Doc. 300.1.2

Date: 21/08/23

Higher Education Institution's Response

- **Higher Education Institution:** PHILIPS UNIVERSITY
- **Town:** NICOSIA
- **Programme of study**
  Name (Duration, ECTS, Cycle)

  In Greek:

  ΠΕΡΙΒΑΛΛΟΝΤΙΚΗ ΔΙΑΧΕΙΡΙΣΗ ((18 μήνες / 90 ECTS, Μεταπτυχιακό MSc, Εξ Αποστάσεως)

  In English:

  ENVIROMENTAL MANAGEMENT (18 months / 90 ECTS, Master of Science (MSc), Distance Learning)
- **Language(s) of instruction:** ENGLISH/GREEK
- **Programme's status:** New
- **Concentrations (if any):**

  In Greek: I. Αειφόρος Διαχείριση Αποβλήτων, II. Περιβαλλοντική Διαχείριση, Πολιτική, Οικονομία και Πράσινη Λογιστική, III. Περιβάλλον και Δημόσια Υγεία

  In English: I. Sustainable Waste Management, II. Environmental Management, Policy, Economics and Green Accounting, III. Environment and Public Health

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The present document has been prepared within the framework of the authority and competencies of the Cyprus Agency of Quality Assurance and Accreditation in Higher Education, according to the provisions of the "Quality Assurance and Accreditation of Higher Education and the Establishment and Operation of an Agency on Related Matters Laws" of 2015 to 2021 [L.136(I)/2015 – L.132(I)/2021].

A. Guidelines on content and structure of the report

- *The Higher Education Institution (HEI) based on the External Evaluation Committee's (EEC's) evaluation report (Doc.300.1.1 or 300.1.1/1 or 300.1.1/2 or 300.1.1/3 or 300.1.1/4) must justify whether actions have been taken in improving the quality of the programme of study in each assessment area. The answers' documentation should be brief and accurate and supported by the relevant documentation. Referral to annexes should be made only when necessary.*

- *In particular, under each assessment area and by using the 2nd column of each table, the HEI must respond on the following:*

    - *the areas of improvement and recommendations of the EEC*
    - *the conclusions and final remarks noted by the EEC*

- *The institution should respond to the EEC comments, in the designated area next each comment. The comments of the EEC should be copied from the EEC report* ***without any interference*** *in the content.*

- *In case of annexes, those should be attached and sent on separate document(s). Each document should be in *.pdf format and named as annex1, annex2, etc.*

1. Study programme and study programme's design and development
(ESG 1.1, 1.2, 1.7, 1.8, 1.9)

Areas of improvement and recommendations **by EEC**	**Actions Taken by the Institution**	For Official Use ONLY
As a proposed programme, no information has been collected to-date on KPIs, etc. It is noted that there will need to be a fairly considerable scaling up of services for collecting such data if the programme is launched and achieves the stated goal of attracting 60 students per year. The provision of administrative support for 'information management' needs to be carefully planned for if/when the programme is approved.	Philips University appreciates the EEC's observation about the need to collect data and establish KPIs for the program. We also acknowledge the importance of carefully planning administrative support for effective information management. To address the above concerns, we have established a comprehensive plan for data collection ensuring that relevant data points are identified and appropriate KPIs are established. The plan involves key metrics to assess program performance such as student enrollment, retention rates, graduation rates, academic achievements and employment outcomes. By collecting and analyzing this data, we can track the program's progress and make informed decisions to enhance its effectiveness. **Please see Appendix 1 - a plan for data collection and administrative support with specific Key Performance Indicators (KPIs).** Furthermore, we have decided to scale up our administrative services to support the program's information management system so as to ensure that sufficient support is available. After the approval of the Senate, we have already hired additional administrative personnel (namely **Flora Poourkou**). Upon the operation of the program, if it is requested by the School of Education and Science, and approved by the Senate, of more Administrative Staff will be hired.	Choose level of compliance:
Progression across the programme and within individual courses requires further consideration. It is recommended that a common introductory course is developed for semester 1, possibly using ENV 120 (Introduction to sustainability) as a basis. Further consideration should also be given to progression within individual courses as the content appears very broad and ambitious in some instances.	To address the EEC's concerns and ensure a well-structured and progressive program, **we have evaluated the feasibility of developing a common introductory course for semester 1 by transferring the course ENV-120 (Introduction to Sustainability) to the 1st semester becoming a module of the general core studies**. Moreover, the module **ENV-112 (Environmental and Waste to**	Choose level of compliance:

	Energy) is transferred from the 1st semester to the 2nd semester. This modification improves indeed the overall offered program and optimizes its pedagogical layout (please see **Appendix 2- Revised Structure of the program).** In addition, we have implemented the necessary modifications and additions to align it with the objectives and learning outcomes of the program. Furthermore, we have ensured that the course content for each module aligns with the intended learning outcomes, throughout the program. This alignment is based on a careful analysis of the program's goals and the specific learning outcomes established for each course. Finally, a process for ongoing program evaluation has been established to monitor the effectiveness of the course progression and content. The evaluation include feedback from students, faculty, and external stakeholders to identify areas of improvement and made necessary adjustments to ensure a cohesive and engaging learning experience (please see **Appendix 3 - the process for ongoing program evaluation).**	
Choice of recommended readings should be given further consideration. The extensive use of journal articles as core readings might not be the most effective strategy from a pedagogic viewpoint, particularly given that students may come from academic or professional backgrounds where they have limited experience with key concepts or subjects.	We appreciate the EEC's feedback on the choice of recommended readings, particularly the extensive use of journal articles as core readings. To address this concern and ensure an effective pedagogical approach we carefully reviewed the recommended readings and included **other relevant resources alongside journal articles such as textbooks, book chapters, industry reports and case studies.** Furthermore, recognizing that students may have limited experience with certain concepts or subjects, we ensured that the chosen readings provide clear explanations and contextualization of key ideas. Moreover, in addition to the core readings, supplementary material and resources have been incorporated to support students'	Choose level of compliance:

	comprehension and engagement with the subject matter. Finally, to further enhance the pedagogical approach, we encourage guided reading and discussion activities into the curriculum. These activities motivate students to engage with the readings and participate in collaborative discussions. Please see **Appendix 4 – Course Outlines and suggested Reading Lists.** As is shown in **Appendix 4**, the following Recommended Book: "Zarook Shareefdeen, Hazardous Waste Management, Advances in Chemical and Industrial Waste Treatment and technologies, ISBN 978-3-030-95261-7, ISBN 978-3-030-95262-4 (eBook) https://doi.org/10.1007/978-3-030-95262-4, Springer 2022.", has been added to supplement recommended papers, to the study weeks 6, 7 on Hazardous waste and Hazardous waste treatment and disposal, respectively. Also, the following Recommended Book: "K.G. Ramawat, Jean-Michel Mérillon, Jaya Arora, Agricultural Waste: Environmental Impact, Useful Metabolites and Energy Production, Springer 2023 ISBN: 978-981-19-8773-1.", has been added to supplement suggested papers for study weeks 8, 9 on Agricultural waste and Agri-waste disposal, respectively. Conclusively, **books have been added to support journal articles readings** (which however are considered useful towards the provision of up to dated state of the art knowledge).	
Give further thought to specifying what types of backgrounds applicants are expected to come from. This will aid prospective students in understanding whether the programme is appropriate for them, plus help the institution develop a position on what kind of applicants it is seeking to recruit.	We appreciate EEC's suggestion. We have already conducted a comprehensive analysis of the program's objectives, curriculum, and industry requirements to identify the preferred backgrounds of applicants based on academic disciplines, professional experiences, and specific areas of expertise that align with the program's focus on environmental management. This information is communicated to prospective students, enabling them to make informed decisions about their eligibility for the program. The specified applicants' backgrounds are taken into account during the admissions process to ensure a	Choose level of compliance:

	holistic evaluation of the applicants' background and help the students to make informed decisions about their suitability for the program. **Please see Appendix 5 - the criteria and aspects considered during the admission process of the program.** The Program is addressed to graduates of the Departments of: • Natural Sciences • Agricultural Sciences • Environmental Sciences • Polytechnic Schools • Medicine, Dentistry, Pharmacy, Veterinary medicine, Nursing, Health Economics, Departments whose subject is related to public health actions, primary health care and health services administration and other Health Sciences departments • Economics, Management and Social Sciences • Law, and other departments of related subjects of Universities from Cyprus, Greece and recognized institutions abroad.) **Overall:** • **Well specified and detailed categories of applicants have been introduced, as indicated.**	
The dissertation should be positioned as part of the programme of specialisation in one of the three themes, if this is not already the case.	Philips University appreciates the EEC's suggestion to position the dissertation as part of the program's specialization in one of the three theme categories. We have reviewed the existing dissertation's requirements and made the necessary adjustments to clearly position the dissertation as an integral part of the specialization in one of the three themes. Furthermore, according to our procedure, the students receive guidance and support from the faculty members through the dissertation process. Faculty provide expertise and mentorship specific to the chosen specialization theme, helping students shape their research questions, methodology,	Choose level of compliance:

	and analysis to address key issues within their specialized field. **Please see Appendix 6 - the dissertation process** and the key components of positioning the dissertation as part of the program of specialization within one of the three themes of the program.	
Links with relevant professional associations and environmental organisations should be developed to provide input to (a) quality assurance procedures and (b) continuous development of the programme.	We appreciate EEC's suggestion to develop links with professional associations and environmental organisations to provide input to quality assurance procedures and continuous development of the program. To address this, we have actively sought collaborations with relevant professional associations, both at the local and international levels, dedicated to environmental sustainability, climate change, and other related disciplines. This enables Philips University to gain valuable insights into industry trends, best practices and emerging challenges. Their input is instrumental in ensuring that the program remains aligned with current industry standards and practices. In addition, this collaboration enhances the program's relevance and provide students with practical exposure to real-world environmental challenges. Finally, professionals are invited from professional associations and environmental organisations to deliver guest lectures and conduct workshops for students. These sessions provide students with valuable insights into current industry practices, real-life case studies, and emerging research. These collaborations, enhance the program's quality, relevance and practical applicability, preparing students for successful careers in environmental management. The MSc in Environmental Management is accredited by the following British Professional Environmental Organizations, dedicated to environmental sustainability, water and other related disciplines:	

- **The Chartered Institution of Water and Environmental Management (CIWEM),**

CIWEM.pdf

- **The Institute of Environmental Management and Assessment (IEMA), UK.**

IEMA.pdf

Holders of our MSc degree in Environmental Management are eligible to join CIWEM and IEMA to Graduate membership.

Also, as has been shown at the SWOT analysis, Philips University maintains close links with the community and responds to the needs of society in the right manner.

Furthermore, there are strong links with stakeholders, the government, NGOs, industrial partners, etc.).
We are in the process to establish collaboration with the following professional associations and organizations in Cyprus, dedicated to environmental sustainability:

- Cyprus Energy Agency (CEA) which is a non-profit organization focused on promoting sustainable energy practices and policies in Cyprus.
- Cyprus Environmental Organizations Network (CYEN) which is a network of environmental NGOs and organizations working together for environmental protection and sustainability in Cyprus.
- Cyprus Association of Environmental Impact Assessment (CAEIA), an association dedicated to promoting best practices in environmental impact assessment and sustainable development.
- Terra Cypria – The Cyprus Conversation Foundation focused on nature conservation and

	environmental education initiatives in Cyprus. • Cyprus Institute of Environmentalists (CIE), an institution focused on environmental research, education and advocacy in Cyprus. Conclusively, the design of the specific program was based on the needs of the society of Cyprus, Greece, Europe, the Mediterranean and the world. Overall, links with relevant associations and environmental organizations have been performed, but more collaborations will be sought during **the first 3 years of the program.**	

2. Student – centred learning, teaching and assessment
(ESG 1.3)

Areas of improvement and recommendations **by EEC**	**Actions Taken by the Institution**	For Official Use ONLY
There seems to be a disjunction between (1) the descriptions and intentions in the study guides, where inclusion of technologies such as simulations and serious games (conflated as „simulation games"), case based scenarios, interactive activities, group work online and (2) embedding such activities in the online environment. The EEC did not have the opportunity to see examples of such technologies used in this or other e-learning programmes of the institution. We would recommend an alignment between what is mentioned in the study guides and what is available on the online environment. This resulted in partial compliance for 2.4	Philips University appreciates the EEC's feedback on the disjunction between the descriptions and intentions in the study guides and the actual embedding of technologies such as simulations and serious games in the online environment. To address this concern a thorough review of the study guides was conducted to ensure that they accurately reflect the intended use of technologies. Furthermore, the Distance Learning Unit has built upon the identified technologies and has embedded effectively activities such as simulations, serious games, case-based scenarios and interactive activities within the online environment. By implementing these measures, we have aligned the descriptions in the study guides with the available Learning Management Systems. This alignment ensures a consistent and cohesive learning experience, providing students with the expected opportunities for engagement, interaction, and application of knowledge. Furthermore, **we have developed a methodology (Appendix 7)** to streamline the process, improve compliance with the intended use of technologies in online courses, ensure consistency and facilitate effective communication among different teams or individuals, responsible for content creation, course development and technology integration. Considering the above, technology such as simulations and serious games, case-based scenarios, interactive activities, and group work online for the specific program have been developed. Finally, we wish to bring to your attention that an **MoU has been signed with the Hellenic Open University aiming to enhance collaboration between the two institutions** regarding the course guidelines of the program and technical support.	Choose level of compliance:

