesses of students and staff regarding hybrid and digital teaching and learning about entrepreneurial competences.	Evaluating	10
Create interactive learning designs and sessions developing students' entrepreneurial competences, minding students' pre-competence, available resources and pedagogical techniques that enhance students' engagement and motivation.	Creating	20
Integrate the learning material available in the MOOC with other appropriate teaching and learning resources to foster entrepreneurial competences and ethical and sustainable thinking.	Applying	10
Evaluate the learning process and students' acquisition of learning outcomes related to entrepreneurial competences.	Evaluating	10
		Total weight: 100

Topic / Unit name	Workload	Learning type	Mode of delivery	Groups	Collaboration	Feedback	Mandatory activity	Assessment		
								Points	Type	Providers
Introduction										

Introduction												
Introductory video This video should summarize the main aspects and relevant contents/ characteristics of the MOOC. Maybe it could be done after we have the rest of the final draft materials. *To keep the narrative, we could do very short introductory videos (using the same voice/person/character) to all modules/submodules.	20 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Glossary A compilation of the main terms that will be used during the MOOC and can cause doubts.	10 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Self assessment Entrepreneurial competences and teaching methods. The main objective of this assessment shall be to make participants aware of what they already know and from where they depart.	30 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	0	Formative	Self
Total unit workload	1h											
Competences, skills and values in general Describe pedagogical approaches, teaching and assessment methods that enhance students' engagement to develop students' entrepreneurial competences in online learning environment. (**70%),** Identify what entrepreneurial competences students need in the contemporary world to seize and create opportunities and meet challenges to generate value. (**10%)**												
Entrepreneurial competences												

Pre-reading + introductory video Reading and audiovisual materials regarding the basics of entrepreneurial education.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Quiz Formative assessment based on the pre-reading. Multiple choice questions. Can be used as an entry pre-competence test (to check the level of teachers´ pre-competence).	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	3	Formative	Automated
Videos of best practice Short videos (3 - 6 mins) with good examples. Can be existing or newly recorded videos.	60 min	Investigation	Online	Asynchronous	Teacher not present	Yes	Yes	No	No	No		
Disscussion based on reading, videos and own experiences Discussion based on questions. For this forum assignment we recommend having only 2-3 questions not focused exactly on the videos, but maybe things ans characteristics shared by all/most examples.	90 min	Discussion	Online	Synchronous	Teacher not present	No	Yes	Peer	No	2	Formative	Peer
Total unit workload	4.5h											
Pedagogical approaches, teaching and assessment												
Videos Videos on pedagogical approaches, learning outcomes, learning theories, constructive alignment etc.	115 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Quiz Short formative assessment related to the pre-reading.	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	3	Formative	Automated
Videos/materials on best practice Participants will be provided with materials on good practices in flipped classroom and work-based learning approaches (E+ project RAPIDE).	60 min	Investigation	Online	Asynchronous	Teacher not present	Yes	Yes	No	No	No		

Discussion based on the pre-reading, videos and own experience Participants will be divided in groups and provided with questions for discussion.	90 min	Discussion	Online	Synchronous	Teacher not present	Yes	Yes	Peer	No	2	Formative	Peer
Total unit workload	5.41h											
Final test												
Final test - Copy	30 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	10	Summative	Automated
Total unit workload	0.5h											
Entrepreneurial competences-Copy												
Pre-reading + introductory video Reading and audiovisual materials regarding the basics of entrepreneurial education.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Quiz Formative assessment based on the pre-reading. Multiple choice questions. Can be used as an entry pre-competence test (to check the level of teachers´ pre-competence).	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	3	Formative	Automated
Videos of best practice Short videos (3 - 6 mins) with good examples. Can be existing or newly recorded videos.	60 min	Investigation	Online	Asynchronous	Teacher not present	Yes	Yes	No	No	No		
Disscussion based on reading, videos and own experiences Discussion based on questions. For this forum assignment we recommend having only 2-3 questions not focused exactly on the videos, but maybe things ans characteristics shared by all/most examples.	90 min	Discussion	Online	Synchronous	Teacher not present	No	Yes	Peer	No	2	Formative	Peer
Total unit workload	4.5h											

