Evaluation of the Inter-University Learning in Higher Education on Advanced Land Management (ILHAM-EC)

By

Dr Giuseppe Nocella (MSc, PhD, PGCAP)
Associate Professor
University of Reading

Contents

1. Introduction

The scope of this document is to evaluate the on-line Master's program on *Sustainable Land Management* (SLM) developed by the Inter-University Learning in Higher Education on Advanced Land Management (ILHAM-EC) consortium. This an interesting new Master's degree program which is well structured and takes into account innovative approaches to tackle land degradation and desertification processes. This Master is based on innovative learning methods that contribute to enhance high quality educational curricula that meet professional, employer and socio-economic needs of higher education in Egypt and offers at the same time opportunities to develop an international educational network on this important topic of our time.

The structure of the websites is simple and easy to navigate and engagement with end-users is facilitated by news and the content of courses. The on-line Master's program on SLM contains teaching material for the following 10 modules:

1. Soil salinity and Land management
2. Sustainable agro-ecosystem management
3. Economics of land degradation
4. Advanced spectroscopy analysis for SLM
5. Land Management using GIS and RS applications
6. Applied Bio-Economics
7. Land use planning in sustainable development
8. Sustainable Feed-Food Links
9. Project Proposal Writing, Financing and Sources of Funding
10. Water Resources Management

In order to evaluate the online Master's course in *Sustainable Land Management* the following areas of teaching and learning are evaluated for each course mentioned above: 1) Course Overview/ Information & Content, 2) Learning Objectives & Learner Engagement, 3) Learner support and accessibility, 4) Interaction/Presence and 5) Assessment and feedback.

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

2. Modules' Evaluation (MEV)

2.1 MEV 1: Soil Salinity and Land Management

Course Overview/Information & Content		Suggestions for the Category
1	The instructor begins the course by welcoming end users. In his introduction, he presents himself and his research interests as well as that of the teaching assistants. The instructor provides end users with a good set of introductory slides that are schematic and easy to follow. The video-scribing section provides end users with an enjoyable introduction to the module.	As a good practice, instructors could start by highlighting the module aims and objectives. Provide end users with a comprehensive syllabus where such aims and objectives are presented.
2	The course highlights the skills and abilities that end users will be able to master by the end of the seminars well. The course is easy to navigate.	
Learning Objectives & Learning Agreement		**Suggestions for the Category**
3	The course is designed to support teachers, who are provided with slides and videos that they could use again with their students.	It is advisable to provide end users with further case studies and practical examples so as to encourage class activities and interaction.
Learner Support & Accessibility		**Suggestions for the Category**
4	The instructor uploads power points and videos to support end users' learning. The slides for each lecture are very well structured; they are simple, easy to follow and often accompanied by images and power points. The instructor also provides end users with resources such as handbooks, books and journal articles. End users are supported with such different types of sources to master the content, the aims and the objectives of the module.	It could be a good idea to provide users with further information regarding the context of the media and support materials.
Interaction/Presence		**Suggestions for the Category**
5	The instructor brings in his own experience very well.	Provide further interaction with end users.
Assessment and Feedback		**Suggestions for the Category**

6	The course ends with a lecture made up of power points with practical questions and their correct answers to support end users' success in their assessments. In this section, the module convenor also uploads a handbook and makes it clear to end users that the assessment will be based on the handbook content.	An interactive quiz could be provided to end users.

2.2 MEV 2: Sustainable Agroecosystem Management

	Course Overview/Information & Content	Suggestions for the Category
1	The course begins with a warm introduction for end users, where the instructor inspires end users by highlighting her research expertise and interests. She brings in her own experience. The introduction is enjoyable and made up of images. The instructor makes the module aims and objectives clear, as well as its structure. She provides context for each lecture. The video-scribing section provides end users with an enjoyable introduction to the module.	It could be a good idea to provide end users with a syllabus right from the beginning of the course.
2	The course aims at supporting students to master its content, objectives and aims. It is very well structured and is consistent between its rubrics and its content and it is easy to navigate.	
	Learning Objectives & Learning Agreement	**Suggestions for the Category**
3	Concepts and tools to deal with the dynamics of agroecosystems in different environmental and socio-economic contexts. It also supports end users' development of skills to design sustainable management pathways of agroecosystems.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
4	The course facilitates learning by providing end users with examples often taken from the instructor's own experience.	None
5	The module convenor interacts with students through various activities such as videos and tutorials on diagramming.	None
	Learner Support & Accessibility	**Suggestions for the Category**