Internship and placement opportunities for this MSc should be given consideration and linked to career advice the university provides to e-learning students. Such initiatives should take advantage of the university networks and partnerships.	The Internship is organized and implemented precisely and punctually according to the specifications and requirements of the relevant policy of CYQAA, and It is part of the program of study. It operates, it is assessed on its one capacity, and it is required for completion of the program of study. The University and the pertinent Department provide every support to the students involved to fully participate in, complete all requirements of the practicum and acquire all learning outcomes and practical skills in order to successfully complete and pass it on a Pass/Fail basis. In the remote case that a student fails the Practicum, most likely due to absences and not full participation, the student has to repeat the entire Practicum in order to graduate and receive the respective degree. Upon completion of the internship, the Supervisor, the Instructor and the Coordinator of each institution evaluate each intern student in relation to his / her entire academic and practical performance, based on the requirements of the specific internship. The internship involves an intensely supervised experience in the student's designated programme area at an approved site. While gaining direct service experience, students regularly meet with an approved supervisor. Student performance is evaluated throughout the Internship. The student's professional and career development is an essential area of focus. To ensure that internship and placement opportunities are effectively integrated into the program, the University developed a strategy that incorporates career advice and leverages its networks and partnerships (please see **Appendix 8**).	Choose level of compliance:
The programme team should consider strategies for building a student community to enhance the student experience. This is fundamental as the institution still has a small number of e-learning programmes. It was not clear to the EEC how the programme team	To address this recommendation to consider strategies for building a student community to enhance the student experience, we have developed an online orientation program specifically designed for	Choose level of compliance:

employed approaches and strategies in doing this. This led to partial compliance for 2.1.	new students entering the M.Sc. program in Environmental Management. This specific action provides them with essential information about the program, its structure, available resources, and opportunities for engagement. Furthermore, it serves as an opportunity for students to connect with faculty members and support staff, establishing initial connections and setting the foundation for a sense of community. Another action taken are virtual collaborations spaces where students can interact and collaborate with each other. This is in the form of online discussion forums, chat platforms and social media groups exclusive to the program. These spaces serve as platforms for students to ask questions, share insights and resources, engage in academic discussions, and establish connections with their peers. Moreover, according to our distance learning strategy, we encourage regular and meaningful engagement between faculty members and students. This includes scheduled virtual office hours, online Q&A sessions, guest lectures delivered by faculty members. Finally, we actively involve alumni of the program by inviting them to participate in panel discussions and career mentoring activities. Alumni offer valuable insights and experiences to future students providing inspiration and guidance as they progress in their studies and embark on their professional careers. **In Appendix 9 you may find our Strategy and initiatives to build a student community.**	
There is a trend in distance learning to include the thesis in the modular structure of a programme rather than	Philips University applies the instructions and directions given by CYQAA concerning Master Thesis.	Choose level of compliance:

superimposing it a separate entity outside the modular structure. This helps with student tasks and progression towards the thesis production. We recommend that the university considers this approach.	These instructions and directions of CYQAA are applied in this educational program.	
It was not clear at the time of the visit whether the programme would run in English or in Greek (depending on recruitment). We recommend that the team develops materials and two versions of the programme VLE (in English and in Greek) ahead of the commencement of the programme to accommodate both possibilities in recruitment for this MSc.	The program has been designed and developed in such a way in order to be offered in both Greek and English. To this end, the University has developed and prepared the necessary instructional material in both Greek and English languages.	
The programme team should consider trends in pedagogy towards authentic assessment opportunities while they design and produce assessment activities and exam papers, including an open book approach if applicable. This led to partial compliance for 2.3.	The University has already considered trends in pedagogy towards authentic assessment opportunities. In order to incorporate more up-to-date innovations in pedagogical approaches and teaching methods into the program, the following actions were taken from the Pedagogical Planning Committee of the Distance Education Unit: a) **We introduced the flipped classroom model** where students engage with instructional materials and content outside of class and use class time for active learning discussions and collaborative activities. b) It was agreed with the faculty members of the program to provide online resources for **students to access before the class, allowing them to familiarize themselves with the content** at their own pace. In addition, to use class for interactive discussions, problem-solving activities, case-studies, or group projects that promote deeper understanding and application of concepts. c) We **incorporated problem-based learning (PBL) approaches**, where students tackle real-world problems or case studies relevant to the field of education. Also, to present students with authentic scenarios that require critical thinking, problem-solving, and collaborative decision-making. Finally, to facilitate group discussions and provide guidance as students work through the problem,	

encouraging them to apply their knowledge and skills to develop innovative solutions.

d) The Faculty, the Pedagogical Planning Committee & the Technical Support Committee emphasize the integration of technology tools and resources to enhance teaching and learning experiences. We explored the use of educational apps, online platforms and multimedia resources to engage students and facilitate concept mastery. Furthermore, the Technical Support Committee provides training and support for faculty and students to effectively use technology tools in their teaching and learning processes. Finally, we encourage faculty to engage in research on innovative teaching methods.

Furthermore, the University employs **a mapping assessment and student assessment Rubrics** for the M.Sc. to maintain student high levels of participation, motivation and engagement.

Grading Rubrics, (**Appendix 10 - Assessment of Learning Outcomes**), are effective tools which allow for objective and consistent assessment of a range of performances, assignments, and activities.

Rubrics can help clarify students' expectations and show students how to meet them, making students accountable for performance in an easy-to-follow format. The feedback that students receive through a grading rubric can help them improve their performance on received or subsequent work. Rubrics allow for consistency in grading for those who teach the same course.

In addition, by aligning the content, activities and assessment of each unit with the desired ILO's, it provides a visual representation of how the content and assessment of each unit contribute to the overall program outcomes. This **mapping report serves** as a valuable tool for both the teaching team and the students, as it enhances transparency and understanding of the curriculum

	structure (**Appendix 11 – Curriculum Mapping Guide**). In addition, **the program follows a blended learning model** that combines traditional face-to-face instruction, online teleconferences with online activities and resources. This approach allows students to access course materials, engage in discussions, and complete assignments through online platforms. Furthermore, we use **interactive multimedia** such as **videos**, interactive presentations to explain complex concepts and engage students in hands-on activities. These resources can be accessed through the Moodle Platform and provide interactive learning experience. Moreover, students can work together on group assignments, research projects, or problem-solving tasks using online communication and collaboration tools. Finally, we emphasize that all students complete **an assessment questionnaire** concerning Teachers' courses and University's facilities at the end of each semester.	

3. Teaching staff
(ESG 1.5)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
PU and the MSc in Environmental Management would likely benefit from: ● revisiting the operational rationale of the programme and re-allocating tasks, time and activities between junior and senior members of staff.	We appreciate EEC's suggestion. To address it we conducted a comprehensive review of the operational rationale of the program by **assessing the current distribution of tasks, responsibilities, and activities among junior and senior staff members**. Based on the review findings, we have realigned and reallocated tasks, time, and activities between junior and senior staff. More specifically, the alignment includes **redefining roles, adjusting workload distributions, and optimizing the expertise and capabilities** of both junior and senior staff. The goal was to ensure a more efficient and effective utilization of resources while maximizing the expertise and potential contributions of each team member. Finally, we **foster a culture of collaboration and mentoring within the program.** Senior staff members provide guidance, mentorship, and support to junior staff members, allowing for knowledge transfer and professional development. This collaboration facilitates a balanced distribution of tasks and responsibilities, as well as creating opportunities for junior staff members to contribute meaningfully to the program's operations.	Choose level of compliance:
● transforming the general academic concepts, e.g., quality, research, synergy, etc., into specific and measurable goals and targets. This, hopefully, will guarantee a sustained path to continuous improvement in the future.	Distance learning instructors participate in the University's 'Staff Development Plan', which includes financial and other support to participate in local and international conferences and seminars, to have membership in international professional associations, and offering in-house training seminars. As the case is with all instructors at the University, distance learning instructors undergo annual evaluation, a fundamental component of which is the development by each faculty member of an annual plan with measurable goals and targets, a self-assessment	Choose level of compliance:

	of which is evaluated at the annual evaluation. The annual evaluation includes (a) the evaluation/feedback by the students at the end of each semester, (b) an evaluation by the pertinent Dean of School based on the instructor's self-assessment report, as well as periodic observations and meetings between the Program Coordinator and the on-site instructors.	
● engaging senior staff more actively in the teaching process	Senior faculty members are certainly actively engaged in the teaching process by carrying the required teaching load prescribed for full-time faculty members. **Synergies of teaching and research:** The faculty members teaching in the Program have an excellent record of both already published and on-going research. The outcomes of their research are included in the teaching material and bibliography of the pertinent courses, and they are presented and discussed in group discussions. In addition, students are introduced to research methodology, and they are assigned with research papers in the appropriate courses. The Master Thesis also involves substantial research.	Choose level of compliance:
● organising training for trainers, especially in the virtual mode of teaching selected for this programme.	Following this recommendation of the EEC, the University implements a training and development program for the instructors in the Distance Learning Programs of Study, which consists of a three-day seminar (**Appendix 12**), and which includes the following: • Introduction to distance learning • Theories supporting online education, such as self-regulated learning, conversational framework, etc. • Quality in distance learning • Characteristics of adult students • Organization of Group Counseling meetings / Tele-Meetings, communication, OSS elements, alternative scenarios in OSS and others • Assessment of written assignments • Plagiarism • Rights / Obligations of teachers	Choose level of compliance:

	• Technological and Technical skills to support distance education. • Online interactive elements, including Moodle add-ons such as HSP In addition, the faculty training program, includes the following: • Publish a comprehensive Faculty Handbook. • Orientation sessions for newly hired faculty members. • Implementation of a Faculty Mentors Program, by which older faculty members are assigned as Mentors to new faculty members for advising and consultations on a continuous basis. • Periodic offerings of training programs to all members of the teaching staff on pedagogical, research and other faculty-related matters.	
● establish a medium-term policy for supporting juniors to mature scientifically, improve their international presence and visibility, and cultivate the capacity for becoming the future leaders of PU, according to the vision of its Founder.	Philips University implements a Faculty Mentoring Program, which ensures that the junior faculty members get in a position to succeed professionally. Issues handled by this program through continuous interaction between a senior and a junior faculty member are orientation to the University, excelling at teaching and research, understanding the criteria for annual evaluations/reviews, positioning the faculty member for promotion, developing professional networks, and achieving career goals. In addition, distance learning instructors participate in the University's 'Staff Development Plan', which includes financial and other support to participate in local and international conferences and seminars, to have membership in international professional associations, and offering in-house training seminars.	Choose level of compliance:

4. Student admission, progression, recognition and certification *(ESG 1.4)*

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
The information provided to the EEC did not fully clarify what academic backgrounds prospective students should have in order to be accepted for admission. This information is crucial for students when they apply (see also section 1).	We appreciate EEC's suggestion. We have already conducted a comprehensive analysis of the program's objectives, curriculum, and industry requirements to identify the preferred backgrounds of applicants based on academic disciplines, professional experiences, and specific areas of expertise that align with the program's focus on environmental management. This information is communicated to prospective students, enabling them to make informed decisions about their eligibility for the program. The specified applicants' backgrounds are taken into account during the admissions process to ensure a holistic evaluation of the applicants' background and help the students to make informed decisions about their suitability for the program. **Please see Appendix 5 - the criteria and aspects considered during the admission process of the program.** The Program is addressed to graduates of the Departments of: • Natural Sciences • Agricultural Sciences • Environmental Sciences • Polytechnic Schools • Medicine, Dentistry, Pharmacy, Veterinary medicine, Nursing, Health Economics, Departments whose subject is related to public health actions, primary health care and health services administration and other Health Sciences departments • Economics, Management and Social Sciences • Law, and other departments of related subjects of Universities from Cyprus, Greece and recognized institutions abroad.) **Overall:** • **Well specified and detailed categories of applicants**	Choose level of compliance:

	have been introduced, as indicated.	
Since the programme is offered for distance learning and the university has a strong technical infrastructure, the exams should also be offered online as well. The students should be able to choose if they prefer an online or onsite examination, depending on their location and/or ability to travel.	Under normal conditions, onsite final exams are required by CYQAA. However, the University is already equipped with an appropriate platform and technology with **lock-down proctoring for online examinations** in case this would be needed.	Choose level of compliance:

