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# External Evaluation Report (E-learning programme of study)

- **Higher Education Institution:**  
European University Cyprus
- **Town:** Nicosia
- **School/Faculty (if applicable):** School of Science
- **Department/ Sector:** Department of Life Science
- **Programme of study- Name (Duration, ECTS, Cycle)**

## In Greek:

“Φαρμακευτικές Βιοεπιστήμες και Ανάπτυξη  
Φαρμάκων (18 Μήνες/90 ECTS, Μεταπτυχιακό)” Εξ’  
Αποστάσεως

## In English:

Drug Biosciences and Pharmaceutical Development  
(18 Months/90 ECTS, Master of Science) E-learning

- **Language(s) of instruction:** English and Greek
- **Programme’s status:** New
- **Concentrations (if any):**

**In Greek:** Concentrations



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].

In English: Concentrations

## A. Introduction

*This part includes basic information regarding the onsite visit.*

Members of the External Evaluation Committee (EEC) reviewed and examined the Accreditation Programme of Study (Application for Evaluation and other accreditation reports) provided by the School of Science at the European University Cyprus (EUC) relating to the MSc in Drug Biosciences & Pharmaceutical Development. The EEC members evaluated the submitted documents individually before visit on-site on the 22<sup>nd</sup> May 2023. The visit of the EEC in the EUC campus took place on May 22 2023 following a tight but well organized schedule. Throughout the day the committee met with the EUC representative, academic teachers, students and administrators. The committee was able to visit the learning, teaching, and accommodation facilities. The EEC members were first briefed by the EUC representative, Prof. Loizos Symeou, the Vice-Rector of Academic Affairs and Chair of the Committee of Internal Quality Assurance, and subsequently met with Prof. Marios Vryonides, the Vice-Rector of Research and External Affairs, Prof. Panos Papageorgis, the Dean of the School of Science, Dr. Anastasios Theodorou, Chairperson of the Department of Life Science and Dr. Vasiliki Gkretsi, Faculty Representative of the Departmental Committee of IQA. Next, Prof. Panos Papageorgis presented the structure and governance, mission and vision of the EUC. Consecutively the EEC members met with the Head of the relevant department. Dr. Anastasios Theodorou who presented the Department's structure. The Department's profile, mission and vision, strategic planning, academic staff structure, student profile, research activity, infrastructure, student academic support, mobility, service to the society, and SWOT analysis were presented. After each presentation, there was discussion with participation of the academic teachers physically present. After a short break, Dr. Athanasios Metaxas, Coordinator of the program presented the methodology and equipment used in teaching and learning i.e. hardware materials, online platform, teaching material, evaluation methods, projects, samples of written examinations and SWOT analysis. Afterwards, there was a discussion with participation of the academic teachers present. Next, the EEC met only with members of the teaching staff on each course and discuss the CVs, as well as the members of the administrative staff. Finally, the EEC members again met with the Head of the relevant department and the programme's Coordinator to summarise the previous discussions. After a working lunch of the EEC members, with the CYQAA Officer George Aletraris, the EEC members met with representatives of the students to discuss various aspects related to studies and student life. In the late afternoon, a guided tour to the campus was done, where the EEC could inspect all facilities including the classroom and laboratories. During the visit at the EUC,

the EEC was given access to all additional material as requested, including study programs, the curricula vitae of all teachers, study guide, and documents relevant to the EUC structure. The reception of the EEC by European University Cyprus was excellent and all staff and students were particularly cooperative and willing to support the evaluation procedure, providing any material requested and answering all questions posed by the EEC members. Based on the provided information, namely the accreditation report, and the visit on site, the EEC can conclude that the School of Sciences and the program being evaluated have good standards and meet the quality expectations (pending adoption of recommendations). This evaluation report describes how the standards are met and provides additional recommendations for improving the program.

