

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

HELLENIC REPUBLIC



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# **Accreditation Report**

# for the New Postgraduate Study Programme of:

Innovative Approaches in Clinical Microbiology and Infectomics

> Biomedicine Sciences International Hellenic University 08/12/2024









### TABLE OF CONTENTS

| Part A: Background and Context of the Review  | 3 |
|---|---|
| I. The External Evaluation & Accreditation Panel  | 3 |
| II. Review Procedure and Documentation  | 3 |
| III. Postgraduate Study Programme Profile   | ô |
| Part B: Compliance with the Principles  | 3 |
| Principle 1: Strategy, Quality Assurance Policy and Quality Goal Setting for the New Postgraduate Study Programmes  | 8 |
| Principle 2: Design and Approval of New Postgraduate Study Programmes   | 3 |
| Principle 3: Regulations for Student Admission, Progression, Recognition of Postgraduate Studies, and certification |   |
| Principle 4: Teaching Staff of New Postgraduate Study Programmes  | 2 |
| Principle 5: Learning Resources and Student Support   | ô |
| Principle 6: Initial Internal and External Evaluation and Monitoring of New Postgraduate Study<br>Programmes        | C |
| Part C: Conclusions   | 1 |
| I. Features of Good Practice  | 4 |
| II. Areas of Weakness   | 4 |
| III. Recommendations for Follow-up Actions  | 4 |
| IV. Summary & Overall Assessment  | 5 |

# PART A: BACKGROUND AND CONTEXT OF THE REVIEW

# I. The External Evaluation & Accreditation Panel

The Panel responsible for the Accreditation Review of the new postgraduate study programme of Innovative Approaches in Clinical Microbiology and Infectomics of the International Hellenic University comprised the following five (5) members, drawn from the HAHE Register, in accordance with Laws 4009/2011 & 4653/2020:

- 1. PAPAGEORGIOU TASSOS (Chair) Turku Centre for Biotechnology, University of Turku and Åbo Akademi University
- 2. CHRISTOPHIDES GEORGE Imperial College London
- **3.** KYRIAKIDOU PANAGIOTA Democritus University of Thrace
- 4. PANTOPOULOS KONSTANTINOS McGill University

# **II. Review Procedure and Documentation**

The members of the External Evaluation and Accreditation Panel (EEAP) for the review of the new postgraduate study programme (PSP) in "Innovative approaches in clinical microbiology and infectomics" were appointed by the Hellenic Authority for Higher Education (HAHE) of the Register of Independent Experts on 21 November 2024, in accordance with Laws 4009/2011 & 4653/2020. The assessment was conducted through document reviews and online interviews. The entire evaluation and accreditation exercise did not include an on-site visit of the Department and University campus but was carried out remotely using the Zoom platform.

EEAP members had their first meeting on the 25th of November from 16:00-17:00 (all times refer to Greek time) to discuss the material provided by the International Hellenic University (IHU) and the Program Committee, allocate tasks, prepare for the on-line meetings with the Institution and agree on key questions and issues to focus on during the evaluation. The Panel reviewed the submitted documents (A1 to A19) which were assumed to be factually correct. The received files are listed below:

A1. Proposal for Academic Accreditation of the new PSP: "Innovative approaches in clinical microbiology and infectomics".

A2. Senate decision on the establishment of the new PSP: "Innovative approaches in clinical microbiology and infectomics".

A3. Reasoned report of the MDC for the establishment of the PSP: "Innovative approaches in clinical microbiology and infectomics".

A4. Decision of the Senate on the strategy of the Institution in matters of development of postgraduate programmes.

A5. Feasibility and viability studies for the establishment and operation of the new PSP:

"Innovative approaches in clinical microbiology and infectomics"

A6. Quality Policy of the academic unit for the development and improvement of the PSP: "Innovative approaches in clinical microbiology and infectomics"

A7. Quality target of the PSP: "Innovative approaches in clinical microbiology and infectomics". A8. Study Guide.

A9. Course Outlines.

A10. List of teaching staff.

A11. Internal regulations of the MSc: "Innovative approaches in clinical microbiology and infectomics".

A12. Regulation of studies, internship, mobility, and preparation of the of the PSP: "Innovative approaches in clinical microbiology and infectomics'.