5. Learning resources and student support
(ESG 1.6)

Areas of improvement and recommendations **by EEC**	**Actions Taken by the Institution**	For Official Use ONLY
In general, there are no major issues for what concerns physical resources, human support resources and student support services. We would recommend: ● to assess before the programme starts the actual level of digital literacy and technical knowledge that the students have and organise, if needed, a DL course covering any gap in that respect.	• In order to address the first recommendation, we conduct an assessment, prior to the start of the program, to gauge the digital literacy and technical knowledge of incoming students. This assessment helps identify any gaps or areas where additional support may be needed. The assessment includes surveys, self-assessment questionnaires, or practical exercises to evaluate students' proficiency in relevant areas such as computer skills and basic technical competencies. Based on the assessment results and if it is needed, we offer to our students a Digital Literacy (DL) course to address any identified gaps in students' digital literacy and technical knowledge. The DL course provides essential training and guidance on using digital tools, software applications, online research, data analysis, and other relevant technical skills needed for successful participation in the program. Over and above that, the Technical Support Committee of the Distance Education Unit provides individualized support to students who require further assistance in developing their digital literacy and technical skills. This support includes one-on-one mentoring, tutoring session, or access to online resources and tutorials. A comprehensive support system was established by the Distance Education Unit, as already described, to address students' specific needs and provide guidance throughout their academic journey.	Choose level of compliance:

● to assess previous experience and provide, if needed, training on DL to the newly recruited teaching faculty.	• In order to address this recommendation and ensure that the teaching faculty is well-equipped to deliver effective instruction, we included an assessment of previous experience as part of the onboarding process for newly recruited teaching faculty. The specific assessment evaluates faculty's previous experience and familiarity with digital learning platforms, online teaching methodologies, and instructional technologies. Based on the assessment results we provide training on digital learning to the teaching faculty who may benefit from it. The training was set to cover various aspects of online instruction, including the effective use of learning management systems, engaging students in virtual classrooms, facilitating online discussions, designing and delivering multimedia content, and leveraging interactive tools for assessment and feedback. The training is tailored to meet the specific needs and objectives of the program. Furthermore, we offer ongoing professional development opportunities to the teaching faculty to enhance their skills and knowledge in digital learning. These opportunities include workshops, webinars and online courses. By fostering a culture of continuous learning, we ensure that faculty members stay updated with emerging trends and best practices in digital learning, enabling them to deliver high-quality instruction in the online environment.	
● to continuously monitor the knowledge and use of DL tools by the entire teaching faculty (including necessary updates).	• To address this recommendation, we have ensured that the teaching faculty has access to ongoing technical support for DL tools. This involves a dedicated technology support team (Technical Support Team) that faculty members can reach out to	

	for assistance with troubleshooting, software updates, or guidance on using specific DL tools. In addition, we have in place, a mechanism for continuous evaluation and feedback. We gather feedback from students and faculty on effectiveness of digital learning strategy and on the use of DL tools and their effectiveness in supporting teaching and learning. This feedback results on ongoing improvements and refinements to instructional approaches, ensuring that faculty members are continuously supported in their professional development journey. Moreover, regular evaluations provide opportunities for faculty members to reflect on their teaching practices and identify areas of growth and enhancement. This enables us to support faculty members in staying current with DL advancements and empower them to deliver high-quality instruction using the latest tools and practices.	

6. Additional for doctoral programmes

(ALL ESG)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
N/A	Click or tap here to enter text.	Choose level of compliance:
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7. Eligibility (Joint programme)

(ALL ESG)

Areas of improvement and recommendations **by EEC**	Actions Taken by the Institution	For Official Use ONLY
N/A	Click or tap here to enter text.	Choose level of compliance:
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B. Conclusions and final remarks

Conclusions and final remarks **by EEC**	**Actions Taken by the Institution**	For Official Use ONLY
In our view, the programme under consideration is currently Partially Compliant. We recommend that the following issues are addressed before approval. **Content** ● Choice of recommended readings should be given further consideration. The extensive use of journal articles as core readings might not be the most effective strategy from a pedagogic viewpoint, particularly given that students may come from academic or professional backgrounds where they have limited experience with key concepts or subjects.	To address this concern and ensure an effective pedagogical approach we carefully reviewed the recommended readings and included other relevant resources alongside journal articles such as textbooks, book chapters, industry reports and case studies. Furthermore, recognizing that students may have limited experience with certain concepts or subjects, we ensured that the chosen readings provide clear explanations and contextualization of key ideas. Moreover, in addition to the core readings, supplementary material and resources have been incorporated to support students' comprehension and engagement with the subject matter. Finally, to further enhance the pedagogical approach, we encourage guided reading and discussion activities into the curriculum. These activities motivate students to engage with the readings and participate in collaborative discussions. Please refer to **Appendix 4 – Course Outlines and suggested Reading Lists.** As is shown in **Appendix 4**, the following are Recommended Books: "Zarook Shareefdeen, **Hazardous Waste Management, Advances in Chemical and Industrial Waste Treatment and Technologies**, ISBN 978-3-030-95261-7, ISBN 978-3-030-95262-4 (eBook) https://doi.org/10.1007/978-3-030-95262-4, Springer 2022.", have been added to supplement recommended papers, to the study weeks 6, 7 on Hazardous waste and Hazardous waste treatment and disposal, respectively. Also, the following Recommended Books: K.G. Ramawat, Jean-Michel Mérillon, Jaya Arora, **Agricultural Waste: Environmental Impact, Useful Metabolites and Energy Production**, Springer 2023 ISBN: 978-981-19-8773-1.", has been added to supplement suggested	Choose level of compliance:

	papers for study weeks 8, 9 on Agricultural waste and Agri-waste disposal, respectively. Conclusively, the above **books have been added to support journal articles readings.**	
Learning design ● There seems to be a disjunction between (1) the descriptions and intentions in the study guides, where inclusion of technologies such as simulations and serious games (conflated as „simulation games") as simulations and serious games (conflated as „simulation games"), case based scenarios, interactive activities, group work online etc. and (2) embedding such activities in the online environment. The EEC did not have the opportunity to see examples of related technologies used in this or other e-learning programmes of the institution. We would recommend an alignment between what is mentioned in the study guides and what will be available on the online environment.	Philips University appreciates the EEC's feedback on the disjunction between the descriptions and intentions in the study guides and the actual embedding of technologies such as simulations and serious games in the online environment. To address this concern a thorough review of the study guides was conducted to ensure that they accurately reflect the intended use of technologies. Furthermore, the Distance Learning Unit has built upon the identified technologies and has embedded effectively activities such as simulations, serious games, case-based scenarios and interactive activities within the online environment. By implementing these measures, we have aligned the descriptions in the study guides with the available Learning Management Systems. This alignment ensures a consistent and cohesive learning experience, providing students with the expected opportunities for engagement, interaction, and application of knowledge. Furthermore, **we have developed a methodology (Appendix 7)** to streamline the process, improve compliance with the intended use of technologies in online courses, ensure consistency and facilitate effective communication among different teams or individuals, responsible for content creation, course development and technology integration. To address this recommendation to consider strategies for building a student community to enhance the student experience, we have developed an online orientation program specifically designed for new students entering the M.Sc. program in Environmental Management.	Choose level of compliance:

● The programme team should consider strategies for building a student community to enhance the student experience. This is fundamental as the institution still has a small number of e-learning programs (three, including the one under consideration).	This specific action provides them with essential information about the program, its structure, available resources, and opportunities for engagement. Furthermore, it serves as an opportunity for students to connect with faculty members and support staff, establishing initial connections and setting the foundation for a sense of community. Another action taken are virtual collaborations spaces where students can interact and collaborate with each other. This is in the form of online discussion forums, chat platforms and social media groups exclusive to the program. These spaces serve as platforms for students to ask questions, share insights and resources, engage in academic discussions, and establish connections with their peers. Moreover, according to our distance learning strategy, we encourage regular and meaningful engagement between faculty members and students. This includes scheduled virtual office hours, online Q&A sessions, guest lectures delivered by faculty members. Finally, we actively involve alumni of the program by inviting them to participate in panel discussions and career mentoring activities. Alumni offer valuable insights and experiences to future students providing inspiration and guidance as they progress in their studies and embark on their professional careers. **In Appendix 9, one may find our Strategy and Initiatives to build a student community.**	
Student admission and progression ● Give further thought to specifying what types of backgrounds applicants are expected to come from. This will aid prospective students in understanding whether the programme is appropriate for them, plus help the institution	We have already conducted a comprehensive analysis of the program's objectives, curriculum, and industry requirements to identify the preferred backgrounds of applicants based on academic disciplines, professional experiences, and specific areas of expertise that align	Choose level of compliance:

develop a position on what kind of applicants it is seeking to recruit.	with the program's focus on environmental management. This information is communicated to prospective students, enabling them to make informed decisions about their eligibility for the program. The specified applicants' backgrounds are taken into account during the admissions process to ensure a holistic evaluation of the applicants' background and help the students to make informed decisions about their suitability for the program. **Please refer to Appendix 5 - the criteria and aspects considered during the admission process of the program.** The Program is addressed to graduates of the Departments of: • Natural Sciences • Agricultural Sciences • Environmental Sciences • Polytechnic Schools • Medicine, Dentistry, Pharmacy, Veterinary medicine, Nursing, Health Economics, Departments whose subject is related to public health actions, primary health care and health services administration and other Health Sciences departments • Economics, Management and Social Sciences • Law, and other departments of related subjects of Universities from Cyprus, Greece and recognized institutions abroad.) **Overall:** • **Well specified and detailed categories of applicants for admission have been introduced, as indicated above.**	
● Progression across the programme and within individual courses requires further consideration. It is recommended that a common introductory course is developed for semester 1, possibly using ENV 120 (Introduction to sustainability) as a basis. Further consideration should also be given to progression within individual courses as the content	To address the EEC's concerns and ensure a well-structured and progressive program, we have evaluated the feasibility of developing a common introductory course for semester **1 by transferring the course ENV 120 (Introduction to Sustainability) to the 1st semester becoming** a module of the general core studies. Moreover, the module **ENV-112 (Environmental and Waste to Energy) is transferred**	

appears very broad and ambitious in some instances.	**from the 1st semester to the 2nd semester.** This modification improves indeed the overall offered program and optimizes its pedagogical layout (please see **Appendix 2- Revised Structure of the program).** In addition, we have implemented the necessary modifications and additions to align it with the objectives and learning outcomes of the program. Furthermore, we have ensured that the course content for each module aligns with the intended learning outcomes, throughout the program. This alignment is based on a careful analysis of the program's goals and the specific learning outcomes established for each course. Finally, an ongoing evaluation process has been established to monitor the effectiveness of the course progression and content. This evaluation process includes feedback from students, faculty, and external stakeholders to identify possible areas of improvement and make any necessary adjustments to ensure a cohesive and engaging learning experience (please see **Appendix 3 - the process for ongoing program evaluation).**	
● Internship and placement opportunities for this MSc should be given consideration and linked to career advice the university provides to e-learning students. Such initiatives should take advantage of the university networks and partnerships.	The Internship is organized and implemented precisely and punctually according to the specifications and requirements of the relevant policy of CYQAA, and It is part of the program of study. It operates, it is assessed on its one capacity, and it is required for completion of the program of study. The University and the pertinent Department provide every support to the students involved to fully participate in, complete all requirements of the practicum and acquire all learning outcomes and practical skills in order to successfully complete and pass it on a Pass/Fail basis. In the remote case that a student fails the Practicum, most likely due to absences and not full participation, the student has to repeat the entire Practicum in order to graduate and receive the respective degree.	

● It was not clear at the time of the visit whether the programme would run in English or in Greek (depending on recruitment). We recommend that the team develops materials and two versions of the programme VLE (in English and in Greek) ahead of the commencement of the programme to accommodate both possibilities in recruitment for this MSc.	Upon completion of the internship, the Supervisor, the Instructor and the Coordinator of each institution evaluate each intern student in relation to his / her entire academic and practical performance, based on the requirements of the specific internship. The internship involves an intensely supervised experience in the student's designated programme area at an approved site. While gaining direct service experience, students regularly meet with an approved supervisor. Student performance is evaluated throughout the Internship. The student's professional and career development is an essential area of focus. To ensure that internship and placement opportunities are effectively integrated into the program, the University developed a strategy that incorporates career advice and leverages its networks and partnerships (please see **Appendix 8**). The program has been designed and developed in such a way in order to be offered in both Greek and English. To this end, the University has developed and prepared the necessary instructional material in both Greek and English languages.	
Quality assurance ● Links with relevant professional associations and environmental organisations should be developed to provide input to (a) quality assurance procedures and (b) continuous development of the programme.	To address this, we have actively sought collaborations with relevant professional associations, both at the local and international levels, dedicated to environmental sustainability, climate change, and other related disciplines. This enables Philips University to gain valuable insights into industry trends, best practices and emerging challenges. Their input is instrumental in ensuring that the program remains aligned with current industry standards and practices. In addition, this collaboration enhances the program's relevance	Choose level of compliance:

	and provide students with practical exposure to real-world environmental challenges. Finally, professionals are invited from professional associations and environmental organizations to deliver guest lectures and conduct workshops for students. These sessions provide students with valuable insights into current industry practices, real-life case studies, and emerging research. These collaborations, enhance the program's quality, relevance and practical applicability, preparing students for successful careers in environmental management. The MSc in Environmental Management is accredited by the following British Professional Environmental Organizations, dedicated to environmental sustainability, water and other related disciplines: • **The Chartered Institution of Water and Environmental Management (CIWEM),**  CIWEM.pdf • **The Institute of Environmental Management and Assessment (IEMA), UK**.  IEMA.pdf **Holders of our MSc degree in Environmental Management are eligible to join CIWEM and IEMA to Graduate membership.** Also, as has been shown at the SWOT analysis, Philips University maintains close links with the community and responds to the needs of society in the right manner. Furthermore, there are strong links with stakeholders, the government, NGOs, industrial partners, etc.). We are in the process to establish collaboration with the following professional associations and organizations in Cyprus, dedicated to environmental sustainability:	