## B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
<b>Tomasz Pawiński</b>	Professor	Medical University of Warsaw, Poland
<b>Marie L (Marieke) De Bruin</b>	Professor	Utrecht University, The Netherlands
<b>Natalie Ferry</b>	Senior Lecturer	University of Salford, UK
<b>Stylianos Hatzipanagos</b>	Professor	University of London, UK
<b>Niki Makri</b>	Student representative	University of Cyprus

## C. Guidelines on content and structure of the report

- *The external evaluation report follows the structure of assessment areas.*
- *At the beginning of each assessment area there is a box presenting:*
  - (a) *sub-areas*
  - (b) *standards which are relevant to the European Standards and Guidelines (ESG)*
  - (c) *some questions that EEC may find useful.*
- *The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.*
- *Under each assessment area, it is important to provide information regarding the compliance with the requirements of each sub-area. In particular, the following must be included:*

### **Findings**

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

### **Strengths**

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

### **Areas of improvement and recommendations**

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- *The EEC should state the compliance for each sub-area (Non-compliant, Partially compliant, Compliant), which must be in agreement with everything stated in the report. It is pointed out that, in the case of standards that cannot be applied due to the status of the HEI and/or of the programme of study, N/A (= Not Applicable) should be noted.*
- *The EEC should state the conclusions and final remarks regarding the programme of study as a whole.*
- **The report may also address other issues which the EEC finds relevant.**

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

### **Sub-areas**

- 1.1 Policy for quality assurance**
- 1.2 Design, approval, on-going monitoring and review**
- 1.3 Public information**
- 1.4 Information management**

### **1.1 Policy for quality assurance**

#### **Standards**

- *Policy for quality assurance of the programme of study:*
  - *has a formal status and is publicly available*
  - *supports the organisation of the quality assurance system through appropriate structures, regulations and processes*
  - *supports teaching, administrative staff and students to take on their responsibilities in quality assurance*
  - *ensures academic integrity and freedom and is vigilant against academic fraud*
  - *guards against intolerance of any kind or discrimination against the students or staff*
  - *supports the involvement of external stakeholders*

### **1.2 Design, approval, on-going monitoring and review**

#### **Standards**

- *The programme of study:*
  - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
  - *is designed by involving students and other stakeholders*
  - *benefits from external expertise*
  - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)*
  - *is designed so that it enables smooth student progression*
  - *is designed so that the exams' and assignments' content corresponds to the level of the programme and the number of ECTS*
  - *defines the expected student workload in ECTS*
  - *includes well-structured placement opportunities where appropriate*
  - *is subject to a formal institutional approval process*

- *results in a qualification that is clearly specified and communicated, and refers to the correct level of the National Qualifications Framework for Higher Education and, consequently, to the Framework for Qualifications of the European Higher Education Area*
- *is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date*
- *is periodically reviewed so that it takes into account the changing needs of society, the students' workload, progression and completion, the effectiveness of procedures for assessment of students, student expectations, needs and satisfaction in relation to the programme*
- *is reviewed and revised regularly involving students and other stakeholders*

### 1.3 Public information

#### Standards

- *Regarding the programme of study, clear, accurate, up-to date and readily accessible information is published about:*
  - *selection criteria*
  - *intended learning outcomes*
  - *qualification awarded*
  - *teaching, learning and assessment procedures*
  - *pass rates*
  - *learning opportunities available to the students*
  - *graduate employment information*

### 1.4 Information management

#### Standards

- *Information for the effective management of the programme of study is collected, monitored and analysed:*
  - *key performance indicators*
  - *profile of the student population*
  - *student progression, success and drop-out rates*
  - *students' satisfaction with their programmes*
  - *learning resources and student support available*
  - *career paths of graduates*
- *Students and staff are involved in providing and analysing information and planning follow-up activities.*



*You may also consider the following questions:*

- *What is the procedure for quality assurance of the programme and who is involved?*
- *Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?*
- *How/to what extent are students themselves involved in the development of the content of their studies?*
- *Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?*
- *Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?*
- *How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?*
- *How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?*
- *What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?*
- *How long does it take a student on average to graduate? Is the graduation rate for the study programme analogous to other European programmes with similar content? What is the pass rate per course/semester?*
- ***How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?***
- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*
- *Have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

General findings include:

### 1.1 Policy for quality assurance

- The committee finds that QA procedures at EUC are robust, both for both new programmes and continuous monitoring.
- Course content is subject to quality assurance processes at the university.