A13. Regulation for the management of complaints and the procedure for handling complaints and objections of students.

A14. A16. Regulation for the operation of an academic advisor.

A15. Regulation on Research Ethics Model Diploma Supplement in Greek and English language.

A17. A18. Summary report on the performance of teaching staff Specific regulation for the implementation of e-learning.

A19. Plan for the use of tuition fees.

The provided timetable was followed in order. No interviews with students and alumni were conducted, as this is a new postgraduate program with no admissions yet.

On Tuesday 26th November from 15:00-16:00, EEAP had a meeting with the Vice-Rector and President of MODIP Prof. Tzionas Panagiotis, the Head of the Department Prof. Skepastianos Petros, and the Director of the PSP Prof. Chatzidimitriou Maria. A presentation was given by Prof. Chatzidimitriou with general information regarding the PSP. A meeting from 16:0016:45 with teaching staff of the PSP was followed with the participation of: Prof. Lialiaris Theodore (Democritus University of Thrace), Associate Professor Magiorkinis Gkikas (National and Kapodistrian University of Athens), Prof. Metallidis Simeon (AUTH), Prof. Papavassiliou Fotini (Univesrity of Heidelberg), Associate Professor Pessach Ilias (IHU), Prof. Pournaras Spyridon (National and Kapodistrian University of Athens), Prof. Tzimagiorgis Georgios AUTH, Assistant Professor Tsachouridou Olga (AUTH), Prof. Chatzidimitriou Dimitrios (AUTH), and Assistant Professor Chatzopoulou Fani (IHU). Between 17:00-17:30, an on-line tour with the participation of Prof. Eleftheriou Faidra (IHU) and MD Kavvadas Dimitrios (AUTH) was held. The on-line tour consisted of two short videos, one on the Alexandria University campus of IHU (https://youtu.be/nYBjex60\_aY) and a second one on the Department of Biomedical Sciences (https://youtu.be/lgpFM-NFe3M). Classrooms, lecture halls, libraries, laboratories, and other facilities related to the PSP were shown to the EEAP followed by discussion.

A meeting with employers and social partners was held from 18:00-18:45 with the participation of Papadimitriou Aikaterini (MD, Microbiological Laboratory, General Hospital "Papageorgiou" Thessaloniki), Vagdatli Eleni, (MD, Professor, Microbiological Laboratory, General Hospital "Hippoktarion" Thessaloniki), Chatzidimitriou Dimitrios (Professor, LABNET Private Diagnostic Laboratory, AE), Athanasios G. Kossyvakis (PhD, Molecular Biologist, General Secretariat of Public Health, Hellenic Ministry of Health), and Nitsas Vassileios (MD, "Agios Loukas" Private Hospital).

The EEAP had a private meeting to discuss the main findings followed by a closure meeting (19:30-20:00) with the Vice-Rector & President of MODIP Prof. Tzionas Panagiotis, the Director of the PSP Prof. Chatzidimitriou Maria, the Head of the Department Prof. Skepastianos Petros, and Ms. Kazazi Kalliopi (MODIP Manager). EEAP presented briefly their initial findings and impressions followed by discussion. Overall, the review process (including preparation, meetings, and report writing) was completed smoothly without any significant issues or concerns and the entire process was contacted in a spirit of collaboration. In response to the panel's request, additional material was promptly provided. The panel expresses its gratitude to HAHE for effectively supporting the review of this PSP. All PSP and IHU officials as well as the employers and social partners showed great enthusiasm and dedication to successfully accomplish the accreditation procedure. EEAP would like to thank the Department and University Administration as well as all faculty members for their cooperation and fruitful discussions.

# III. Postgraduate Study Programme Profile

The International Hellenic University was re-established by Law (No 4610/2019); it comprises (6) Schools and twenty-three (23) Departments with campuses in Thessaloniki, Serres, Katerini, and Kilkis. The main campus (16,000m<sup>2</sup>) is situated outside Thessaloniki and includes virtual classrooms, electronic library, IT labs, Digital Manufacturing and Materials Characterization Laboratory, Molecular Ecology/Molecular Biology Lab, as well as the storage room of the finds of the University's archaeological excavation at Neo Rysio, create an environment conducive for higher learning and research for students. The Department of Biomedical Sciences belongs to the School of Health Sciences and was established in May 2019 by Law 4610 (Government Gazette 90/A/07-05-2019) "Synergies between Universities and Technical Universities, access to higher education, experimental schools, General State Archives and other provisions". The Department of Biomedical Sciences is an evolution of the former Department of Medical Laboratories of the Alexandreio Technological Educational Institute of Thessaloniki, which belonged to the technological sector of Higher Education.