	• Cyprus Energy Agency (CEA) which is a non-profit organization focused on promoting sustainable energy practices and policies in Cyprus. • Cyprus Environmental Organizations Network (CYEN) which is a network of environmental NGOs and organizations working together for environmental protection and sustainability in Cyprus. • Cyprus Association of Environmental Impact Assessment (CAEIA), an association dedicated to promoting best practices in environmental impact assessment and sustainable development. • Terra Cypria – The Cyprus Conversation Foundation focused on nature conservation and environmental education initiatives in Cyprus. • Cyprus Institute of Environmentalists (CIE), an institution focused on environmental research, education and advocacy in Cyprus. Conclusively, the design of the specific program was based on the needs of the society of Cyprus, Greece, Europe, the Mediterranean and the world. Overall, links with relevant associations and environmental organizations have been performed, but further ones are aimed during the first 3 years of the program.	
Programme structure ● Transforming the general academic concepts, e.g., quality, research, synergy, etc., into specific and measurable goals and targets. This, hopefully, will guarantee a sustained path to continuous improvement in the future.	Distance learning instructors participate in the University's 'Staff Development Plan', which includes financial and other support to participate in local and international conferences and seminars, to have membership in international professional associations, and offering in-house training seminars. As the case is with all instructors at the University, distance learning instructors undergo annual evaluation, a fundamental component of which is the development by each faculty member	Choose level of compliance:

	of an annual plan with measurable goals and targets, a self-assessment of which is evaluated at the annual evaluation. The annual evaluation includes (a) the evaluation/feedback by the students at the end of each semester, (b) an evaluation by the pertinent Dean of School based on the instructor's self-assessment report, as well as periodic observations and meetings between the Program Coordinator and the on-site instructors.	
Staff workload and career progression ● Revisiting the operational rationale of the Program and re-allocating tasks, time and activities between staff and between juniors and seniors. ● Engaging senior staff more actively in the teaching process.	We appreciate EEC's suggestion. To address it we conducted a comprehensive review of the operational rationale of the program by assessing the current distribution of tasks, responsibilities, and activities among junior and senior staff members. Based on the review findings, we have realigned and reallocated tasks, time, and activities between junior and senior staff. More specifically, the alignment includes redefining roles, adjusting workload distributions, and optimizing the expertise and capabilities of both junior and senior staff. The goal was to ensure a more efficient and effective utilization of resources while maximizing the expertise and potential contributions of each team member. Finally, we foster a culture of collaboration and mentoring within the program. Senior staff members provide guidance, mentorship, and support to junior staff members, allowing for knowledge transfer and professional development. This collaboration facilitates a balanced distribution of tasks and responsibilities, as well as creating opportunities for junior staff members to contribute meaningfully to the program's operations. Senior faculty members are certainly actively engaged in the teaching process by carrying the required teaching load prescribed for full-time faculty members. **Synergies of teaching and research:**	Choose level of compliance:

● Establishing a medium-term policy for supporting juniors to mature scientifically, improve their international presence and visibility, and cultivate the mind ground for becoming the future leaders of PU, according to the vision of its Founder.	The faculty members teaching in the Program have an excellent record of both already published and on-going research. The outcomes of their research are included in the teaching material and bibliography of the pertinent courses and they are presented and discussed in group discussions. In addition, students are introduced to research methodology and they are assigned with research papers in the appropriate courses. The Master Thesis also involves substantial research. Philips University implements a Faculty Mentoring Program, which ensures that the junior faculty members get in a position to succeed professionally. Issues handled by this program through continuous interaction between a senior and a junior faculty member are orientation to the University, excelling at teaching and research, understanding the criteria for annual evaluations/reviews, positioning the faculty member for promotion, developing professional networks, and achieving career goals. In addition, distance learning instructors participate in the University's 'Staff Development Plan', which includes financial and other support to participate in local and international conferences and seminars, to have membership in international professional associations, and offering in-house training seminars.	
Assessment ● The programme team should consider trends in pedagogy towards authentic assessment opportunities while they design and produce assessment activities and exam papers, including an open book approach if applicable.	The University has already considered trends in pedagogy towards authentic assessment opportunities. In order to incorporate more up-to-date innovations in pedagogical approaches and teaching methods into the program, the following actions were taken from the Pedagogical Planning Committee of the Distance Education Unit: e) We introduced the flipped classroom model where students engage with instructional materials and content outside of	

	class and use class time for active learning discussions and collaborative activities. f) It was agreed with the faculty members of the program to provide online resources for students to access before the class, allowing them to familiarize themselves with the content at their own pace. In addition, to use class for interactive discussions, problem-solving activities, case-studies, or group projects that promote deeper understanding and application of concepts. g) We incorporated problem-based learning (PBL) approaches, where students tackle real-world problems or case studies relevant to the field of education. Also, to present students with authentic scenarios that require critical thinking, problem-solving, and collaborative decision-making. Finally, to facilitate group discussions and provide guidance as students work through the problem, encouraging them to apply their knowledge and skills to develop innovative solutions. h) The Faculty, the Pedagogical Planning Committee & the Technical Support Committee emphasize the integration of technology tools and resources to enhance teaching and learning experiences. We explored the use of educational apps, online platforms and multimedia resources to engage students and facilitate concept mastery. Furthermore, the Technical Support Committee provides training and support for faculty and students to effectively use technology tools in their teaching and learning processes. Finally, we encourage faculty to engage in research on innovative teaching methods. Furthermore, the University employs a mapping assessment and student assessment Rubrics for the M.Sc. to maintain high levels of student participation, motivation and engagement. **Grading Rubrics**, (**Appendix 10 - Assessment of Learning Outcomes**), are effective tools which	

	allow for objective and consistent assessment of a range of performances, assignments, and activities. Rubrics can help clarify students' expectations and show students how to meet them, making students accountable for performance in an easy-to-follow format. The feedback that students receive through a grading rubric can help them improve their performance on received or subsequent work. Rubrics allow for consistency in grading for those who teach the same course. In addition, by aligning the content, activities and assessment of each unit with the desired ILO's, it provides a visual representation of how the content and assessment of each unit contribute to the overall program outcomes. This **mapping report serves** as a valuable tool for both the teaching team and the students, as it enhances transparency and understanding of the curriculum structure (**Appendix 11 – Curriculum Mapping Guide**). In addition, **the program follows a blended learning model** that combines traditional face-to-face instruction, online teleconferences with online activities and resources. This approach allows students to access course materials, engage in discussions, and complete assignments through online platforms. Furthermore, we use **interactive multimedia** such as **videos**, interactive presentations to explain complex concepts and engage students in hands-on activities. These resources can be accessed through the Moodle Platform and provide interactive learning experience. Moreover, students can work together on group assignments, research projects, or problem-solving tasks using online communication and collaboration tools. Finally, we emphasize that all students complete **an assessment questionnaire** concerning Teachers' courses and University's facilities. Under normal conditions, onsite final exams are required by CYQAA. However, the University has already been equipped with an appropriate	
● Since the programme is offered for distance learning and the university has a strong technical infrastructure, the exams should also be offered online as		

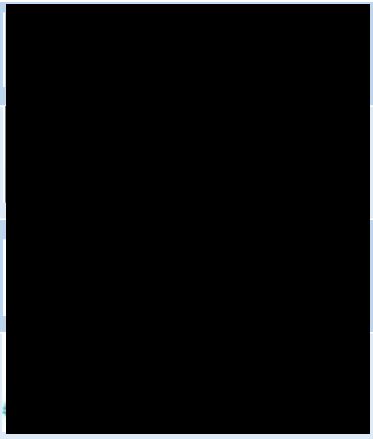
well. The students should be able to choose if they prefer an online or onsite examination, depending on their location and/or ability to travel.	platform and technology with lock-down proctoring for online examinations in case this would be needed.	
Thesis ● The dissertation should be positioned as part of the programme of specialisation in one of the three themes, if this is not already the case. ● There is a trend in distance learning to include the thesis in the modular structure of a programme rather than superimposing it a separate entity outside the modular structure. This helps with student tasks and progression towards the thesis production. We recommend that the university considers this approach.	Philips University appreciates the EEC's suggestion to position the dissertation as part of the program's specialization in one of the three theme categories. We have reviewed the existing dissertation's requirements and made the necessary adjustments to clearly position the dissertation as an integral part of the specialization in one of the three themes. Furthermore, according to our procedure, the students receive guidance and support from the faculty members through the dissertation process. Faculty provide expertise and mentorship specific to the chosen specialization theme, helping students shape their research questions, methodology, and analysis to address key issues within their specialized field. **Please see Appendix 6 - the dissertation process** and the key components of positioning the dissertation as part of the program of specialization within one of the three themes of the program. Philips University applies the instructions and directions given by CYQAA concerning Master Thesis. These instructions and directions of CYQAA are applied in this educational program.	
Staff and student training ● Organising training for trainers, especially in the virtual mode of teaching selected for this program.	Philips University implements a training and development program for the instructors in the Distance Learning Programs of Study, which consists of a three-day seminar (**Appendix 12**), and which includes the following: • Introduction to distance learning • Theories supporting online education, such as self-regulated learning, conversational framework, etc. • Quality in distance learning • Characteristics of adult students • Organization of Group Counseling meetings / Tele-Meetings, communication, OSS	

● Assessing before the programme starts the actual level of digital literacy and technical knowledge that the students have and organise, if needed, a DL course covering any gap in that respect.	elements, alternative scenarios in OSS and others • Assessment of written assignments • Plagiarism • Rights / Obligations of teachers • Technological and Technical skills to support distance education. • Online interactive elements, including Moodle add-ons such as HSP In addition, the faculty training program, includes the following: • Publish a comprehensive Faculty Handbook. • Orientation sessions for newly hired faculty members. • Implementation of a Faculty Mentors Program, by which older faculty members are assigned as Mentors to new faculty members for advising and consultations on a continuous basis. • Periodic offerings of training programs to all members of the teaching staff on pedagogical, research and other faculty-related matters. • In order to address the first recommendation, we conduct an assessment, prior to the start of the program, to gauge the digital literacy and technical knowledge of incoming students. This assessment helps identify any gaps or areas where additional support may be needed. The assessment includes surveys, self-assessment questionnaires, or practical exercises to evaluate students' proficiency in relevant areas such as computer skills and basic technical competencies. Based on the assessment results and if it is needed, we offer to our students a Digital Literacy (DL) course to address any identified gaps in students' digital literacy and technical knowledge. The DL course provides essential training and guidance on using digital	

● Assessing previous experience and provide, if needed, training on DL to the newly recruited teaching faculty.	tools, software applications, online research, data analysis, and other relevant technical skills needed for successful participation in the program. Over and above that, the Technical Support Committee of the Distance Education Unit provides individualized support to students who require further assistance in developing their digital literacy and technical skills. This support includes one-on-one mentoring, tutoring session, or access to online resources and tutorials. A comprehensive support system was established by the Distance Education Unit, as already described, to address students' specific needs and provide guidance throughout their academic journey. In order to address this recommendation and ensure that the teaching faculty is well-equipped to deliver effective instruction, we included an assessment of previous experience as part of the onboarding process for newly recruited teaching faculty. The specific assessment evaluates faculty's previous experience and familiarity with digital learning platforms, online teaching methodologies, and instructional technologies. Based on the assessment results we provide training on digital learning to the teaching faculty who may benefit from it. The training was set to cover various aspects of online instruction, including the effective use of learning management systems, engaging students in virtual classrooms, facilitating online discussions, designing and delivering multimedia content, and leveraging interactive tools for assessment and feedback. The training is tailored to meet the specific needs and objectives of the program. Furthermore, we offer ongoing professional development opportunities to the teaching faculty to enhance their skills and knowledge in digital learning. These	

● Continuously monitoring the knowledge and use of DL tools by the entire teaching faculty (including necessary updates are implemented).	opportunities include workshops, webinars and online courses. By fostering a culture of continuous learning, we ensure that faculty members stay updated with emerging trends and best practices in digital learning, enabling them to deliver high-quality instruction in the online environment. To address this recommendation, we have ensured that the teaching faculty has access to ongoing technical support for DL tools. This involves a dedicated technology support team (Technical Support Team) that faculty members can reach out to for assistance with troubleshooting, software updates, or guidance on using specific DL tools. In addition, we have in place, a mechanism for continuous evaluation and feedback. We gather feedback from students and faculty on effectiveness of digital learning strategy and on the use of DL tools and their effectiveness in supporting teaching and learning. This feedback results on ongoing improvements and refinements to instructional approaches, ensuring that faculty members are continuously supported in their professional development journey. Moreover, regular evaluations provide opportunities for faculty members to reflect on their teaching practices and identify areas of growth and enhancement. This enables us to support faculty members in staying current with DL advancements and empower them to deliver high-quality instruction using the latest tools and practices.	