### 1.2 Design, approval, on-going monitoring and review

- The new program “Drug Biosciences and Pharmaceutical Development” is to create something that is strictly dedicated to discovery and early development of new medicines.
- The program focuses on pre-clinical development of new drugs with elective modules that consider the broader drug life-cycle perspective.
- The course content reflects current active research areas.
- The program is well-designed and coherent, with clear aims and objectives.
- The semester structure is clearly outlined across the 18 months of the program.
- Students follow compulsory courses and can choose from two elective courses
- There is a plan for delivery as e-learning with detailed study guides.

### 1.3 Public information

- As it is a new program, it has not a formal status and it is not publicly available. The program appears to comply with the purposes of higher education of the Council of Europe.

### 1.4 Information management

- The program`s information is effectively managed.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

- A good planned use of online resources to engage students. The blackboard ULTRA virtual learning environment offers a helpful and innovative mechanism to organise learning materials and interactive activities.
- The multi-disciplinary teaching team is enthusiastic, dedicated to the teaching and research activities in general and for their duties.
- They seem to have good connections with potential external stakeholders
- The facilities and laboratory equipment are new and sufficient.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- EUC must manage student expectations regarding the option of hybrid teaching with practice elements in the lab. This should be explicit in all materials to clarify that on-campus research project is an option.
- We recommend that the project module does not offer ‘literature review’ as an online student alternative for a ‘wet lab’ project, but rather that it would be replaced with:
  - a) ‘dry lab’ (computational research) with data collection or
  - b) systematic review (with clear methodology, e.g. PRISMA)

This would enable ALL students to meet the learning outcomes of the Masters thesis.

- The number of elective subjects should be increased, to give students the possibility to get acquainted with topics covering a broader drug life-cycle perspective. One could consider existing courses in other programs, e.g. public health, medicine or (health) law. In addition to a research methods elective for those students who choose the research project option.
- The literature dedicated to “Drug Design and small molecule synthesis” course presented in course description is rather old, from the end of the twentieth century. In opinion of EEC should be updated. The proposal is: R. Hill “Drug Discovery and Development” 3<sup>rd</sup> Ed. 2021, Elsevier ; EH Kerns “Drug-like Properties. Concept, Structure Design, and Methods” 2016, Academic Press ; S. Hongmao “Practical Guide to rationale Drug Design” 2015 Elsevier Science & Technology.
- The professional software for Drug design should be explicitly incorporated into modules (as appropriate) to map to support for dry project.

**Please select what is appropriate for each of the following sub-areas:**

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
1.1	Policy for quality assurance	Compliant
1.2	Design, approval, on-going monitoring and review	Partially compliant
1.3	Public information	Not applicable
1.4	Information management	Compliant

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

### **Sub-areas**

**2.1 Process of teaching and learning and student-centred teaching methodology**

**2.2 Practical training**

**2.3 Student assessment**

**2.4 Study guides structure, content and interactive activities**

### **2.1 Process of teaching and learning and student-centred teaching methodology**

#### **Standards**

- *The e-learning methodology is appropriate for the particular programme of study.*
- *Expected teleconferences for presentations, discussion and question-answer sessions, and guidance are set.*
- *A specific plan is developed to safeguard and assess the interaction:*
  - *among students*
  - *between students and teaching staff*
  - *between students and study guides/material of study*
- *Training, guidance and support are provided to the students focusing on interaction and the specificities of e-learning.*
- *The process of teaching and learning supports students' individual and social development.*
- *The process of teaching and learning is flexible, considers different modes of e-learning delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.*
- *Students are encouraged to take an active role in creating the e-learning process.*
- *The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.*
- *Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.*
- *Mutual respect within the learner-teacher relationship is promoted.*
- *The implementation of student-centred learning and teaching respects and attends to the diversity of students and their needs, enabling flexible learning paths.*
- *Appropriate procedures for dealing with students' complaints regarding the process of teaching and learning are set.*