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

6	The course is structured in 5 lectures, comprehensive of an introductory one. Each lecture is made up of a video where the instructor presents the content of the lesson very well. The video shows power point presentations that are very well written and enjoyable; they are simple, schematic and always accompanied by images, tables and graphs. Each lecture ends with a slide with a list of references that end users could consult to strengthen their knowledge on the topic. Extra support is provided through interactive videos, tutorials and lessons from the Stockholm environmental institute. In explaining approaches such as the RRA and the PRA, the instructor provides tips from her own experience and advises end users on the pros and cons of each approach. She also advises the moderators to maintain a neutral attitude.	Although the videos are based on power point presentations, it could be a good idea to also upload the latter and ensure end users have the possibility to download them and use them as an extra support.
Interaction/Presence		**Suggestions for the Category**
7	The instructor engages with end users via different activities and through various technological sources (videos, presentations, case studies etc..). She brings in her own experience by, for example, showing images of semi-structured interviews and focus group workshops.	None
Assessment and Feedback		**Suggestions for the Category**
8	The module convenor provides a quiz section to test end users' learning; she provides them with a 5 minutes quiz to test their knowledge.	It would be good to support end users' through practical questions and by providing them with their respective correct answers.

2.3 MEV 3: Economics and Land Degradation

Course Overview/Information & Content		Suggestions for the Category
1	The module convenor starts off with a warm welcome to end users, providing them with a background on her education and research interests which are relevant to the module. The instructor is available for online meetings and to answer any questions or concerns that might arise. She also explains very well the content, the aims and the objectives of the module. Furthermore, she provides end-users with a range of qualitative and quantitative interdisciplinary tools that can be applied to their own specific cases. The module convenor also uploads a summary of teachers training materials. The video-scribing section provides end users with an enjoyable introduction to the module.	None
Learning Objectives & Learning Agreement		**Suggestions for the Category**
2	The course is designed to ensure that end users will be independent in solving case studies to which they are familiar with.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
3	The course facilitates learning by providing end users with case studies that could help them in solving problems related to their own case studies.	None
4	The module convenor interacts with students through various activities such	None

	as entertaining and enjoyable videos and exercises such as the challenges and solutions in applying the 6+1 steps.	
	Learner Support & Accessibility	**Suggestions for the Category**
5	Each different type of video aims both at explaining the topic and at providing extra support, such as entertaining videos and lectures from other universities. The module convenor often provides a list of both compulsory and non-compulsory reading materials. Furthermore, she supports end users by uploading a list of case studies and an interactive map of case studies.	Although there is a vast quantity of materials, videos show and power points, it could be a good idea to upload slides that end users could download on their own computers.
	Interaction/Presence	**Suggestions for the Category**
6	The instructor engages with end users via different activities and through various technological sources (videos, presentations, case studies etc..). The module convenor is very supportive thus strengthening a sense of community and trust with end users. The instructor also brings in her own experience.	None.
	Assessment and Feedback	**Suggestions for the Category**
7	The course platform allows end users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies.	The instructor could further support end users with a set of questions and answers in order to help them to succeed in their own assessment.

![ILHAM-EC logo] ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

2.4 MEV 4: Advanced Spectroscopy Analysis for SLM

Course Overview/Information & Content	Suggestions for the Category
1 The course begins with a welcome to end users where the module convenor introduces them to spectroscopy. The introductory video is accompanied by enjoyable images. The video-scribing section provides end users with an enjoyable introduction to the module.	Although the module convenor uploads a pdf with information about herself, it would be good to say something about this also in the introduction. Furthermore, the instructor should also make the content, aims and objectives of the module clear right from the beginning. It is also advisable to upload a comprehensive syllabus with a list of the topics and reading materials required right from the start of the course. When introducing the course, a good practice is to remind end users of its organization and structure. A good solution could be to ensure that the course is easy to navigate and provides end users with consistency between the assignments and the rubrics.
Learning Objectives & Learning Agreement	**Suggestions for the Category**
2 The course is designed to provide end users with skills to carry out advanced spectroscopy analysis.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
3 The course facilitates learning by providing end users with videos which demonstrate how to carry out specific laboratory experiments.	It is recommended to interact more with the end users and to create class activities where they would be able to participate too.