C. Higher Education Institution academic representatives

Name	*Position*	*Signature*
Professor Dimitrios Natsopoulos	RectorClick to enter Position	
Professor Constantina Shiakallis	Vice-Rector for Academic Affairs	
Professor Andreas Hadjis	Acting Dean, School of Education and Sciences	
Professor Pavlakis Andreas	Director, Distance Learning Unit	

Date: 21 August, 2023

APPENDICES

- **Appendix 1: Key Performance Indicators (KPIs) for Data Collection & Administrative Support**
- **Appendix 2: Revised Structure of the Program**
- **Appendix 3: Ongoing Program Evaluation Process**
- **Appendix 4: Course Outlines & suggested Reading Lists**
- **Appendix 5: Admission Process Criteria**
- **Appendix 6: Dissertation Process**
- **Appendix 7: Technology Integration Methodology (in online Courses)**
- **Appendix 8: Internship Strategy**
- **Appendix 9: Strategy to build Student Community**
- **Appendix 10: Grading Rubrics – Assessment of Learning Outcomes**
- **Appendix 11: Curriculum Mapping Guide**
- **Appendix 12: Distance Learning Instructors' (3-day) Training Seminar**

APPENDIX 1

Key Performance Indicators (KPIs)
for Data Collection & Administrative Support

This is a comprehensive plan for data collection and administrative support for the M.Sc. Program in Environmental Management, including specific Key Performance Indicators (KPIs). The table outlines the key components of the plan and the respective KPIs for monitoring the program's performance and progress.

Aspect	Plan for Data Collection and Administrative Support	Key Performance Indicators (KPIs)
Data Collection Plan	- Relevant Data Points: Student Enrolment, Retention Rates, Graduation Rates, Academic Performance, Employability & Environmental Impact.	- Student Enrolment: Target 10% annual increase.
	- Data Collection Methods: Student Records, Surveys, and Environmental Project Assessment.	- Retention Rates: Aim for a minimum 90% Retention Rate.
	- Data Quality Assurance: Implement processes to ensure data accuracy and consistency.	- Graduation Rates: Target 80% or above Graduation Rate.
	- Data Storage and Security: Establish secure data storage compliant with data protection policies.	- Academic Performance: Strive for an average GPA of 2.7 or higher, and encourage 80% participation in environmental projects.
		- Employability: Target 75% of graduates employed in environmental or related fields within six months of graduation.
		- Environmental Impact: Encourage 50% of students to undertake projects with positive environmental sustainability impact.
Administrative Support Plan	- Scaling up Staff: Assess data management needs and hire additional administrative staff if required.	
	- Efficient Data Management Systems: Implement a specialized Environmental Management Database.	
	- Clear Data Collection Processes: Procedure for data collection established.	
	- University Senate approval for support plan and resource allocation	

With this plan in place, Philips University can effectively track and analyse data, make evidence-based decisions and enhance the effectiveness of the program.

APPENDIX 2

Revised Structure of the Program

In the following Figure you may find a revised structure of the M.Sc. program after the rearrangement of the selected Modules.

The progression within individual courses has been revised where needed, to revise broad and ambitious contents. For example, it has been stated by the evaluators that the students are expected to spend one week studying each of the following waste categories: industrial waste, agricultural waste and hazardous waste.

Thus, as it concerns Module ENV-110, Environmental Pollution, topics on hazardous, industrial and electronic waste have been merged and the study period has been doubled/extended to two weeks, with the aim to mainly focus on the hazardous waste and hazardous waste treatment and disposal in general and a limited only reference to the specific waste category of electronics. The same has been done for the agricultural waste, which has been extended to two weeks with reference to agricultural waste and agri-waste disposal. Conclusively, by a common introductory course ENV 120 (Introduction to Sustainability) has been used as a basis for, as suggested. Additionally, selected Modules have been rearranged and the content has been modified where appropriate.

APPENDIX 3

Ongoing Program Evaluation Process

This ongoing program evaluation process involves various stakeholders, including program administrators, faculty, students, and external stakeholders. It relies on multiple data sources, such as surveys, faculty, input, and academic performance data, to assess the program's effectiveness and relevance.

PROCESS FOR ONGOING PROGRAM EVALUATION	STAKEHOLDERS INVOLVED	KEY STEPS
Purpose of Evaluation	- Program Administrators	- Monitor the effectiveness of the M.Sc. Program in Environmental Management in achieving its objectives.
	- Faculty	- Identify areas for improvement and enhancement.
	- Students	- Ensure a cohesive and engaging learning experience.
	- External Stakeholders (Industry, Employers, Alumni)	
Data Collection and Sources	- Student Feedback Surveys	- Regularly conduct surveys among students to gather feedback on course content and learning experience.
	- Faculty Input	- Faculty members provide insights on course delivery and curriculum relevance.
	- External Stakeholder Feedback	- Gather input from industry professionals, employers, and alumni on program alignment and graduate preparedness.
	- Academic Performance Data	- Analyze student performance data, including GPA and graduation rates.
Evaluation Criteria	- Alignment with Learning Outcomes	- Assess whether the course content aligns with intended learning outcomes.
	- Student Satisfaction	- Evaluate student satisfaction with program quality and resources.
	- Graduation and Employment Rates	- Monitor graduation rates and track graduate employability in relevant fields.
	- Program Relevance to Industry Needs	- Evaluate the program's alignment with current industry demands.
Evaluation Process	- Regular Surveys	- Conduct periodic surveys among students, faculty, and stakeholders.
	- Focus Groups	- Organize focus groups for in-depth discussions on specific program aspects.
	- Alumni Tracking	- Follow up with alumni to assess post-graduation experiences and career progress.
Action and Improvement	- Data Analysis	- Analyze collected feedback and performance data to identify areas for improvement.

PROCESS FOR ONGOING PROGRAM EVALUATION	STAKEHOLDERS INVOLVED	KEY STEPS
	- Recommendations	- Develop actionable recommendations to address identified issues and enhance the program.
	- Implementation	- Implement necessary adjustments to the program curriculum and support services.
	- Continuous Improvement	- Monitor the impact of changes and incorporate ongoing feedback for continuous enhancement.

The recommendations of the EEC, which are implemented for continuous improvement were implemented, thus ensuring that the program remains responsive to the needs of its stakeholders and provides a cohesive and engaging learning experience.

APPENDIX 4

Course Outlines
&
Suggested Reading Lists

(Study Week 7)

Hazardous waste treatment and disposal

Introduction

In the context of this Study Week, the following topics will be included:

- Technologies adopted for treatment and management of radioactive nuclear wastes
- The problems that may result from the low efficiency of the solid waste system
- Phyto-remediation
- An overview of treatment technologies for this waste

Purpose

The main purpose of this module is to assist students understand the most current knowledge on hazardous waste management practices. It addresses the rapidly changing advances in waste stream characterization and the discovery of new chemicals – which have led to new hazardous wastes, technological innovation, stringent environmental regulations, changes in transport and dispersion modelling of hazardous pollutants, and new waste management techniques.

Learning Outcomes

By the end of the teaching Study Week, students are expected to:

- Recognize markings for the storage and transport of hazardous waste in accordance with applicable law
- Discuss future challenges and the importance of renewing technologies

Key words

- Radioactive
- Remediation
- Contaminated sites
- Reactivity
- Hazardous waste treatment
- Hazardous waste disposal
- Toxicity

Summary

In this section, an attempt is made to improve students' knowledge about the concept of hazardous waste disposal. The management of extremely increasing volumes of these wastes became a very important accordingly. Inadequate management of waste led to contamination of environment: water, soil, and atmosphere and to a serious impact on public health. Direct health impacts of mismanagement of waste are well known and can be observed obviously in developing countries. Saving of the environment and human health from the detrimental effects of hazardous and radioactive wastes is achieved by the effective improvement of waste management programs.

Bibliography

Recommended study material

Recommended journal articles

B.S. Rathi, P.S. Kumar, D.V.N. Vo, Critical review on hazardous pollutants in water environment: Occurrence, monitoring, fate, removal technologies and risk assessment, Science of the Total Environment 797 (2021) 149134.

Recommended book

Zarook Shareefdeen, Hazardous Waste Management, Advances in Chemical and Industrial Waste Treatment and technologies, ISBN 978-3-030-95261-7, ISBN 978-3-030-95262-4 (eBook) https://doi.org/10.1007/978-3-030-95262-4, Springer 2022.

Essay

Discuss ways where we can promote and implement sustainable hazardous waste disposal practices to minimize environmental impact and protect public health in our community. (max 250 words)

Interactive work

(Please post your findings in MOODLE (chat), according to the instructor's guidelines, to be communicated to your classmates and prepare for a discussion of the following tasks in the next teleconference.)

1. Visit the landfill of your area and mention ways to manage hazardous waste. Are they effective? New processing methods need to be found. Write one paragraph of your opinion. (max 400 words)

Self-assessment exercises (Indicative answers on page 62 of the guide)

Exercise 1

Please explain what is the difference between nuclear waste and radioactive waste? (max 150 words)

Exercise 2

Please explain what is radioactive waste and where does it come from? (max 150 words)

(Study Week 8)

Agricultural waste

Introduction

In the context of this Study Week, we cover the following topics:

- Which waste is characterized as agricultural
- Their qualitative and quantitative characteristics

Purpose

The purpose of this module is to develop the students' ability to classify agricultural waste, and the particular characteristics and peculiarities of such waste when compared to municipal and industrial waste.

Learning Outcomes

Upon completion of this Study Week, students' are expected to:

- become familiar with various waste management strategies
- recognize the value of agricultural waste as a potential resource
- understand the role of organic matter in soil health and fertility through composting and organic waste incorporation

Key words

- Pesticides
- Fertilizers
- Agriculture
- Machinery
- Solids

Summary

During the Study Week, students' learn to explore to the shaping factors of rural space and the way in which each of them contributes to this shaping. At the beginning, the parameters that characterize an agricultural waste will be analysed. Then, their quantitative and qualitative characteristics will be analysed and finally, the various ways for their final disposal to a natural recipient and their proper management.

Bibliography

Recommended study material

Recommended Book

K.G. Ramawat, Jean-Michel Mérillon, Jaya Arora, Agricultural Waste: Environmental Impact, Useful Metabolites and Energy Production, Springer 2023 ISBN : 978-981-19-8773-1.

Recommended Paper

Edmond Sanganyado, Kudakwashe E. Chingono, Willis Gwenzi, Nhamo Chaukura, Wenhua Liu, Organic pollutants in deep sea: Occurrence, fate, and ecological implications, Review, Water Research 205 (2021) 117658.

Essay

List and explain the types of waste that are classified as agricultural. What are the usual values of their quantitative and qualitative characteristics? Refer to bibliography of the last five years. (max 450 words).

Interactive work

(You are requested to post your findings in MOODLE (chat), according to the instructor's guidelines in order to be communicated to your classmates and then prepare for discussion.)

2. Agricultural waste represents a huge pool of untapped resources that can be turned into valuable assets with many potential industrial applications. Search on the Internet and find ways to the proper management and utilization of agricultural waste in order to present it. (max 10 slides or 400 words)

Self-assessment exercises (Indicative answers on page 61-62 of the guide)

Exercise 1

Briefly explain the two most important effects on water resources as observed in modern agriculture. (max 150 words)

Exercise 2

State and explain four rules of good agricultural practice. How do they help reduce groundwater pollution? (max 150 words)

(Study Week 9)

Agri-waste disposal

Introduction

In the context of this Study Week, we describe:

- Environmental impacts of waste disposal
- The limits of legislation that exist for their disposal to natural recipients

Purpose

This study week deals with the concept of management of waste generated as a result of agricultural activities. This involves identification of farm waste, evaluation of suitable treatment methods (sorting and treatment), identification of possible by-products and proper disposal of treated waste.

Learning Outcomes

By the end of this Study Week, students' are expected to:

- Develop a deeper understanding of the environmental impact of improper agri-waste disposal
- How agri-waste can lead to pollution, soil degradation, and greenhouse gas emissions
- Understand the importance of adopting sustainable agricultural practices
- Understand the role of organic matter in enhancing soil health and fertility through composting, which improves soil structure, water retention, and nutrient availability
- Propose methods of management of agricultural and livestock solid waste

Key concepts

- Agricultural waste
- Agri-waste management
- Agri-waste disposal methods
- Composting
- Organic waste
- Crop residues
- Livestock waste
- Biodegradable waste
- Recycling agricultural waste
- Sustainable agriculture
- Biomass utilization

- Green waste

Summary

In this study week, students can gain essential knowledge and skills to contribute to sustainable agriculture, environmental protection, and responsible waste management practices.

Bibliography

Recommended study material

Recommended Book

K.G. Ramawat, Jean-Michel Mérillon, Jaya Arora, Agricultural Waste: Environmental Impact, Useful Metabolites and Energy Production, Springer 2023 ISBN : 978-981-19-8773-1.

Recommended Paper

B. Koul, A. M. Yakoob, M.P. Shah, Agricultural waste management strategies for environmental sustainability, Environmental Research 206 (2022) 112285.

Essay

Discuss what strategies can be implemented at the community level to promote efficient agri-waste management and foster sustainable agricultural practices? (max 450 words)

Interactive work

(Please post your findings in MOODLE (chat), according to the instructor's guidelines, to be communicated to your classmates and prepare for a discussion of the following tasks in the next teleconference.)