### **2.2 Practical training**

#### **Standards**

- *Practical and theoretical studies are interconnected.*
- *The organisation and the content of practical training, if applicable, support achievement of planned learning outcomes and meet the needs of the stakeholders.*

## 2.3 Student assessment

### Standards

- *A complete assessment framework is designed, focusing on e-learning methodology, including clearly defined evaluation criteria for student assignments and the final examination.*
- *Assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures.*
- *Assessment is appropriate, transparent, objective and supports the development of the learner.*
- *The criteria for the method of assessment, as well as criteria for marking, are published in advance.*
- *Assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the e-learning process.*
- *Assessment, where possible, is carried out by more than one examiner.*
- *A formal procedure for student appeals is in place.*
- *Assessors are familiar with existing testing and examination methods and receive support in developing their own skills in this field.*
- *The regulations for assessment take into account mitigating circumstances.*

## 2.4 Study guides structure, content and interactive activities

### Standards

- *A study guide for each course, fully aligned with e-learning philosophy and methodology and the need for student interaction with the material is developed. The study guide should include, for each course week / module, the following:*
  - *Clearly defined objectives and expected learning outcomes of the programme, of the modules and activities in an organised and coherent manner*
  - *Presentation of course material, and students' activities on a weekly basis, in a variety of ways and means (e.g. printed material, electronic material, teleconferencing, multimedia)*
  - ***Weekly schedule of interactive activities and exercises (i.e. simulations, problem solving, scenarios, argumentation)***
  - *Clear instructions for creating posts, discussion, and feedback*
  - *Self-assessment exercises and self-correction guide*
  - *Bibliographic references and suggestions for further study*
  - *Number of assignments/papers and their topics, along with instructions and additional study material*
  - *Synopsis*
- *Study guides, material and activities are appropriate for the level of the programme according to the EQF.*



*You may also consider the following questions:*

- Is the nature of the programme compatible with e-learning delivery?*
- How do the programme, the material, the facilities, and the guidelines safeguard the interaction between students, students and teaching staff, students and the material?*
- How many students upload their work and discuss it in the platform during the semester?*
- How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).*
- How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?*
- How is the development of students' general competencies (including digital skills) supported in educational activities?*
- How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?*
- Is the teaching staff using new technology in order to make the teaching process more effective?*
- How is it ensured that theory and practice are interconnected in teaching and learning?*
- How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?*
- Are students actively involved in research? How is student involvement in research set up?***
- How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?*
- Do students' assessments correspond to the European Qualifications Framework (EQF)?***
- How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?*
- How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

#### **2.1 Process of teaching and learning and student-centred teaching methodology**

The nature of the programme is compatible with distance learning delivery and the methodology provided is appropriate for the particular programme of study. The University's learning management system supports online teaching, learning and administrative processes. This structure comprises the VLE (Blackboard ULTRA) to provide both synchronous and asynchronous tools supporting interactive activities and a video conferencing tool (Blackboard Collaborate) to support online synchronous communication between students and tutors. This creates opportunities for student to student interaction and supports the group and peer review activities the program team has developed in the study guides (see also section 2.4).

## 2.2 Practical training

Induction sessions are organised by student support services at the University to induct students and familiarise them with the VLE and affordances of other technologies the program employs. There is strong evidence in the study guides that learning materials are designed following sequencing and building on knowledge.

## 2.3 Student assessment

The VLE platform provides formative e-assessment opportunities, through quizzes in order to assess students' knowledge. The student guide provides a mixture of self, formative and summative assessment building key competencies in communication and team work, however the provision of more complex forms of examination by e-assessment to assess competencies such as critical thinking was not shown. The final examinations for every course employs online exams (using a proctoring system to support academic integrity). Some of the courses are designed around an open book format. The EEC thought that both approaches (adoption of online exams and open book format) provided excellent opportunities to embed authentic assessment activities into the program from which students should certainly benefit.