Entrepreneurial competences- Copy- Copy												
Disscussion based on reading, videos and own experiences Discussion based on questions. For this forum assignment we recommend having only 2-3 questions not focused exactly on the videos, but maybe things ans characteristics shared by all/most examples.	90 min	Discussion	Online	Synchronous	Teacher not present	No	Yes	Peer	No	2	Formative	Peer
Videos of best practice Short videos (3 - 6 mins) with good examples. Can be existing or newly recorded videos.	60 min	Investigation	Online	Asynchronous	Teacher not present	Yes	Yes	No	No	No		
Quiz Formative assessment based on the pre-reading. Multiple choice questions. Can be used as an entry pre-competence test (to check the level of teachers´ pre-competence).	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	3	Formative	Automated
Pre-reading + introductory video Reading and audiovisual materials regarding the basics of entrepreneurial education.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Total unit workload	4.5h											

Developing entrepreneurial competences Describe pedagogical approaches, teaching and assessment methods that enhance students' engagement to develop students' entrepreneurial competences in online learning environment. (**10%),** Evaluate individual and group strengths and weaknesses of students and staff regarding hybrid and digital teaching and learning about entrepreneurial competences. (**40%),** Evaluate the learning process and students' acquisition of learning outcomes related to entrepreneurial competences. (**10%)**												
Evaluating the pre-knowledge on entrepreneurial competences												
Introductory videos Videos about the entrepreneurial competences framework - ENTRECOMP Europe.	30 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Introduction to EntreComp Edu Get to know how to apply the EntreComp framework to education.	30 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Discussion Discussion on the entrepreneurial competences framework. E.g. Participants in groups discussing various aspects or dimensions of the entrepreneurial competence framework.	60 min	Discussion	Online	Synchronous	Teacher not present	No	Yes	No	No	No		
Final test	30 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	10	Summative	Automated

Total unit workload	2.5h												
Real-world requirements for entrepreneurial competences Describe pedagogical approaches, teaching and assessment methods that enhance students' engagement to develop students' entrepreneurial competences in online learning environment. (**10%),** Identify what entrepreneurial competences students need in the contemporary world to seize and create opportunities and meet challenges to generate value. (**90%)**													
Real-world requirements													
Introductory presentation videos and readings Videos on the future of jobs. References: Frey & Osborne 2013 and 2017, World Economic Forum, ENTRECOMP and sustainability etc.	90 min	Investigation	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Case-study analysis Examples of entrepreneurial stories. Several stories, analyzing them from different points of view (scientific fields, countries, regions), producing essays on students´ entrepreneurial skills needed for this particular entrepreneurial environment. Making generalizations.	60 min	Production	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Peer-review Assessing the essays according to rubrics. [For moving the course to the WP platform, it shall be turned into self-assessment based on the criteria from the rubrics]	90 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	10	Formative	Peer

Total unit workload	4h												
Relevant pedagogical approaches Describe pedagogical approaches, teaching and assessment methods that enhance students' engagement to develop students' entrepreneurial competences in online learning environment. (**10%),** Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills. (**10%),** Identify relevant pedagogical approaches to support students to analyse the impacts of ideas, opportunities, actions, created values and ethical implications in the selected real-world environment. (**80%)**												
Relevant peadgogical approaches													
Introductory materials Introductory videos (10 mins per video) and other materials on pedagogical approaches (strategies): - in general - flipped classroom - problem/project-based learning - inquiry-based learning - work-based learning.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Branching scenarios Possibility of creating a character; selecting relevant pedagogical approaches related to the acquisition of spotting opportunities, sustainable and ethical thinking, creating values.	60 min	Practice	Online	Asynchronous	Teacher not present	No	No	Automated	No	9	Formative	Automated