1. Access and read the article: B. Koul, A. M. Yakoob, M.P. Shah, Agricultural waste management strategies for environmental sustainability, Environmental Research 206 (2022) 112285. Write a paragraph on the strategies for utilization and valorisation of agricultural wastes.

Self-assessment exercises (Indicative answers on page 65 of the guide)

Exercise 1

Which are the most effective methods for agri-waste disposal? (max 150 words)

Exercise 2

Discuss the environmental benefits of proper agri-waste disposal? (max 150 words)

APPENDIX 5

Admission Process Criteria

The table below summarizes the criteria and aspects considered during the admissions process for the M.Sc. Program in Environmental Management:

CRITERIA	ASPECTS CONSIDERED
Academic Background	- Relevance of academic degree and coursework to environmental management.
	- Academic achievements and performance in relevant disciplines (e.g., environmental sciences, engineering, ecology).
Professional Experience	- Relevance and duration of work experience in environmental management or related fields.
	- Roles such as environmental consultants, managers, researchers, educators, etc.
Specific Areas of Expertise	- Specialized knowledge and expertise in areas like climate change, water resource management, waste management, etc.
Statement of Purpose/Personal Statement	- Clarity of motivation to join the program and alignment with its focus.
	- Demonstrated interest in environmental management and commitment to the field.
Letters of Recommendation	- Positive feedback from professors, employers, or supervisors.
	- Assessment of academic performance, professional capabilities, and potential.
Interview	- Further assessment of the applicant's background, interests, and commitment to the program.

By using the above table as a reference, the admissions committee can effectively evaluate applicants in a comprehensive manner, ensuring that the right candidates are selected based on their qualifications, experiences, and alignment with the program's objectives and industry requirements.

APPENDIX 6

Dissertation Process

The table summarizes the dissertation process and highlights the key components of positioning the dissertations as part of the program of specialization within one of the three themes in the M.Sc. Program in Environmental Management.

COMPONENT	DESCRIPTION
Selection of Specialization Theme	- Students choose one of the three specialization themes offered in the program.
	- Themes may include "Climate Change and Sustainable Energy," "Water Resource Management," etc.
Dissertation Proposal	- Students submit a dissertation proposal that aligns with the chosen theme.
	- The proposal outlines the research question, objectives, and methodology within the theme.
Dissertation Supervision	- Based on the chosen theme, students are assigned a specialized supervisor.
	- The supervisor guides the student throughout the research process within the theme.
Integration of Coursework	- Coursework provides foundational knowledge and skills related to the chosen theme.
	- The dissertation complements and builds upon concepts covered in relevant courses.
Dissertation Defense	- After completion, students defend their dissertation findings before a committee.
	- The committee evaluates the alignment of the dissertation with the chosen theme.

By following this approach and incorporating these components, the M.Sc. Program in Environmental Management ensures that the dissertation becomes an essential part of the program's specialization within one of the three themes. This integration enhances the overall learning experience for students and allows them to contribute meaningfully to their specialized area of environmental management.

APPENDIX 7

Technology Integration Methodology
(In On-line Courses)

The specific methodology summarizes the actions taken to address the disjunction between the study guides and the actual implementation of the technologies in the online environment, aiming to improve compliance with the intended use of technologies in online courses.

Actions	Description
Technology Audit and Gap Analysis	- Conduct a comprehensive audit of the online learning environment to identify gaps in technology integration.
	- Compare study guides' intended technologies with the ones currently embedded in the online courses.
Faculty Training and Development	- Provide faculty training on effectively using technologies mentioned in the study guides.
	- Emphasize the pedagogical benefits and practical applications of these technologies in online learning.
Integration of New Technologies	- Work on integrating missing technologies mentioned in the study guides into the online courses.
	- Collaborate with instructional designers and technology experts for a seamless integration process.
Quality Assurance Mechanisms	- Implement quality assurance mechanisms to ensure technologies align with study guides' intentions.
	- Regularly review and update course materials based on advancements in technology integration.
Student Feedback and Surveys	- Gather feedback from students on their experiences with the technologies used in the online courses.
	- Conduct surveys to assess students' perception of technology alignment with study guides.
Showcase Best Practices	- Create examples and showcases of successful technology implementations in online courses.
	- Share these examples with faculty to inspire and guide effective technology use.
Ongoing Communication	- Maintain open communication channels between faculty, instructional designers, and technology support.
	- Address challenges or concerns related to technology integration through regular communication.

By implementing these actions, Philips University aims to integrate the actual use of technologies in the online environment, as a means to improve compliance with the intended use of technologies in online courses. This alignment contributes to a more cohesive and effective e-learning experience for students, enhancing the overall quality of the online program.

APPENDIX 8

Internship Strategy

The table below is a summary of our strategy for integrating internship and placement opportunities, along with career advice, into the M.Sc. in Environmental Management.

Initiative	Description
Internship and Placement Programs	Establish formal program to offer internships and placements for M.Sc. students in Environmental Management. Collaborate with industry, government, and NGOs for opportunities.
Career Counselling Services	Provide specialized career counselling services tailored to e-learning students in Environmental Management.
Curriculum Integration	Integrate career development modules and practical experiences like case studies to bridge theory and practice.
Industry Workshops and Webinars	Organize workshops and webinars featuring industry professionals and alumni to offer insights into the job market and industry trends.
Networking Opportunities	Facilitate networking events, both in-person and virtual, to connect students with potential employers and alumni in the environmental field.
Job Portals and Internship Databases	Create an exclusive online platform where companies can post internships and job opportunities for Environmental Management students.
Collaboration with Alumni	Leverage the university's alumni network to establish mentorship programs and gain industry insights from experienced graduates.
Research Partnerships	Encourage research collaborations between faculty, students, and industry partners to provide internship opportunities and address environmental challenges.
Career Fairs and Recruitment Events	Organize career fairs and recruitment events focused on the environmental sector to facilitate interactions between students and employers.
Industry Advisory Board	Form an industry advisory board comprising representatives from environmental organizations to guide the program's curriculum and relevance.

By implementing the above initiatives, the program provides valuable resources and opportunities to its students.

APPENDIX 9

Strategy to build Student Community

In the following table you would find a summary of our strategy for building a student community to enhance the student experience in the program.

Strategy	Description
Online Student Forums and Discussion Groups	Create dedicated online platforms for students to engage in discussions, share ideas, and provide peer support.
Virtual Social Events and Webinars	Organize virtual social events and webinars to bring students, faculty, and guest speakers together for networking and community-building.
Peer Mentoring and Buddy System	Implement a peer mentoring program or buddy system to pair new students with experienced ones for academic and emotional support.
Collaborative Group Projects	Design group projects within the curriculum to encourage teamwork and create a sense of camaraderie among students.
Social Media Engagement	Utilize social media platforms to connect with students, share program updates, and foster a sense of community among learners.
Virtual Study Groups	Encourage students to form virtual study groups based on common interests or coursework to facilitate collaborative learning.
Student-led Clubs and Activities	Support the establishment of student-led clubs and activities related to environmental causes or interests to empower students to build their community.
Regular Communication and Feedback	Maintain regular communication with students through emails, newsletters, and surveys to gather feedback and improve the student experience.
Incorporate Collaborative Tools	Utilize collaborative tools and platforms that promote interaction and teamwork in online coursework and group activities.
Alumni Involvement	Involve alumni in mentoring current students and sharing insights into their career paths to create a sense of continuity and connection.
Online Office Hours and Support Services	Offer virtual office hours and online support services for academic and personal counselling to ensure easy access to guidance.
Recognition and Celebrations	Acknowledge student achievements and celebrate milestones within the program to foster a positive and motivating learning environment.

By implementing the above initiatives, we create a vibrant and supportive student community, positively impacting the overall student experience of the program.

APPENDIX 10

Grading Rubrics
Assessment of Learning Outcomes

Contents

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Learning Outcomes #1 – General Core Studies

	Courses	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D/ 50-54% Description: Pass Quality Points: 1.00	Grade: C-/ 55-59% Description: Pass Quality Points: 2.00	Grade: C/ 60-64% Description: Pass Quality Points: 2.0	Grade: C+/ 65-69% Description: Pass Quality Points: 2.60	Grade: B-/ 70-74% Description: Pass Quality Points: 3.00	Grade: B/ 75-79% Description: Pass Quality Points: 3.30	Grade: B+/ 80-84% Description: Pass Quality Points: 3.60	Grade: A/ 85-100% Description: Pass Quality Points: 4.0
A. Understand and analyze in depth the effects of the presence of toxic and hazardous waste on the environment.	**Environmental Pollution Waste Treatment Technologies Research Methodology**	Does not demonstrate an understanding of the presence of toxic and hazardous waste on the environment	Can explain in very simple and basic terms the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a very weak understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a weak understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a poor understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a fair understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a good understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates a very good understanding of the effects of the presence of toxic and hazardous waste on the environment	Demonstrates an excellent understanding of the effects of the presence of toxic and hazardous waste on the environment
B. Comprehend the application of decontamination technologies either through conventional methods or with new technologies as well as their combination for the protection of the environment.	**Environmental Pollution Waste Treatment Technologies Environment and Waste to Energy Research Methodology**	Is neither able to identify any decontamination technology nor apply those to problem solving.	Is able to identify one or more decontamination technologies but in simple and basic terms while is unable to apply those technologies to problem solving.	Is able to identify one or more decontamination technologies but in simple and basic terms while is also able to apply those technologies to simple problem solving at a very weak level.	Can identify multiple key decontamination technologies and apply them to actual problems at a weak level.	Can identify one or more key decontamination technologies and apply them to actual problems at a poor level.	Can identify multiple key decontamination technologies and apply them to actual problems at a fair level.	Can identify multiple key decontamination technologies and apply them to actual problems at a good level.	Displays a thorough understanding of key decontamination technologies and can apply them to actual problems solving	Displays a deep understanding of key decontamination technologies and can apply them in different problems solving
C. Familiarize and deepen the role of science and society in dealing with environmental risks.	**Environmental Pollution Waste Treatment Technologies Environment and Waste to Energy Research Methodology**	Conveys little understanding of the role of science and society in dealing with environmental risks	Is able to identify some issues of the role of science and society in dealing with environmental risks	Displays a very weak understanding of the role of science and society in dealing with environmental risks	Displays a weak understanding of the role of science and society in dealing with environmental risks	Displays a poor understanding of the role of science and society in dealing with environmental risks	Displays a fair understanding of the role of science and society in dealing with environmental risks	Displays a good understanding of the role of science and society in dealing with environmental risks	Displays a very good understanding of the role of science and society in dealing with environmental risks	Demonstrates an excellent understanding of the role of science and society in dealing with environmental risks
D. Acquire specialized knowledge on the usefulness of a waste which is appropriately treated to reduce the pollutants load.	**Environmental Pollution Waste Treatment Technologies Environment and Waste to Energy Research Methodology**	Conveys little understanding of sustainability issues and no comprehension of the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Can explain in very simple and basic terms sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a very weak understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a weak understanding of sustainability issues the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a poor understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a fair understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a good understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a very good understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Has a thorough understanding of sustainability issues and a deep comprehension of the usefulness of a waste which is appropriately treated to reduce the pollutants load.

E. Understand basic issues of toxicology. Describe general toxicity mechanisms for the effects on human health following environmental exposure.	**Environmental Pollution Waste Treatment Technologies Research Methodology**	Does not demonstrate an understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Is able to identify some toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure, but in very basic and simple terms.	Displays a very weak understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Displays a weak understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Displays a poor understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Displays a fair understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Displays a good understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Displays a thorough understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.	Has a thorough understanding of basic toxicology issues, general toxicology mechanisms and the human health effects following environmental exposure.
F. Identify, analyze, synthesize and evaluate environmental health stressors and understand the ways in which they can affect health.	**Environmental Pollution Waste Treatment Technologies Research Methodology**	Does not demonstrate a capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also to understand the ways in which they can affect health.	Is able to demonstrate a capacity to identify, analyze, synthesize and evaluate some environmental health stressors, and also to understand the ways in which they can affect health.	Demonstrates a very weak capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a very weak understanding of the ways in which they can affect health.	Demonstrates a weak capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a weak understanding of the ways in which they can affect health.	Demonstrates a poor capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a poor understanding of the ways in which they can affect health.	Demonstrates a fair capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a fair understanding of the ways in which they can affect health.	Demonstrates a good capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a good understanding of the ways in which they can affect health.	Demonstrates a very good capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also a very good understanding of the ways in which they can affect health.	Demonstrates an excellent capacity to identify, analyze, synthesize and evaluate environmental health stressors, and also an excellent understanding of the ways in which they can affect health.