The PSP in 'Innovative approaches in clinical microbiology and infectomics' is a newly established program and has been designed and organized by the Department of Biomedical Sciences. The objective of the PSP is the postgraduate teaching, research, training and specialization, in Biomedical and Molecular Sciences and their applications in the diagnosis of infectious diseases, with emphasis on the latest developments. The new PSP aims at the acquisition of knowledge and skills in both applied laboratory and clinical research. Students will be provided with a comprehensive education in the range of applications of biomedical and molecular sciences and the linking of their professional training with the labour market. In particular, students will be trained in modern molecular diagnosis of infectious diseases. Emphasis will be placed on techniques of bioinformatics applications in the diagnosis of infectious diseases. Students will gain knowledge of pharmacology and drug action against pathogens. Community infections as well as public health, prevention and surveillance issues will be studied in depth. Students will be trained both theoretically and practically in the use of laboratory methods for the diagnosis of clinical syndromes and infections. Emphasis will also be placed on the study and diagnosis of traveller infections and tropical diseases.

The duration of studies in the PSP, which leads to the award of the Diploma of Postgraduate Studies (MSc), is defined as a minimum of three (3) semesters (90 ECTS), which includes the time for the preparation and evaluation of a diploma Thesis. The academic curriculum comprises three semesters, each spanning six months. The initial two semesters entail five mandatory courses, 6 ECTS credits each, summing up to 30 ECTS credits per semester. The teaching staff includes 10 staff contributors from IHU and 46 external teaching associates (56 in total). Students must effectively fulfill their academic requirement that entails acquiring a cumulative sum of 90 ECTS credits (30 credits per semester of study, along with an additional 30 credits from the diploma thesis to obtain Master's degree qualification. The program is offered in English. Selection criteria encompass overall academic performance, research or

professional background, knowledge of foreign languages, and a record of published scientific work. The instructional approach for this program employs distance learning with on-site laboratory practicals. The primary source of funding for the PSP will come from tuition fees, set at €3900 per student, supplemented by additional support from potential alternative sources. The maximum number of students admitted is set to 50 and the minimum to 10.

# **PART B: COMPLIANCE WITH THE PRINCIPLES**

# Principle 1: Strategy, Quality Assurance Policy and Quality Goal Setting for the New Postgraduate Study Programmes

INSTITUTIONS SHOULD INCLUDE IN THEIR STRATEGIC MANAGEMENT THE DEVELOPMENT, ORGANISATION, AND IMPLEMENTATION OF NEW POSTGRADUATE STUDY PROGRAMMES (PSP) IN SPECIFIC SCIENTIFIC FIELDS AFTER INVESTIGATING THEIR FEASIBILITY AND SUSTAINABILITY. INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY FOR THE NEW POSTGRADUATE STUDY PROGRAMMES AS PART OF THEIR STRATEGIC MANAGEMENT.

THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT THE PSP OF THE INSTITUTION AND THE ACADEMIC UNIT. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL INTERESTED PARTIES.

By decision/s of the Institutional Senate, the Institutions should adapt their strategy to allow for the provision of postgraduate study programmes, in addition to attending to the profile, vision, mission and strategic objectives of the Institution. In this strategy, the Institutions should anticipate the potential benefits, difficulties or risks from the implementation of new postgraduate study programmes to achieve their goals. The Institution's strategic choices should be documented through specific feasibility and sustainability studies, especially for new postgraduate study programmes.

In the case of PSP delivered by distance methods, the Institution prepares and applies an elearning strategy. The Institution's e-learning strategy is integrated into its overall strategy and identifies educational goals while keeping up to the rapid technological changes and to the developments in pedagogical models. The Institution should include in its strategy the justification and feasibility as to why e-learning has been selected as the appropriate learning strategy for the particular programmes of study where it is applied.

In the context of e-learning, innovation strategies, the possibility of programme revision, the linking between learning and research (requiring knowledge of the latest innovations in order to select the most appropriate means to achieve the learning outcomes) should be taken into account.