	Learner Support & Accessibility	Suggestions for the Category
4	The module convenor uploads different types of materials to help end users in mastering the content of the course. There are videos where the instructor explains the lectures as well as videos where there are practical demonstrations filmed in a laboratory. This is a very useful support for end users in applying the theoretical aspects of the module. The instructor also uploads further materials such as journal articles and links to books chapters.	It could be a good idea to provide users with further information regarding the context of the media and support materials.
	Interaction/Presence	Suggestions for the Category
5		It would be useful if the instructor could give end users his own perspective and experience related to each topic content.
	Assessment and Feedback	Suggestions for the Category
6	The course platform allows users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies.	It is advisable to upload a sample quiz or sets of questions and answers to support end users in succeeding in their assessment.

2.5 MEV 5: Land management using GIS and remote sensing applications

	Course Overview/Information & Content	Suggestions for the Category
1	The module convenor welcomes end users with an overview video which shows in a clear way the structure content, course lectures and aims. Good engagement with end users declaring herself available for further information should they need it thanks to the forum platform. The video-scribing section provides end users with an enjoyable introduction to the module.	It could be useful to provide end users with a syllabus.
2	The course highlights well skills and abilities that end users will be able to master by the end of seminars.	When introducing the course, ensure students can print out a handout of the module.
Learning Objectives & Learning Agreement		**Suggestions for the Category**
3	The course is designed to provide end users with skills to apply QGIS.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
4	The course facilitates learning by providing end users with examples and tutorials such as the one on how to create a simple practical classification.	None

Learner Support & Accessibility	Suggestions for the Category
5 The module convenor provides end users with accessible material such as manuals, journal articles, examples and pdf files that summarize the content of the lecture.	It could be a good idea to provide users with power points as well as videos that explain the lecture so that they can watch it at any time.

Interaction/Presence	Suggestions for the Category
6 The instructor engages with end users via different activities and through various technological sources (videos, practical examples etc..).	It would be useful if the instructor could give students its own perspective and experience related to each topic content.

Assessment and Feedback	Suggestions for the Category
7 The course platform allows users to have access to their assessment results and feedback as well as gaining badges and awareness on competencies. The instructor adds a quiz section so that end users can test their level of understanding (good practice).	It would be good to support end users' organization and time-management skills by adding either a further section or an ad hoc file which describes what the assessment will be like and how it will be marked. Students would then be able to successfully complete the assessment and align with the course learning objective.

2.6 MEV 6: Applied Bio-Economics

Course Overview/Information & Content	Suggestions for the Category
1 The course is made up of a set of three main topics that are explained through power point presentations. The lecturer uploads a power point slide to introduce the module convenor, his background and research interests. The course starts off with an introduction where the module convenor answers some basic questions on markets. The video-scribing section provides end users with an enjoyable introduction to the module.	Although there is a reading section, no list of reading materials has been uploaded yet. Along with a reading list, it could be useful to provide end users with a course syllabus.
2 The course is easy to navigate and well structured.	When introducing the course, remind end users of its organization and structure.

Learning Objectives & Learning Agreement	Suggestions for the Category
3 The course is designed to provide end users with skills to understand how the market operates and how to interpret market signals. It aims to stimulate end users' understanding of how to introduce incentives to reduce pollution.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

4	The course facilitates learning by providing end users with examples.	None
5	The module convenor interacts with students through various activities such as the profit maximization example.	None
	Learner Support & Accessibility	**Suggestions for the Category**
6	The module convenor provides end users with accessible material such as power points. This allows end users to be prepared for the seminars. The power points are very well structured, organized and enjoyable. Their content is always accompanied with images, graphs and tables that facilitate end users' attention and participation in the lecture.	It could be a good idea to also upload interactive videos reproducing the lecture. The instructor could also further support his students by providing them with a list of extra reading and references to look at so that they could go further in depth on the content of the lectures.
	Interaction/Presence	**Suggestions for the Category**
7		It would be useful if the instructor could give students his own perspective and experience related to each topic content. Further interaction could be advisable.
	Assessment and Feedback	**Suggestions for the Category**
8	The course platform allows users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies. There is a quiz that end users can attempt to test their level of understanding.	None

2.7 MEV 7: Land use planning in sustainable development

	Course Overview/Information & Content	Suggestions for the Category
1	The course begins with a welcome to end users where the module convenor explains module aims, its content and structure. End users can use tools to analyse case studies, and the video-scribing section provides them an enjoyable introduction to the module. The module convenor also declares himself to be available to enlighten end users for further information should they need it.	None
2	The syllabus is comprehensive and well organized since it has been divided according to the topics.	The syllabus could highlight module objectives and expectations more clearly.
3	Skills and abilities that end users will be able to master by the end of the seminars are highlighted clearly.	When introducing the course, remind end users of its organization and structure. A good solution could be to ensure that the course is easy to navigate and provides