## 2.4 Study guides structure, content and interactive activities

The study guides for the program demonstrate the significant amount of work the program team has put in their development, with clear learning outcomes, logical sequencing and presentation, including a week by week sequencing, employing mixed methods of engagement and assessment. The EEC has not seen the fully developed online environment as at the time of the visit the VLE of the program had not been developed. The team has been using VLE learning analytics tools to monitor student attendance and progression.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

- Most staff in the Department have had previous experience in delivering face-to-face or online courses and programs. As a result, they have a good understanding of the pedagogical opportunities and challenges of e-learning. They seem to be familiar with the affordances of technologies employed for the program.
- There is an established culture of continuous professional development which includes familiarisation with e-learning tools
- Course topics are innovative and relevant.
- The teaching and the administrative staff respect and attend to the diversity and the needs of students.
- The teaching tools reflect current developments in distance learning provision in the higher education sector.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- Safeguarding measures require development for online activities.
- Align module learning objectives (LOs) to EQF terminology. For example, for Masters study too many LOs are 'describe' or 'list', consider greater focus on 'evaluate' or 'apply'.
- The EEC has not seen relevant assessment documents, including grading criteria, marking guides and rubrics. The EUC should develop these.
- The team has been using VLE learning analytics tools to monitor student attendance and progression. There is a need for clearly articulated expectations of engagement and cut off point for support structures to be initiated.

Please select what is appropriate for each of the following sub-areas:

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
2.1	Process of teaching and learning and student-centred teaching methodology	Compliant
2.2	Practical training	Compliant
2.3	Student assessment	Partially compliant
2.4	Study guides structure, content and interactive activities	Partially compliant



### 3. Teaching staff (ESG 1.5)

#### **Sub-areas**

**3.1 Teaching staff recruitment and development**

**3.2 Teaching staff number and status**

**3.3 Synergies of teaching and research**

#### **3.1 Teaching staff recruitment and development**

##### **Standards**

- *Institutions ensure the competence of their teaching staff.*
- *Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.*
- *Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.*
- *The teaching staff is regularly engaged in professional and teaching-skills training and development.*
- *Training, guidance and support are provided to the teaching staff focusing on interaction and the specificities of e-learning.*
- *Promotion of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.*
- *Innovation in teaching methods and the use of new technologies is encouraged.*
- *Conditions of employment that recognise the importance of teaching are followed.*
- *Recognised visiting teaching staff participates in teaching the study programme.*

#### **3.2 Teaching staff number and status**

##### **Standards**

- *The number of the teaching staff is adequate to support the programme of study.*
- *The teaching staff status (rank, full/part time) is appropriate to offer a quality programme of study.*
- *Visiting staff number does not exceed the number of the permanent staff.*

#### **3.3 Synergies of teaching and research**

##### **Standards**

- *The teaching staff collaborate in the fields of teaching and research within the HEI and with partners outside (practitioners in their fields, employers, and staff members at other HEIs in Cyprus or abroad).*
- *Scholarly activity to strengthen the link between education and research is encouraged.*

- *The teaching staff publications are within the discipline.*
- *Teaching staff studies and publications are closely related to the programme's courses.*
- *The allocation of teaching hours compared to the time for research activity is appropriate.*

*You may also consider the following questions:*

- *Is the teaching staff qualified to teach in the e-learning programme of study?*
- *How are the members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?*
- *How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?*
- *Is teaching connected with research?*
- *Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?*
- *What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?*
- *Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

#### **3.1 Teaching staff recruitment and development**

The panel recognises that the new e-learning may require resource allocation to the team.

#### **3.2 Teaching staff number and status**

The teaching staff are enthusiastic and knowledgeable and this is certainly a strength of the program. Staff are active in research evidenced by publication and acquired funding. Teaching staff seem generally motivated to engage in research and would appear to have an ambition to produce high quality and impactful research.

Teaching staff lead modules that align with their individual research experience.

#### **3.3 Synergies of teaching and research**

The University provides certificated training programs to faculty members in the form of professional development workshops and seminars relevant to distance learning.