Discussion Discussion about the scenarios.	60 min	Discussion	Online	Synchronous	Teacher not present	No	Yes	Peer	No	2	Formative	Peer
Total unit workload	3h											
Evaluating the digital teaching and learning skills of students and staff Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills. (**50%),** Evaluate individual and group strengths and weaknesses of students and staff regarding hybrid and digital teaching and learning about entrepreneurial competences. (**40%),** Evaluate the learning process and students' acquisition of learning outcomes related to entrepreneurial competences. (**10%)**												
Digital skills for teaching and learning												
Introductory Videos General videos on technology enhanced learning. These videos should focus on digital skills necessary for different scenarios. (The different modes of delivery will be further explored on the Delivery Models of Teaching and Learning module).	30 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		

Self-assessment of digital skills (first part) A rubric for self-assessment. Comparing to the average according to different criteria. Gap analysis and feedback. Evaluating pre-knowledge of digital skills according to the DigComp framework, using the Digital Skills Assessment tool from the European Commission platform (https://digital-skills-jobs.europa.eu/en/digital-skills-assessment).	30 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	0	Formative	Automated
Content provision and practice Provision of different scenarios and choosing the tools that can enhance teaching and learning for that scenario. The scenarios are chosen according to the results from the first self-assessment, for each skill.	75 min	Practice	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Reflection on digital skills at own institutions Essay on ways to improve faculty digital skills at your institution. Use your strengths/weaknesses as examples.	60 min	Production	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Peer-review Peer-review of the essays with suggestions for improvement.	75 min	Assessment	Online	Asynchronous	Teacher not present	No	Yes	Peer	No	5	Formative	Peer
Self-assessment of digital skills (second part) A rubric for self-assessment. Comparing to the average according to different criteria. Progress analysis and feedback. Evaluating resulting knowledge of digital skills according to the DigComp framework, using the Digital Skills Assessment tool from the European Commission platform (https://digital-skills-jobs.europa.eu/en/digital-skills-assessment).	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	0	Formative	Automated
Total unit workload	5.5h											

Learning design concept and tool Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills. (**10%),** Identify relevant pedagogical approaches to support students to analyse the impacts of ideas, opportunities, actions, created values and ethical implications in the selected real-world environment. (**10%),** Create interactive learning designs and sessions developing students' entrepreneurial competences, minding students' pre-competence, available resources and pedagogical techniques that enhance students' engagement and motivation. (**80%)**												
Learning design concept and tool												
Introductory video Video on learning design concept and the tool (10 min in total). BDP Learning Design tool: https://learning-design.eu/en/	90 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Quiz A short automated quiz related to the learning design concept.	10 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	2	Formative	Automated
Case-study analysis Several case-studies provided and discussed in groups. Delivery mode is hybrid.	120 min	Investigation	Online	Synchronous	Teacher not present	Yes	Yes	Peer	No	No		

Preparing learning design Preparing learning designs/sessions in an LD tool based on the discussion related to the case-studies based on the hybrid delivery mode. (Self-assessment instead of teacher assessment in WP.)	280 min	Production	Online	Synchronous	Teacher not present	Yes	Yes	Teacher	No	30	Summative	Teacher
Total unit workload	8.33h											
Learning resources Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills. (**10%),** Integrate the learning material available in the MOOC with other appropriate teaching and learning resources to foster entrepreneurial competences and ethical and sustainable thinking. (**80%),** Create interactive learning designs and sessions developing students' entrepreneurial competences, minding students' pre-competence, available resources and pedagogical techniques that enhance students' engagement and motivation. (**10%)**												
Learning resources												
Discussion Discussion on the takeaways from this course related to learning resources and what´s missing. Finding information to support ethical and sustainable thinking.	90 min	Discussion	Online	Asynchronous	Teacher not present	No	Yes	Peer	No	No		