The quality assurance policy of the academic unit for postgraduate study programmes should be in line with the Institution's strategy and must be formulated in the form of a public statement, which is implemented by all stakeholders. It focuses on the achievement of special goals related to the quality assurance of the postgraduate study programmes offered by the academic unit. Indicatively, the quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the postgraduate study programme (PSP), its purpose and field of study; it will realise the programme's goals and it will determine the means and ways for attaining them; it will implement appropriate quality procedures, aiming at the programme's continuous improvement.

In particular, in order to implement this policy, the academic unit commits itself to put into practice quality procedures that will demonstrate:

- a. the suitability of the structure and organisation of postgraduate study programmes
- b. the pursuit of learning outcomes and qualifications in accordance with the European and National Qualifications Framework for Higher Education - level 7
- c. the promotion of the quality and effectiveness of teaching at the PSP

- *d.* the appropriateness of the qualifications and the availability of the teaching staff for the PSP
- e. the drafting, implementation, and review of specific annual quality goals for the improvement of the PSP
- f. the level of demand for the graduates' qualifications in the labour market
- g. the quality of support services, such as administrative services, the libraries, and the student welfare office for the PSP
- *h.* the efficient utilisation of the financial resources of the PSP that may be drawn from tuition fees
- *i.* the conduct of an annual internal review and audit of the quality assurance system for the PSP through the cooperation of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU)

#### Documentation

- The Institutional strategy for postgraduate studies, which includes a special strategy for e-learning, as long as it is applied to the Institution's PSP
- Feasibility and sustainability studies for the new PSP
- Quality Policy of the academic unit for the development and improvement of PSP
  Quality Targeting of the academic unit for the PSP

#### **Study Programme Compliance**

I. Findings

IHU was created by Law 4610/2019, Government Gazette 70/D'/07-05-2019 with the merger of English-speaking postgraduate departments with three institutions of the technological sector of higher education. It has currently 32 Undergraduate Study Programmes and 61 Postgraduate Study Programmes (22 inter-institutional and 23 English-taught).

The strategic objectives of the IHU include the development and improvement of the quality of the services provided by the institution, the promotion of marketoriented research and education, the strengthening of the understanding of the economic, socio-political and technological issues that dominate today's society through teaching and research at a high academic level. An additional aim is the development of synergies between the IHU and social institutions and businesses. The main lines of action of the IHU include its digital transformation, the development of environmental policy, the strengthening of research and innovation, the increase of the institution's extroversion, and the strengthening of its social role. The annual internal evaluation of the PSP will be carried out in collaboration with the MODIP of the IHU following the internal evaluation of the department/faculty to which it belongs and in accordance with the corresponding process of the internal quality assurance system of the institution. The external evaluation of the PGP will be carried out in cooperation with the MODIP in the framework of their accreditation, according to the procedure provided by HAHE. The department of public and community health, which provides administrative support, is evaluated as part of the periodic evaluation and certification of the academic unit by HAHE.

The quality assurance policy of the graduate school is made public, disseminated, and applied to the involved members, faculty, external partners, and graduate students so that they all take responsibility for quality assurance. Students will be informed about the quality policy of the graduate school, the departments involved, and the University in general, from the beginning of their studies, in the context of a special welcome event for new students. The PSP will communicate its quality policy at national and international events, which it organizes or participates in, as well as at meetings with professional, research, social, environmental, and cultural bodies.

The postgraduate students will carry out the evaluation of each course and lecturer at the end of each semester. The evaluation will be conducted using a special evaluation form/questionnaire completed by postgraduate students.

The lectures will be conducted remotely during weekends. Auditoriums and classrooms are equipped with projectors, microphones, and wired and wireless broadband networks, and are suitable for both face-to-face and online classes. Courses will be created in the e-class and/or Moodle/Teams of the IHU. The teaching staff will conduct the design, organization, and posting of lectures. The management of the student register will be done through the University's integrated information system of the registry (student system), where students, upon receipt of their unique code from the PSP secretariat, will have access to their grades electronically and will also have the possibility of registering courses for each semester. The third semester is dedicated to diploma work.