There is evidence that staff have external links to appropriable professional bodies and intent to invite external speakers from industry.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

The teaching staff seems to have regular and effective communication with their students and provide timely and have mechanisms in place to provide effective feedback to their students, including allocation of personal tutors for each student. The teaching staff appear to employ a variety of modern teaching methodologies and tools. Teaching is tied to the research interests of members of staff, so students are being taught by recognised experts in the field.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- Any continuous professional development staff activities should benefit from embedding in internal and external recognised professional frameworks (e.g. Advance HE) and providing certification to be used for career progression.
- The team would benefit from increased research resources.
- Allocation of personal tutors for each student should also be the norm for the e-learning cohort, including pastoral and academic support.

**Please select what is appropriate for each of the following sub-areas:**

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
<b>3.1</b>	Teaching staff recruitment and development	Compliant
<b>3.2</b>	Teaching staff number and status	Compliant
<b>3.3</b>	Synergies of teaching and research	Compliant

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

##### **Sub-areas**

- 4.1 Student admission, processes and criteria**
- 4.2 Student progression**
- 4.3 Student recognition**
- 4.4 Student certification**

##### **4.1 Student admission, processes and criteria**

###### **Standards**

- *Pre-defined and published regulations regarding student admission are in place.*
- *Access policies, admission processes and criteria are implemented consistently and in a transparent manner.*

##### **4.2 Student progression**

###### **Standards**

- *Pre-defined and published regulations regarding student progression are in place.*
- *Processes and tools to collect, monitor and act on information on student progression, are in place.*

##### **4.3 Student recognition**

###### **Standards**

- *Pre-defined and published regulations regarding student recognition are in place.*
- *Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.*
- *Appropriate recognition procedures are in place that rely on:*
  - *institutional practice for recognition being in line with the principles of the Lisbon Recognition Convention*
  - *cooperation with other institutions, quality assurance agencies and the national ENIC/NARIC centre with a view to ensuring coherent recognition across the country*

##### **4.4 Student certification**

###### **Standards**

- *Pre-defined and published regulations regarding student certification are in place.*

- *Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.*

*You may also consider the following questions:*

- *Are the admission requirements for the study programme appropriate? How is the students' prior preparation/education assessed (including the level of international students, for example)?*
- *How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?*
- *Is the certification of the HEI accompanied by a diploma supplement, which is in line with European and international standards?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

#### **4.1 Student admission, processes and criteria**

The EEC was able to review full policy documentation regarding student admissions and processes, they align with quality standards and expectations of HE. The panel additionally met with representatives of the administrative team who further outlined the functioning of policy and process and we are confident that robust procedures apply.

The language in which the program is offered is both in English and Greek. It is unclear though, whether students should master both languages or just one.

#### **4.2 Student progression**

As above (see 4.1). In addition, resit and retake opportunities are available.

There was no clear information available to the committee about student career pathways.

#### **4.3 Student recognition**

There is a clear process in place for recognising prior learning and work-based relevant experience when considering candidates for the program. The university adopts policies to promote the international mobility of the students of the program (via Erasmus).

#### **4.4 Student certification**

EEC is satisfied that policy and procedure as provided to us are fair and transparent.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

The admission, recognition and certification criteria are well defined.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

- There should be further clarity about the language requirements in order to register for this program. This will have a positive effect on the program teams' recruitment strategy. In the documentation the EEC has seen, this is described as both in Greek and English.
- Clear student career pathways should be provided to enhance the employability of the students completing the program.

Please select what is appropriate for each of the following sub-areas:

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
4.1	Student admission, processes and criteria	Compliant
4.2	Student progression	Compliant
4.3	Student recognition	Compliant
4.4	Student certification	Compliant

## 5. Learning resources and student support (ESG 1.6)

### Sub-areas

- 5.1 Teaching and Learning resources
- 5.2 Physical resources
- 5.3 Human support resources
- 5.4 Student support

### 5.1 Teaching and Learning resources

#### Standards

- *Weekly interactive activities per each course are set.*
- *The e-learning material and activities take advantage of the capabilities offered by the virtual and audio-visual environment and the following are applied:*
  - *Simulations in virtual environments*
  - *Problem solving scenarios*
  - *Interactive learning and formative assessment games*
  - *Interactive weekly activities with image, sound and unlimited possibilities for reality reconstruction and further processing based on hypotheses*