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

		end users with consistency between the assignments and the rubrics.
Learning Objectives & Learning Agreement		**Suggestions for the Category**
4	The course is designed to provide end users with critical thinking skills to approach complex land use change dynamics.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
5	The course facilitates learning by providing end users with case studies.	None
6	The module convenor interacts with students through various activities such as videos and the Ranchers' Dilemma Game.	None
Learner Support & Accessibility		**Suggestions for the Category**
7	The module convenor provides end users with accessible material such as power points for the lectures ahead of time. This allows the end users to be prepared for the seminars. The power point slides are very well structured, organized and enjoyable. Their content is always accompanied by images that facilitate end users' attention and participation in the online lecture. Furthermore, the instructor always provides references within the power point slides so that end users can look up the original sources. Furthermore, the online platform contains videos reproducing the lecture and thus end users can watch the lecture any time. This is an extra support for end users. The lecturer also provides extra-reading materials for those interested in learning more about the topic.	It could be a good idea to provide end users with further information regarding the context of the media and support materials.
Interaction/Presence		**Suggestions for the Category**
8	The instructor engages with end users via different activities and through various technological sources (videos, presentations, case studies etc.). The module convenor is very supportive, strengthening a sense of community and trust with end users.	It would be useful if the instructor could give students their own perspective and experience related to each topic content.
Assessment and Feedback		**Suggestions for the Category**
9	The course platform allows users to have access to their assessment results and	It would be good to support end users' organization and time-management skills

	feedback as well as gaining badges and awareness on competencies.	by adding either a further section or an ad hoc file which describes what the assessment will be like and how it will be marked. Students would then be able to successfully complete the assessment and align with the course learning objective.

2.8 MEV 8: Sustainable Feed-Food Links

	Course Overview/Information & Content	Suggestions for the Category
1	The module convenor welcomes end users with a brief outline and a video making clear both the research area and topics covered by his lectures. He provides end users with titles for each lesson. The module convenor gives a detailed presentation of himself and his research interests, methodology he uses and projects he is currently working on. The video-scribing section provides end users with an enjoyable introduction to the module.	Usually the module introduction and outline should include information on its aims as well as some further context for its content and structure.
2	The syllabus is well organized and clearly divided into topics.	The syllabus could highlight the module objectives and expectations better. As good practice, the introduction could provide a list of reading materials and case studies to end users.

Co-funded by the
Erasmus+ Programme
of the European Union

3	The course content is presented clearly and easy to navigate.	None
Learning Objectives & Learning Agreement		**Suggestions for the Category**
4	The course is designed to provide end users with skills such as casual diagrams to learn and teach in an interactive way.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities.
5	The course facilitates learning by providing end users with interactive videos and guidelines.	Although examples are provided, a good solution could be to include further case studies.
6	The module convenor interacts with students through various activities such as videos lessons 3 and 4, where he provides students with knowledge to teach through casual diagrams and on feedback loops.	None
Learner Support & Accessibility		**Suggestions for the Category**
7	Pdf files and videos are provided to end users to facilitate their learning. The pdf files are usually very well structured, organized and enjoyable. They are easy to follow as they are made up of images. The videos usually reproduce the lectures so that end users can watch them at any time. This is an extra support for end users. The lecturer also provides extra-reading materials for those interested in learning more about the topic.	The module convenor could expand on the slides in the videos to provide end users with extra context and information.
Interaction/Presence		**Suggestions for the Category**
8	The instructor engages with end users via different activities and through various technological sources (videos, presentations, case studies etc..). Furthermore, he provides them with suggestions to carry out classroom activities. The instructor often provides end users with his own research perspective.	None
Assessment and Feedback		**Suggestions for the Category**
9	The course platform allows users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies.	The module convenor could prepare students on the content of the assessment and how they will be graded. By doing so end users would be provided

Co-funded by the
Erasmus+ Programme
of the European Union

Furthermore, the course ends with a final quiz that end users can take on the online platform to assess their learning.	with extra skills on assessments that they could then use with their students in the future.