Learning Outcomes #2 – Stream 1. Sustainable Waste Management

	Courses	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D 50-54% Description: Pass Quality Points: 1.00	Grade: C- 55-59% Description: Pass Quality Points: 2.00	Grade: C 60-64% Description: Pass Quality Points: 2.0	Grade: C+ 65-69% Description: Pass Quality Points: 2.60	Grade: B- 70-74% Description: Pass Quality Points: 3.00	Grade: B 75-79% Description: Pass Quality Points: 3.30	Grade: B+ 80-84% Description: Pass Quality Points: 3.60	Grade: A 85-100% Description: Pass Quality Points: 4.0
A. Acquire specialized knowledge of how a waste can be useful with appropriate treatment to reduce the pollutant load.	**Introduction to Sustainability Renewable Technologies Advanced Wastewater Treatment**	Conveys little understanding of sustainability issues and no comprehension of the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Can explain in very simple and basic terms sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a very weak understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a weak understanding of sustainability issues the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a poor understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a fair understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a good understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Demonstrates a very good understanding of sustainability issues and the usefulness of a waste which is appropriately treated to reduce the pollutants load.	Has a thorough understanding of sustainability issues and a deep comprehension of the usefulness of a waste which is appropriately treated to reduce the pollutants load.
B. Gain a comprehensive view of the environment and energy relationship.	**Introduction to Sustainability Renewable Technologies Advanced Wastewater Treatment**	Conveys little understanding of the relationship between environment and energy.	Can explain in very simple and basic terms the relationship between environment and energy.	Demonstrates a very weak understanding of the relationship between environment and energy.	Understands the relationship between environment and energy at a week level.	Poorly understands the relationship between environment and energy.	Fairly understands the relationship between environment and energy.	Understands the relationship between environment and energy at a good level.	Understands the relationship between environment and energy at a very good level.	Has a deep understanding of the relationship between environment and energy.
C. Perform an environmental assessment for the optimal energy solution.	**Introduction to Sustainability Renewable Technologies Advanced Wastewater Treatment**	Is unable to effectively perform an environmental assessment for the optimal energy solution.	May perform basic environmental assessment for the optimal energy solution.	Is able to perform an environmental assessment for the optimal energy solution at a very weak level.	Is able to perform an environmental assessment for the optimal energy solution at a weak level.	Is able to perform an environmental assessment for the optimal energy solution at a poor level.	Is able to perform an environmental assessment for the optimal energy solution at a fair level.	Is able to perform an environmental assessment for the optimal energy solution at a good level.	Displays a thorough ability to perform an environmental assessment for the optimal energy solution.	Uses deep knowledge to perform an environmental assessment for the optimal energy solution.
D. Acquire knowledge on waste treatment with new, environmentally friendly technologies. Determine the optimum process to improve efficiency and achieve better waste disposal after treatment.	**Introduction to Sustainability Renewable Technologies Advanced Wastewater Treatment**	Is neither able to identify any new, environmentally friendly treatment technology, nor to determine the optimum process to efficiently improve and achieve better waste disposal after treatment.	Is able to identify one or more new, environmentally friendly treatment technologies, while is unable to determine the optimum process to efficiently improve and achieve better waste disposal after treatment.	Can identify new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment, at a very weak level.	Can identify new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment, at a weak level.	Can identify new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment, at a poor level.	Can identify new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment, at a fair level.	Can identify new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment, at a good level.	Demonstrates a very good knowledge on new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment.	Has a thorough familiarity with key knowledge on new, environmentally friendly treatment technologies, and may determine the optimum process to efficiently improve and achieve better waste disposal after treatment.

Learning Outcomes #3 – Stream 2. Environmental Management, Policy, Finance and Green Accounting

	Courses	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D 50-54% Description: Pass Quality Points: 1.00	Grade: C- 55-59% Description: Pass Quality Points: 2.00	Grade: C 60-64% Description: Pass Quality Points: 2.0	Grade: C+ 65-69% Description: Pass Quality Points: 2.60	Grade: B- 70-74% Description: Pass Quality Points: 3.00	Grade: B 75-79% Description: Pass Quality Points: 3.30	Grade: B+ 80-84% Description: Pass Quality Points: 3.60	Grade: A 85-100% Description: Pass Quality Points: 4.0
A. Develop their knowledge, understanding and skills in green and sustainable Accounting, Economics and Accountability.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Conveys little understanding and knowledge, as well limited skills in green and sustainable accounting, economics and accountability.	Can articulate on general principles of sustainable accounting, economics and accountability, and has some basic skills.	Has very weak knowledge, understanding, and developed skills in green and sustainable accounting, economics and accountability.	Has weak knowledge, understanding, and developed skills in green and sustainable accounting, economics and accountability.	Has poor knowledge, understanding, and developed skills in green and sustainable accounting, economics and accountability.	Has fair knowledge, understanding, and developed skills in green and sustainable accounting, economics and accountability.	Has a good knowledge, understanding, and good developed skills in green and sustainable accounting, economics and accountability.	Has a very good knowledge, understanding, and very good developed skills in green and sustainable accounting, economics and accountability.	Has deep knowledge, thorough understanding, and developed skills in green and sustainable accounting, economics and accountability.
B. Increase their knowledge and understanding of the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Conveys little capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Can explain in very simple and basic terms the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a very weak capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a weak capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a poor capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a fair capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a good capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates a very good capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.	Demonstrates an excellent capacity to identify the range of green and sustainable products and services in Green Accounting, Economics, Banking and Insurance sectors.
C. Raise awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Is not aware of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	May recognize basic and obvious issues of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a very weak awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a very weak awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a poor awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a fair capacity awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a good awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Demonstrates a very good awareness of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.	Is deeply aware of the role of the financial sector and financial professionals in supporting the transition to a low carbon world.
D. Understand the main causes of environmental noise production and its negative effects, then learn about the	**Principles of Green Accounting and Economics Environmental Legislation and Policy**	Conveys little understanding of the main causes of environmental noise production and its negative effects, as well	Can explain in very simple and basic terms the main causes of environmental noise production and its negative effects, as well	Demonstrates a very weak understanding of the main causes of environmental noise production and its negative	Demonstrates a weak understanding of the main causes of environmental noise production and its negative	Demonstrates a poor understanding of the main causes of environmental noise production and its negative	Demonstrates a fair understanding of the main causes of environmental noise production and its negative	Demonstrates a good understanding of the main causes of environmental noise production and its negative	Demonstrates a very good understanding of the main causes of environmental noise production and its negative	Has deep knowledge of the main causes of environmental noise production and its negative effects, as well

main objectives of the Environmental Noise Framework Directive and related legislation.	**Environmental Risk Management**	as on the main objectives of the Environmental Noise Framework Directive and related legislation.	as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	effects, as well as on the main objectives of the Environmental Noise Framework Directive and related legislation.	as on the main objectives of the Environmental Noise Framework Directive and related legislation.
E. Approach key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Conveys little understanding and knowledge, of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Can generally articulate on key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has very weak understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has weak understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has poor understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has fair understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has a good understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has a very good understanding of key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.	Has a thorough familiarity with key features of environmental policy, so that knowledge and principles can then be promoted to social groups and institutionalized organizations involved in environmental issues.
F. Know the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Does not demonstrate an understanding of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Is able to identify some characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives, but in very basic and simple terms.	Displays a very weak knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Displays a weak knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Displays a poor knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Displays a fair knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Displays a good knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Displays a thorough knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.	Has deep knowledge of the characteristics of environmental policy in the framework of the Common Agricultural Policy, EU decisions on climate change and energy, the role of the green economy and environmental objectives.
G. Understand the principles of environmental policy, on which environmental	**Principles of Green Accounting and Economics Environmental**	Conveys little understanding of the principles of environmental policy, on which	Can generally articulate on the principles of environmental policy, on which environmental	Has very weak understanding of the principles of environmental policy, on which	Has weak understanding of the principles of environmental policy, on which	Has poor understanding of the principles of environmental policy, on which	Has fair understanding of the principles of environmental policy, on which	Has a good understanding of the principles of environmental policy, on which	Has a very good understanding of the principles of environmental policy, on which	Has a thorough familiarity with the principles of environmental policy, on which environmental

management is based.	**Legislation and Policy Environmental Risk Management**	environmental management is based.	management is based.	environmental management is based.	environmental management is based.	environmental management is based.	environmental management is based.	environmental management is based.	environmental management is based.	management is based.
H. Discuss and gain critical knowledge and potential of Green Accounting and Economics.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Conveys little understanding and knowledge of Green Accounting and Economics.	Can generally articulate on Green Accounting and Economics.	Has very weak understanding of Green Accounting and Economics.	Has weak understanding of Green Accounting and Economics.	Has poor understanding of Green Accounting and Economics.	Has fair understanding of Green Accounting and Economics.	Has a good understanding of Green Accounting and Economics.	Has a very good understanding of Green Accounting and Economics.	Has a thorough familiarity of Green Accounting and Economics.
I. Identify the stages of risk analysis.	**Principles of Green Accounting and Economics Environmental Legislation and Policy Environmental Risk Management**	Is not able to identify the stages of risk analysis.	May be able to identify one or more stages of risk analysis.	Displays a very weak ability to identify the stages of risk analysis.	Displays a weak ability to identify the stages of risk analysis.	Displays a poor ability to identify the stages of risk analysis.	Displays a fair ability to identify the stages of risk analysis.	Displays a Has a good ability to identify the stages of risk analysis.	Displays a very good ability to identify the stages of risk analysis.	Displays a deep ability to identify the stages of risk analysis.

Learning Outcomes #4 – Stream 3. Environmental and Public Health

	Courses	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D 50-54% Description: Pass Quality Points: 1.00	Grade: C- 55-59% Description: Pass Quality Points: 2.00	Grade: C 60-64% Description: Pass Quality Points: 2.0	Grade: C+ 65-69% Description: Pass Quality Points: 2.60	Grade: B- 70-74% Description: Pass Quality Points: 3.00	Grade: B 75-79% Description: Pass Quality Points: 3.30	Grade: B+ 80-84% Description: Pass Quality Points: 3.60	Grade: A 85-100% Description: Pass Quality Points: 4.0
A. Understand the structure and physiology of different kinds of microorganisms (bacteria, fungi, protozoa, viruses), their biodiversity and their interactions with the environment.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Can explain in very simple and basic terms, microbial biodiversity, the structure and physiology of different kinds of microorganisms, and their interactions with the environment.	Displays a very weak knowledge of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Displays a weak knowledge of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Displays a poor knowledge of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Displays a fair knowledge of the characteristics of structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Displays a good knowledge of the characteristics of structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Displays a thorough knowledge of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.	Has deep knowledge of the structure and physiology of different kinds of microorganisms, their biodiversity and their interactions with the environment.
B. Understand key issues related to metabolism, including the concepts of aerobic and anaerobic respiration.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of metabolism, including the concepts of aerobic and anaerobic respiration.	Is able to identify metabolism, including the concepts of aerobic and anaerobic respiration, at a very basic level.	Can identify metabolism, including the concepts of aerobic and anaerobic respiration, at a very weak level.	Can identify metabolism, including the concepts of aerobic and anaerobic respiration, at a weak level.	Can identify metabolism, including the concepts of aerobic and anaerobic respiration, at a poor level.	Can identify metabolism, including the concepts of aerobic and anaerobic respiration, at a fair level.	Can identify metabolism, including the concepts of aerobic and anaerobic respiration, at a good level.	Demonstrates a very good knowledge on metabolism, including the concepts of aerobic and anaerobic respiration.	Has a thorough familiarity with key knowledge on metabolism, including the concepts of aerobic and anaerobic respiration.
C. Know basic genetics, including transcription and translation.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Conveys little understanding and knowledge of basic genetics, including transcription and translation.	Can generally articulate on basic genetics, including transcription and translation.	Has very weak understanding of basic genetics, including transcription and translation.	Has weak understanding of basic genetics, including transcription and translation.	Has poor understanding of basic genetics, including transcription and translation.	Has fair understanding of basic genetics, including transcription and translation.	Has a good understanding of basic genetics, including transcription and translation.	Has a very good understanding of basic genetics, including transcription and translation.	Has a thorough familiarity of basic genetics, including transcription and translation.
D. Understand microbial ecology in relation to microbial interactions, succession, and community development.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Does not demonstrate an understanding of microbial ecology in relation to microbial interactions, succession, and community development.	Displays an understanding of microbial ecology in relation to microbial interactions, succession, and community development, but in very basic and simple terms.	Displays a very weak knowledge of microbial ecology in relation to microbial interactions, succession, and community development.	Displays a weak knowledge of microbial ecology in relation to microbial interactions, succession, and community development.	Displays a poor knowledge of microbial ecology in relation to microbial interactions, succession, and community development.	Displays a fair knowledge of microbial ecology in relation to microbial interactions, succession, and community development.	Displays a good knowledge of microbial ecology in relation to microbial interactions, succession, and community development.	Displays a thorough microbial ecology in relation to microbial interactions, succession, and community development.	Has deep knowledge of microbial ecology in relation to microbial interactions, succession, and community development.
E. Know the basic principles	**Environmental Microbiology**	Conveys little understanding	Can generally articulate on the	Has very weak understanding	Has weak understanding	Has poor understanding	Has fair understanding	Has a good understanding	Has a very good understanding	Has a thorough familiarity of