- *They have the ability to transfer students to real-life situations, make decisions, and study the consequences of their decisions*
  - *They help in building skills both in experiences and attitudes like in real life and also in experiencing - not just memorizing knowledge*
- *A pedagogical planning unit for e-learning, which is responsible for the support of the e-learning unit and addresses the requirements for study materials, interactive activities and formative assessment in accordance to international standards, is established.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose.*
- *Student-centred learning and flexible modes of e-learning and teaching, are taken into account when allocating, planning and providing the learning resources.*

## 5.2 Physical resources

### Standards

- *Physical resources, i.e. premises, libraries, study facilities, IT infrastructure, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

## 5.3 Human support resources

### Standards

- *Human support resources, i.e. tutors/mentors, counsellors, other advisers, qualified administrative staff, are adequate to support the study programme.*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*

## 5.4 Student support

### Standards

- *Student support is provided covering the needs of a diverse student population, such as mature, part-time, employed and international students and students with special needs.*
- *Students are informed about the services available to them.*
- *Student-centred learning and flexible modes of learning and teaching, are taken into account when allocating, planning and providing student support.*



- *Students' mobility within and across higher education systems is encouraged and supported.*

*You may also consider the following questions:*

- *Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/ improved?*
- *What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?*
- *Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?*
- *What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?*
- *Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?*
- *How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?*
- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)?*
- *How is student mobility being supported?*

### Findings

*A short description of the situation in the Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.*

#### **5.1 Teaching and Learning resources**

The EEC did not have the opportunity to explore the program's online environment as this was still under development at the time of our visit. We were able to review an online course (Epidemiology) developed on the institutional VLE. This had a basic structure and was rather a repository of resources, not offering significant opportunities for interaction between students and staff and between students.

However, based on the study guides for this program which the EEC has reviewed there is a variety of interactive exercises: self-assessment, formative assessment and summative assessment that are employed online per module in order to support LOs - including a variety of assessment methods that access online databases, including drug databases and bioinformatic databases, quizzes, use of chemistry appropriate resources e.g. ChemDraw, interpretation of data, discussion groups, in class discussion and discussion boards, calculations, group assignments, presentation, analysis of secondary data, Reaxys and synthesis, study of published articles, peer learning via comment on posts and peer-peer feedback as well as creation of resources and information leaflets, for example.



The EEC had the opportunity to review two sample exam papers in Pharmacology (from BSc Pharmacy) as exam papers in the program under consideration / development. These comprised an open and a closed exam paper and included multiple choice questions (MCQ) and short-answer questions, the open book exam retained the MCQ format including calculations with a choice of answers.

## 5.2 Physical resources

Well-resourced library

Planning for increased numbers evidenced via expansion into new labs

## 5.3 Human support resources

There is infrastructure to support e-learning, including a 24/7 access to support staff.

Adequate staff resource allocation should be evaluated.

## 5.4 Student support

The facilities and the laboratory equipment are adequate to support the program. The University has the necessary technology resources and related infrastructure for distance learning. The physical resources, i.e. library and IT infrastructure, adequately support the operation of the program. The student advisory and support infrastructure is sufficient to support student learning.

In each course, many resources and materials are made available for students and the EEC was able to meet with 6 students from BSc Pharmacy (3) and MSc Cancer Biology (3) courses. Teachers provide students with additional material that offers them guidance and understanding of the courses. Students were very satisfied with their instructors' guidance and support.

The University has a distance learning unit responsible for providing technical support for designing, creating, implementing and evaluating online courses. The unit addresses the requirements for study materials, interactive activities and formative and summative assessment in accordance with international standards.

### Strengths

*A list of strengths, e.g. examples of good practices, achievements, innovative solutions etc.*

The availability of the interactive virtual learning environment facilitates teaching activities and tutor-student communication. The laboratories and IT infrastructure support study and research activities.

The program builds on established processes and advice from the Distance Learning Unit of the University.