Video Videos on how to find relevant and reliable resources about ethical and sustainable thinking.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Preparing resources on ethical and/or sustainable thinking Based on the discussion and the video, participants prepare (collect and systematize) materials on the selected topic and for a selected group of students (taking into account the educational level and pre-knowledge of students).	75 min	Production	Online	Asynchronous	Teacher not present	No	No	Teacher	No	5	Formative	Self
Demonstration of selected resources Participants demonstrate the prepared resources. For the MOOC - the prepare recordings or other formats (e.g. infographics). For the project - participants prepare presentations.	90 min	Practice	Online	Asynchronous	Teacher not present	No	Yes	Peer	No	5	Summative	Peer
Total unit workload	5.25h											

Evaluation and quality assurance Integrate the learning material available in the MOOC with other appropriate teaching and learning resources to foster entrepreneurial competences and ethical and sustainable thinking. (**10%),** Identify relevant pedagogical approaches to support students to analyse the impacts of ideas, opportunities, actions, created values and ethical implications in the selected real-world environment. (**10%),** Evaluate individual and group strengths and weaknesses of students and staff regarding hybrid and digital teaching and learning about entrepreneurial competences. (**10%),** Evaluate the learning process and students' acquisition of learning outcomes related to entrepreneurial competences. (**80%),** Create interactive learning designs and sessions developing students' entrepreneurial competences, minding students' pre-competence, available resources and pedagogical techniques that enhance students' engagement and motivation. (**10%)**										
Evaluation and quality assurance										
Pre-reading Reading materials on evaluation and QA in HE.	60 min	Acquisition	Online	Asynchronous	Teacher not present	No	No	No	No	No

Quiz Short quiz based on the pre-reading.	60 min	Assessment	Online	Asynchronous	Teacher not present	No	No	Automated	No	3	Formative	Automated
Self-evaluation Self-evaluation of a learning design, learning resources and the learning process, based on a rubric.	90 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	20	Summative	Self
Total unit workload	3.5h											

Delivery models of teaching and learning

Use appropriate technology to support sound pedagogical approaches that contribute to the development of students' entrepreneurial and problem-solving skills. (**20%),** Integrate the learning material available in the MOOC with other appropriate teaching and learning resources to foster entrepreneurial competences and ethical and sustainable thinking. (**10%),** Identify relevant pedagogical approaches to support students to analyse the impacts of ideas, opportunities, actions, created values and ethical implications in the selected real-world environment. (**0%),** Evaluate individual and group strengths and weaknesses of students and staff regarding hybrid and digital teaching and learning about entrepreneurial competences. (**10%)**

Delivery models on teaching and learning

Videos on different delivery modes Videos on different modes of delivery.	60 min	Investigation	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Discussion on good practices Group discussion on good practices, based on delivery modes.	90 min	Discussion	Online	Synchronous	Teacher not present	Yes	Yes	Peer	No	2	Formative	Peer
Total unit workload	2.5h											
Hybrid teaching and blended learning												
Videos on best practices (hybrid teaching and blended learning) Videos related to best practices hybrid and blended delivery.	60 min	Investigation	Online	Asynchronous	Teacher not present	No	No	No	No	No		
Discussion on hybrid teaching and blended learning Group discussion on hybrid teaching and blended learning, based on the video.	90 min	Discussion	Online	Synchronous	Teacher not present	Yes	Yes	Peer	No	2	Formative	Peer
Total unit workload	2.5h											
Further personal development												
...												
Final self-assessment Entrepreneurial competences and teaching methods	30 min	Assessment	Online	Asynchronous	Teacher not present	No	No	No	No	0	Formative	Self
Recommendation for further independent work In this submodule, we can include some related open courses or videos, as well as interesting papers. Perhaps it could be divided as a directory, having different "sections" for each of the topics: hybrid learning, digital learning, face to face teaching, etc. (here we could also include a section referencing papers focused on the covid-19 consequences on the digitalization of universities...)	60 min	Investigation	Online	Synchronous	Teacher not present	No	No	No	No	No		

Total unit workload	1.5h
Total course workload	**59h**