of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	**Environmental Chemistry Environmental Pollution and Health Protection**	and knowledge of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	of the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.	the basic principles of microbial growth and their role in nutrient recycling, pollutant biodegradation processes and various biotechnological applications.
F. Familiarize with classic and modern microbiological analysis techniques.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of the classic and modern microbiological analysis techniques.	Can explain in very simple and basic terms, classic and modern microbiological analysis techniques.	Displays a very weak knowledge of classic and modern microbiological analysis techniques.	Displays a weak knowledge of classic and modern microbiological analysis techniques.	Displays a poor knowledge of classic and modern microbiological analysis techniques.	Displays a fair knowledge of classic and modern microbiological analysis techniques.	Displays a good knowledge of classic and modern microbiological analysis techniques.	Displays a thorough knowledge of classic and modern microbiological analysis techniques.	Has a deep familiarity with classic and modern microbiological analysis techniques.
G. Familiarize with toxicology. Describe the general mechanisms of toxicity for causing effects on human health following environmental exposure.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Conveys little understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Can generally articulate on toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has very weak understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has weak understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has poor understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has fair understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has a good understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has a very good understanding of toxicology, and the general mechanisms of toxicity for causing effects on human health following environmental exposure.	Has a thorough familiarity with toxicology, and a deep knowledge of the general mechanisms of toxicity for causing effects on human health following environmental exposure.
H. Know environmental management policies and practices.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of environmental management policies and practices.	Can generally articulate on environmental management policies and practices.	Displays a very weak knowledge of environmental management policies and practices.	Displays a weak knowledge of environmental management policies and practices.	Displays a poor knowledge of environmental management policies and practices.	Displays a fair knowledge of environmental management policies and practices.	Displays a good knowledge of environmental management policies and practices.	Displays a thorough environmental management policies and practices.	Has deep knowledge of environmental management policies and practices.
I. Evaluate laboratory analytical data of various parameters related to pollution.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not able to evaluate laboratory analytical data of various parameters related to pollution.	May be able to evaluate laboratory analytical data of various parameters related to pollution but a very basic level.	Displays a very weak ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a weak ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a poor ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a fair ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a Has a good ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a very good ability to evaluate laboratory analytical data of various parameters related to pollution.	Displays a deep ability to evaluate laboratory analytical data of various parameters related to pollution.
J. Familiarize with the types of pollution (air, soil and	**Environmental Microbiology Environmental Chemistry**	Conveys little understanding and knowledge, of the types of	Can generally articulate on of the types of pollution, and of	Has very weak understanding of the types of pollution, and of	Has weak understanding of the types of pollution, and of	Has poor understanding of the types of pollution, and of	Has fair understanding of the types of pollution, and of	Has a good understanding of the types of pollution, and of	Has a very good understanding of the types of pollution, and of	Has a thorough familiarity with the types of pollution, and a

water pollution), and evaluate environmental health stressors in the context of health effects triggering.	**Environmental Pollution and Health Protection**	pollution, and of environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	environmental health stressors in the context of health effects triggering.	deep evaluation of environmental health stressors in the context of health effects triggering.
K. Familiarize with environmental and molecular epidemiology.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of environmental and molecular epidemiology.	May recognize basic issues of environmental and molecular epidemiology.	Demonstrates a very weak awareness of environmental and molecular epidemiology.	Demonstrates a very weak awareness of environmental and molecular epidemiology.	Demonstrates a poor awareness of environmental and molecular epidemiology.	Demonstrates a fair capacity awareness of environmental and molecular epidemiology.	Demonstrates a good awareness of environmental and molecular epidemiology.	Demonstrates a very good awareness of environmental and molecular epidemiology.	Has a thorough familiarity with environmental and molecular epidemiology.
L. Use risk analysis and risk assessment tools and techniques in environmental health management.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not able to apply risk analysis and risk assessment tools and techniques in environmental health management.	Conveys little capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a very weak capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a weak capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a poor capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a fair capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a good capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates a very good capacity to apply risk analysis and risk assessment tools and techniques in environmental health management	Demonstrates an excellent capacity to apply risk analysis and risk assessment tools and techniques in environmental health management
M. Plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not able to evaluate laboratory analytical data of various parameters related to pollution.	May be able to plan the remediation of contaminated areas by choosing the appropriate methods considering costs at a very basic level.	Displays a very weak ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a weak ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a poor ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a fair ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a Has a good ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a very good ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.	Displays a deep ability to plan the remediation of contaminated areas by choosing the appropriate methods considering costs.
N. Know sustainable solutions to environmental problems with an emphasis on green chemistry applications.	**Environmental Microbiology Environmental Chemistry Environmental Pollution and Health Protection**	Is not aware of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Can explain in very simple and basic terms, sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a very weak knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a weak knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a poor knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a fair knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a good knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Displays a thorough knowledge of sustainable solutions to environmental problems with an emphasis on green chemistry applications.	Has a deep familiarity with sustainable solutions to environmental problems with an emphasis on green chemistry applications.

Learning Outcomes #5 – Research Project

	Courses	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D 50-54% Description: Pass Quality Points: 1.00	Grade: C- 55-59% Description: Pass Quality Points: 2.00	Grade: C 60-64% Description: Pass Quality Points: 2.0	Grade: C+ 65-69% Description: Pass Quality Points: 2.60	Grade: B- 70-74% Description: Pass Quality Points: 3.00	Grade: B 75-79% Description: Pass Quality Points: 3.30	Grade: B+ 80-84% Description: Pass Quality Points: 3.60	Grade: A 85-100% Description: Pass Quality Points: 4.0
	Research Project	Demonstrates limited attention to the requirements of assignments, is unable to communicate information obtained from various sources, and cannot effectively apply qualitative and quantitative analysis methods.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a very basic level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a very weak level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a weak level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a poor level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a fair level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a good level.	Demonstrates attention to the requirements of assignments, is able to communicate information obtained from various sources, and can apply qualitative and quantitative analysis methods at a very good level.	Demonstrates high attention to the requirements of assignments, is highly able to communicate information obtained from various sources, and can effectively apply qualitative and quantitative analysis methods.

Marking Scheme – Essay

	Essay	Grade: F Below 50% Description: Fail Quality Points: None	Grade: D 50-54% Description: Pass Quality Points: 1.00	Grade: C- 55-59% Description: Pass Quality Points: 2.00	Grade: C 60-64% Description: Pass Quality Points: 2.0	Grade: C+ 65-69% Description: Pass Quality Points: 2.60	Grade: B- 70-74% Description: Pass Quality Points: 3.00	Grade: B 75-79% Description: Pass Quality Points: 3.30	Grade: B+ 80-84% Description: Pass Quality Points: 3.60	Grade: A 85-100% Description: Pass Quality Points: 4.0
	Knowledge and understanding	Demonstrates limited and inadequate knowledge of the topic to meet learning outcomes.	Demonstrates some knowledge of the topic to meet learning outcomes but at a very basic level.	Demonstrates some knowledge of the topic to meet learning outcomes but at a very weak level.	Demonstrates some knowledge of the topic to meet learning outcomes but at a weak level.	Demonstrates some knowledge of the topic to meet learning outcomes but at a poor level.	Displays acceptable knowledge of the topic to meet learning outcomes at a fair level.	Displays relevant knowledge of the topic to meet learning outcomes at a good level.	Displays relevant and sound knowledge and understanding of the topic to meet learning outcomes at a very good level.	Demonstrates a deep comprehension of the topic.
	Analysis	The analysis is non critical and is descriptive.	The analysis is generally descriptive and non-proper material is used.	The analysis is mainly descriptive and drives to incorrect conclusions.	The analysis is generally acceptable with limited descriptive parts, and drives to some correct conclusions.	The analysis is generally acceptable, and drives to few correct conclusions which have to be enriched.	The analysis is acceptable, and drives to correct conclusions but there is space for further work to produce more outcomes.	The analysis is acceptable, and drives to correct conclusions supported by a good discussion using knowledge of the module.	The analysis is very good, drives to correct conclusions and is supported by knowledge offered by the module.	The essay shows a sophisticated analysis supported by knowledge offered by the module.
	Reading and referencing	Reading and referencing is very poor and/or incorrect.	Reading and referencing is poor and/or incorrect.	Reading and referencing is overall very weak.	Reading and referencing is overall weak.	Reading and referencing is overall poor and have to be enriched.	Reading and referencing is generally fair.	Reading and referencing is good and accurate.	Reading is wide and rich and referencing is accurate.	The essay is appropriately supported by up to date bibliography and referencing is appropriate.
	Essay structure	It displays a missing general planning.	It displays some structure but key issues are missing and there is some repetition.	It displays an overall structure which needs improvements.	It displays an overall structure which needs improvements.	It displays an overall structure which is relevant to the title.	It displays an overall fair structure which is relevant to the title.	It displays an overall good structure which is relevant to the title and may support productive discussions.	It displays an overall very good structure which is relevant to the title and supports coherent discussions and argument.	It displays an excellent structure which supports stimulating discussions.
	Use of language	The use of language is poor and inappropriate for a scientific essay.	Grammar and sentence construction need to be extensively considered for better meaning.	The written is weak and needs extensive editing.	The written work is weak and needs extensive editing.	The written work is poor and needs to be revised though careful editing.	The written work is fair but there is space for further revisions and editing to correct some grammatical errors.	The essay is good with limited grammatical errors and an overall appropriate academic style.	The essay is very good with no grammatical errors and an overall appropriate academic style.	The essay is excellent with no grammatical errors and an overall appropriate academic style.

APPENDIX 11

Curriculum Mapping Guide

Curriculum Mapping

Key: "I"=Introduced; "R"=reinforced and opportunity to practice; "M"=mastery at the senior or exit level; "A"=assessment evidence collected

LEARNING OUTCOMES (I = Introduce; R = Reinforce; M = Mastery and A = Assessment Opportunity)	**REQUIRED COURSES**													
	ENV-110	ENV-111	ENV-112	CNS-112	ENV-120	ENV-121	ENV-122	ENV-124	ENV-125	ENV-126	ENV-127	ENV-128	ENV-129	ENV-300
Understand and analyse in depth the effects of the presence of toxic and hazardous waste on the environment	I	R	R	A						R	R	I	R	M
Application of decontamination technologies either through conventional methods or with new technologies as well as a combination for the protection of the environment.		I		R			M							A
Familiarization and deepening the role of science and society in dealing					I			I	I	R			R	

	with environmental risks														
	Acquisition of specialized knowledge that a waste is useful with the appropriate treatment to reduce the pollutant load			R	A	I		M							A
	Understanding basic issues of toxicology. Description of general toxicity mechanisms for the effects on human health following environmental exposure											R	I	M	A
	Identify, analyse, synthesize and evaluate environmental health stressors and understand the ways in which they can affect health	I									R			M	A

APPENDIX 12

Distance Learning Instructor'
(3-day)
Training Seminar

DISTANCE LEARNING INSTRUCTORS'
TRAINING SEMINAR
Open and Distance Education

First Day	
Ώρα/ Time	**Θεματολογία Topics**
09:00	**Αλληλογνωριμία** i. Εισαγωγικά ii. Στόχοι Σεμιναρίου iii. Ποιότητα στην εξ αποστάσεως εκπαίδευση iv. Χαρακτηριστικά ενήλικων σπουδαστών και Εξ αποστάσεως Εκπαίδευση **Introduction** i. Quotation marks ii. Seminar Objectives iii. Quality in distance education iv. Characteristics of Adult Students and Distance Education
11.30	**Παρουσίαση Εργαλείων Τηλεκπαίδευσης** **Παρουσίαση των βασικών Τεχνολογιών Πληροφορίας και Επικοινωνίας που χρησιμοποιούνται σήμερα στην εξ αποστάσεως εκπαίδευση** • E-mail • Ιστοσελίδες • Ψηφιακά αποθετήρια • Fora • Εργαλεία web 2.0 (social networks, wikis, blogging) **Presentation of Distance Learning Tools** **Presentation of the basic Information and Communication Technologies used today in distance education** • E-mail • Websites • Digital repositories • Fora • Web 2.0 tools (social networks, wikis, blogging)

Second Day	
09.00	**Η αναγκαιότητα του εκπαιδευτικού υλικού και οι ιδιαιτερότητές του** **Μεθοδολογία οργάνωσης Ο.Σ.Σ / ΟΣΤ** **Συσχετισμός με τις αρχές της ΑεξΑΕ και της Εκπαίδευσης Ενηλίκων** • Στοιχεία μιας ΟΣΣ • Εναλλακτικά σενάρια στις ΟΣΣ • Επικοινωνία ΣΕΠ – φοιτητών ενδιάμεσα των ΟΣΣ _____ **The necessity of the educational material and its peculiarities** **Group Counselling Meetings (GCM) organization methodology** **Correlation with the principles of Distance Education and Adult Education** • Elements of an GCM • Alternative scenarios in GCM • Communication of Adjunct Professor - students between GCM
Third day	
09.00	**Αξιολόγηση του τρόπου με τον οποίο οι διδάσκοντες αξιολογούν τις γραπτές εργασίες** • Σχολιασμός / αξιολόγηση γραπτών εργασιών • Λογοκλοπία **Δικαιώματα και Υποχρεώσεις Μελών ΣΕΠ** _____ **Evaluate the way in which professors evaluate written assignments** • Commentary / evaluation of written assignments • Plagiarism **Rights and Obligations of Adjunct Professor**

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