#### II. Analysis

PSP is supported by the host university and aligns with the overall strategy of the Institution. The available facilities are sufficient and provide all the tools for online and in-person teaching. The program considers cooperation and communication between students an important factor in the learning process. Thus, it encourages teamwork, exchange of ideas, and mutual support. Most courses will be given online to facilitate attendance by students that are currently working and/or leaving in other areas of Greece. However, this arrangement reduces the interactions between students and may not yield the expected learning results. It is anticipated that students will be actively involved in the learning process, including conducting research, study visits, presenting projects, participating in discussions, and applying their knowledge to practical problems. A market survey or experience from other similar PSPs could have helped shape the program in the best possible way for efficient learning outcomes. The level of exposure to research is unclear. The expected income, mainly from tuition fees, could have been better planned to promote excellence in studies and research.

The PSP aims to provide education in the areas of Clinical Microbiology and Infectomics. However, the curriculum lacks courses that can provide knowledge of cutting-edge technologies used in the modern world. Areas such as artificial intelligence and personalized medicine appear to be missing from the courses offered. Although seminars by invited speakers can be arranged to cover these areas, solid knowledge and not just a 'scratch on the surface' is necessary. It is therefore possible that graduates will lack key knowledge, and their employability will be severely affected.

The officials of the PSP expect a high percentage of students to complete the questionnaires. Unfortunately, this is not always the case. The program should be prepared for a low percentage of participation and have a 'plan B' to overcome this issue.

#### III. Conclusions

The program should assess its risks more carefully and improve several areas to increase its sustainability and the offered knowledge. The exposure of students to research appears minimum. No internships are planned. The panel considers that the program is substantially compliant with Principle 1.

#### **Panel Judgement**

| Principle 1: Strategy, Quality Assurance Policy and<br>Quality Goal Setting for the New Postgraduate Study<br>Programmes |   |
|--|---|
| Fully compliant  |   |
| Substantially compliant  | Х |
| Partially compliant  |   |
| Non-compliant  |   |

#### Panel Recommendations

R1.1 Take measures to ensure high participation in questionnaire completion.

R1.2 Make questionnaires in electronic form and distribute them in e-class/Moodle/Teams etc with frequent reminders for regular revision of the curriculum.

R1.3 Make the connection between the PSP and research conducted in the participating Departments clearer. Create research topics.

R1.4 Adjust the ratio of courses given on-line/in-person to improve the active participation of the students and the interactions between students and student-teaching staff.

R1.5 Aim for a higher number of publications per teacher to improve the research output of the teaching staff and make the research opportunities more visible for students. R1.6

Improve the curriculum by adding new courses that better reflect current and future trends. R1.7 Develop alternative plans in case of low number of student enrollment.

# Principle 2: Design and Approval of New Postgraduate Study Programmes

INSTITUTIONS SHOULD DEVELOP THEIR POSTGRADUATE STUDY PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE NEW POSTGRADUATE STUDY PROGRAMMES. THE OBJECTIVES, THE SPECIFIC SCIENTIFIC SUBJECT AND THE STREAMS OR SPECIALISATIONS, THE EXPECTED LEARNING OUTCOMES AND THE EMPLOYMENT PROSPECTS ARE SET OUT IN THE PROGRAMME DESIGN. DURING THE IMPLEMENTATION OF THE NEW POSTGRADUATE STUDY PROGRAMMES, THE DEGREE OF ACHIEVEMENT OF THE LEARNING OUTCOMES SHOULD BE ASSESSED. THE ABOVE DETAILS, AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

The academic units develop their postgraduate study programmes following a well-defined procedure. The academic profile and orientation of the programme, the research character, the scientific objectives, the specific subject areas, the specialisations, the expected learning outcomes, the structure, the courses, the teaching and assessment modes, the teaching staff and the necessary resources are described at this stage.

The structure, content and organisation of courses and teaching methods should be oriented towards deepening knowledge and acquiring the corresponding skills to apply the said knowledge (e.g. course on research methodology, participation in research projects, thesis with a research component).

The expected learning outcomes must be determined based on the European and National Qualifications Framework (EQF, NQF), and the Dublin Descriptors for level 7. During the implementation of the programme, the degree of achievement of the expected learning outcomes and the feedback of the learning process must be assessed with the appropriate tools. In particular, for each expected learning outcome that is designed and made public, it is necessary that its evaluation criteria are also designed and made public.