### Areas of improvement and recommendations

*A list of problem areas to be dealt with, followed by or linked to the recommendations of how to improve the situation.*

The program should develop the learning materials on the program VLE well ahead of the starting date of the program, according to the descriptions of activities and content in the program study guides.

MSc assessment (exam) should focus more on authentic assessment and scenario / problem-based examination. The exam papers should be reviewed and updated to reflect mode of assessment (online) as well as level.

Course leaders and library colleagues could collaborate more effectively in provision of the most up to date materials online.

**Please select what is appropriate for each of the following sub-areas:**

Sub-area		<i>Non-compliant/ Partially Compliant/Compliant</i>
5.1	Teaching and Learning resources	Partially compliant
5.2	Physical resources	Compliant
5.3	Human support resources	Compliant
5.4	Student support	Compliant

## D. Conclusions and final remarks

*Please provide constructive conclusions and final remarks which may form the basis upon which improvements of the quality of the programme of study under review may be achieved, with emphasis on the correspondence with the EQF.*

The EEC evaluated the program based on the provided literature and the on-site visit. The School and the program were found to have good standards and meet quality expectations. Based on the materials and the site visit, the EEC has identified a number of areas in which the program team could make improvements to strengthen the program and increase its impact.

*The EUC programme team should implement the following major recommendations (related to sub-areas rated partially compliant):*

- EUC must manage student expectations regarding the option of hybrid teaching with practice elements in the lab. This should be explicit in all materials to clarify that on-campus research project is an option.
- We recommend that the project module does not offer 'literature review' as an online student alternative for a 'wet lab' project, but rather that it would be replaced with:
  - a) 'dry lab' (computational research) with data collection or
  - b) systematic review (with clear methodology, e.g. PRISMA)This would enable ALL students to meet the learning outcomes of the Masters thesis.
- The number of elective subjects should be increased, to give students the possibility to get acquainted with topics covering a broader drug life-cycle perspective. One could consider existing courses in other programs, e.g. public health, medicine or (health) law. In addition to a research methods elective for those students who choose the research project option.
- Clear student career pathways should be provided to enhance the employability of the students completing the program.
- Safeguarding measures require development for online activities.
- Align module learning objectives (LOs) to EQF terminology. For example, for Masters study too many LOs are 'describe' or 'list', consider greater focus on 'evaluate' or 'apply'.
- The program should develop the learning materials on the program VLE well ahead of the starting date of the program, according to the descriptions of activities and content in the program study guides.
- MSc assessment (exam) should focus more on authentic assessment and scenario / problem-based examination. The exam papers should be developed to reflect mode of assessment (online) as well as level.

*The EUC programme team should consider the following minor recommendations:*

- The literature dedicated to "Drug Design and small molecule synthesis" course presented in course description is rather old, from the end of the twentieth century. In opinion of EEC should be updated. The proposal is: R. Hill "Drug Discovery and Development" 3rd Ed. 2021, Elsevier ; EH Kerns "Drug-like Properties. Concept, Structure Design, and Methods" 2016, Academic Press ; S. Hongmao "Practical Guide to rational Drug Design" 2015 Elsevier Science & Technology.
- The EEC has not seen relevant assessment documents, including grading criteria, marking guides and rubrics. The EUC should develop these.
- The team has been using VLE learning analytics tools to monitor student attendance and progression. There is a need for clearly articulated expectations of engagement and cut off point for support structures to be initiated.

- Any continuous professional development staff activities should benefit from embedding in internal and external recognised professional frameworks (e.g., Advance HE) and providing certification to be used for career progression.
- The team would benefit from increased research resources.
- Allocation of personal tutors for each student should also be the norm for the e-learning cohort, including pastoral and academic support.
- There should be further clarity about the language requirements in order to register for this program. This will have a positive effect on the program teams' recruitment strategy. In the documentation the EEC has seen, this is described as both in Greek and English.
- Course leaders and library colleagues could collaborate more effectively in provision of the most up to date materials online.



## E. Signatures of the EEC

<i>Name</i>	<i>Signature</i>
Tomasz Pawiński	
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**Date:** 23 May 2023