2.9 MEV 9: Project Proposal Writing, Financing and Sources of Funding

Course Overview/Information & Content		Suggestions for the Category
1	The course begins with a warm and well-structured video presentation. The module convenor makes clear who the module is designed for as well as how the course is structured. The instructor states immediately what he is going to cover in the introduction and provides rationale for the organization of the module. The video-scribing section provides end users with an enjoyable introduction to the module where the reasons why the course relies on the logical framework	None

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

	approach is further explained; the European Commission relies upon this methodology.	
2	The module convenor divides the course in two main parts and its online material is well structured, coherent and easy to navigate. This is a good way of supporting end users in orienting them on the online platform.	It is advisable to upload a syllabus online that reflects the structure of the course as well stated in the introductory videos.
Learning Objectives & Learning Agreement		**Suggestions for the Category**
3	The course aims at providing end users with the skills and the tools to draft a successful research proposal. Furthermore, the instructor often refers to practical examples to further support end users.	In an online course, it is important to interactively engage with students by including the interactor and other students in activities. A good solution could therefore be to provide case studies and further class activities.
Learner Support & Accessibility		**Suggestions for the Category**
4	The module convenor provides end users with accessible material relevant for the purposes of the module e.g. the European Commission Humanitarian Aid Office Manual and the Aid Delivery Methods Project Cycle Management Guidelines. The instructor also uploads several videos of short and enjoyable length on the course website. This is a very good initiative as it allows end users to take breaks and learn important information in a timely and organized manner. The videos are enjoyable and made up of graphs and tables.	The lecturer could also upload the power points explained in the videos so that end users could easily print them and add their own notes and thoughts to them. A good idea could also be to add extra images in the slides to make the lectures further enjoyable. Although two materials have been uploaded, it is advisable to indicate a list of extra materials, such as journal articles and books.
Interaction/Presence		**Suggestions for the Category**
5	The instructor supports students with his own perspective, graphs and tables as well as very specific examples.	Include further interaction with the students.
Assessment and Feedback		**Suggestions for the Category**
6	The course platform allows end users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies. The online quiz is good way of helping end users to master the module aims and objectives.	It would be good to support end users' organization and time-management skills by adding either a further section or an ad hoc file which describes what the assessment will be like and how it will be marked. Students would then be able to successfully complete the assessment

		and align with the course learning objectives.

2.10 MEV 10: Water Resources Management

	Course Overview/Information & Content	Suggestions for the Category
1	The course begins with an introduction, where the instructor brings in his research experience as well as that of the other teaching assistants. The introductory power points are very detailed, and they explain the module aims and objectives.	A good way to make the introduction enjoyable is to add some images in the slides. It is advisable to provide a syllabus with the list of topics and readings right at the beginning of the course.

	The video-scribing section provides end users with an enjoyable introduction to the module.	
2	The course is easy to navigate and well-structured according to topics.	None
Learning Objectives & Learning Agreement		**Suggestions for the Category**
3	The course supports learners with interactive and enjoyable videos. Furthermore, the instructor occasionally provides further videos to help end users should they need to review the lecture.	None.
Learner Support & Accessibility		**Suggestions for the Category**
4	The instructor provides end users with plenty of materials to master the subject he teaches. Along with power point slides and interactive videos, he uploads journal articles and chapters of books. This allows end users to be prepared for the seminars. The slides are well structured, enjoyable and easy to follow with images, graphs and tables.	Not applicable.
Interaction/Presence		**Suggestions for the Category**
5	The instructor engages with end users via different activities and through various technological sources (videos, presentations, case studies etc..). The instructor also brings in his own experience.	Not applicable.
Assessment and Feedback		**Suggestions for the Category**
6	The course platform allows users to have access to their assessment results and feedbacks as well as gaining badges and awareness on competencies. The online course, along with the module quiz, also provides end users with practical questions and with their correct answers. This is a good way to support students' success in their assessment as well as their learning process.	Not applicable.

ILHAM-EC
Interuniversity Learning in Higher Education
on Advanced land Management

Co-funded by the
Erasmus+ Programme
of the European Union

3. Conclusions

This is a valuable course which is in line with the Bologna process requirements and that is useful to prospective post-graduate students in the field of agronomy, soil and environmental science. The material that has been evaluated

is of very good quality and helps to upgrade the skills of Egyptian teachers with the most innovative technological and methodological background on SL. Furthermore, the online platform provides lecturers with the necessary knowledge required to teach the same topic in the new pilot Master's program from the same point of departure.

Suggestions provided for each course and for the different areas of evaluations can help teachers to further improve the quality of the modules evaluated using their creativity and experience, taking into account the diversity of students attending the MSc in SLM. The online platform developed for this MSc will also provide new opportunities for the Egyptian educational sector, universities involved and other stakeholders to establish an international educational network capable of creating new cooperative opportunities and relationships aimed to speed up the quality of postgraduate teaching using online resources.