In addition, the design of PSP must consider:

- the Institutional strategy
- the active involvement of students
- the experience of external stakeholders from the labour market
- the anticipated student workload according to the European Credit Transfer and Accumulation System (ECTS) for level 7
- the option of providing work experience to students
- the linking of teaching and research
- the relevant regulatory framework and the official procedure for the approval of the PSP by the Institution

The procedure for the approval or revision of the programmes provides for the verification of compliance with the basic requirements of the Standards by the Institution's Quality Assurance Unit (QAU).

#### Documentation

- Senate decision for the establishment of the PSP
- PSP curriculum structure: courses, course categories, ECTS awarded, expected learning outcomes according to the NQF, internship, mobility opportunities
- Labour market data regarding the employment of graduates, international experience in a relevant scientific field - PSP Student Guide

- Course and thesis outlines
- Teaching staff: teaching assignments per subject area and per course

#### **Study Programme Compliance**

#### I. Findings

The PSP in Innovative Approaches in Clinical Microbiology and Infectomics is committed to academic integrity, ethical standards, inclusivity, and fostering student learning. It aims to support early-career researchers, enhance research dissemination, and promote collaborations both within and beyond the institution. The programme prioritises innovation in teaching, attracting distinguished faculty from around the world, and raising the institution's global profile.

Aligned with the institution's strategic goals, the programme emphasises internationalisation by engaging with global networks, leveraging research infrastructure, and encouraging mobility for researchers and students. It seeks to attract leading researchers and talent, ensuring strong links between research and education, thereby enhancing the programme's global impact.

The programme seeks to improve teaching quality through high participation in course evaluations, strong academic advising, and excellent evaluation scores. It also aims to raise international visibility by collaborating with global universities, attracting international students, and increasing student research outputs, particularly through conference presentations.

The programme focuses on advancing knowledge in Biomedical and Molecular Sciences, with particular emphasis on Infectomics, the study of microbial and host genomic and phenotypic interactions. This focus aims to enhance diagnostic capabilities and infection control strategies. Students receive training in molecular diagnostics, bioinformatics, pharmacology, and public health, with special attention to community infections, tropical diseases, and infections of the central nervous and haematologic systems. Graduates are prepared for careers in applied research, clinical diagnostics, and doctoral studies.

The curriculum requires 90 ECTS credits for graduation, with the first two semesters dedicated to coursework (30 ECTS each), followed by a thesis in the third semester (30 ECTS). Delivered in English through a hybrid model, and mostly during weekends, the programme includes in-person laboratory sessions and mostly online theoretical courses and instruction. It covers compulsory courses such as Clinical Microbiology, Pharmacology, Public Health, and Infection Prevention, with

advanced modules in the second semester. The thesis serves as a comprehensive culmination of academic and practical skills.

Examinations are held at the end of each semester, with a two-week period allocated for assessments, including written, oral, or assignment-based evaluations. A retake session is available before the winter semester. The thesis, a mandatory part of the programme, involves original research and is publicly defended. It is written in English, with a summary in another language, and requires at least 10,000 words, including a clear structure, methodology, and results. Intellectual property rights remain with the student.

The division of teaching and student workload across modules is structured in a balanced manner, with adequate allocation between lectures, laboratory projects, non-directed study, and exam preparation. However, the integration of course assignments within this framework is unclear. There is no indication of whether assignments carry weight towards the final grade, which appears to be determined solely by exams, either written or oral. This raises concerns regarding the incorporation of continuous assessment or formative feedback into the programme. Without clear guidelines on the role of assignments or regular assessments, it is difficult to determine how students' progress is monitored throughout the semester and how they receive feedback to support their learning.

Additionally, the absence of a provided bibliography makes it difficult to assess whether the course materials reflect the most up-to-date knowledge and practices in the field. Given the fast-evolving nature of the topics covered — particularly in areas like molecular diagnostics, bioinformatics, and infectious disease management—it is essential that the reading materials are up-to-date, comprehensive, and reflective of state-of-the-art research. The lack of clarity in these areas suggests that further work may be needed to ensure the curriculum not only meets global academic standards but also integrates the latest research and best practices in teaching and learning.

#### II. Analysis

While the programme offers strong foundational elements, its delivery structure, assessment methods, and curriculum governance may need refinement to ensure students receive a comprehensive, engaging, and up-to-date educational experience, particularly in relation to its ability to foster a fully immersive academic and research environment. Specifically:

Weekend delivery and limited student engagement: The programme's delivery mostly on weekends, alongside students' weekday work commitments, presents a significant challenge for fostering a robust academic environment. It limits students' opportunities to interact regularly with teachers and researchers, which is critical for their academic growth and professional development. In scientific disciplines that require continuous exposure to cutting-edge research and mentorship, such limited interaction may hinder students from fully engaging in the learning process and integrating into the research community.

Lack of assignments to foster continuous learning: The absence of clearly defined assignments throughout the course creates another concern. Without assignments that help students engage with the material continuously, especially given that many students will be working during weekdays, it may be difficult for them to maintain focus on academic goals. Assignments play a crucial role in driving independent study and keeping students aligned with the course's objectives. Their omission could lead to a passive learning experience where students may only focus on exam preparation rather than the gradual accumulation of knowledge.

Sole reliance on exams for grading: The grading structure, which appears to rely solely on exams, raises concerns about whether students' progress is effectively monitored throughout the semester. Without assignments, practical work, or other forms of continuous assessment, students may not receive sufficient feedback to guide their learning. In a state-of-the-art scientific field such as Infectomics, it is crucial that students be regularly assessed to ensure they are developing the necessary skills and knowledge. The lack of continuous assessment might result in gaps in students' understanding and may fail to accurately reflect their abilities and growth during the programme.

Unclear curriculum revision process and stakeholder involvement: Lastly, there is no clear indication of a structured process for curriculum revision or involvement of stakeholders in shaping the programme. No documentation was provided to confirm whether a formal review process exists, or if internal and external experts are regularly consulted to ensure the curriculum remains up to date and responsive to emerging trends in the field. While the curriculum is generally aligned with global standards in science and public health, certain areas of the programme's structure and governance could benefit from further clarification and development. The absence of a formal review process or engagement with internal and external experts may lead to a curriculum that does not evolve in line with emerging trends in the field. For a programme in a fast-evolving field like Infectomics, it is crucial that the curriculum be regularly updated to incorporate the latest research, best practices, and feedback from industry partners, researchers, and other key stakeholders.

#### III. Conclusions

In conclusion, while the PSP in Innovative Approaches in Clinical Microbiology and Infectomics demonstrates a strong commitment to academic integrity, global engagement, and research excellence, there are several critical areas that need refinement to ensure students receive a comprehensive and engaging educational experience. The weekend delivery model, combined with students' weekday work commitments, significantly limits opportunities for students to interact regularly with teachers, researchers, and peers, which is essential for their academic growth and professional development. This lack of regular engagement may hinder students' ability to fully immerse themselves in the research environment and integrate into the academic community, particularly in a fast-evolving field like Infectomics.

Furthermore, the absence of clearly defined assignments and continuous assessment throughout the course raises concerns about how students' progress is monitored and whether they receive timely feedback to guide their learning. Sole reliance on exams for grading could lead to a passive learning experience, where students focus mainly on exam preparation rather than engaging in the ongoing, cumulative learning process that is critical in scientific disciplines. In addition, the lack of a clear procedure for curriculum revision and stakeholder involvement in the development of the programme could hinder its responsiveness to emerging trends and advancements in the field. Regular input from internal and external experts, as well as feedback from industry partners, is crucial for maintaining a relevant and up-to-date curriculum.

Overall, this principle is deemed as substantially compliant with the requirements but needs some revisions in its delivery model, assessment structure, and curriculum governance. These revisions would better support students' academic and professional development, ensure continuous engagement with the evolving landscape of Infectomics, and help the programme remain aligned with the latest research and best practices in the field.

#### **Panel Judgement**

| Principle 2: Design and Approval of New Postgraduate Study<br>Programmes |   |
|--|---|
| Fully compliant  |   |
| Substantially compliant  | х |
| Partially compliant  |   |
| Non-compliant  |   |

#### Panel Recommendations

R2.1 Revise the delivery model for increased engagement: To foster a more interactive and immersive academic environment, it is recommended that the programme consider adjusting its delivery schedule to incorporate more weekday sessions or synchronous online components. This would facilitate greater interaction between students, faculty, and peers, enhancing their academic experience and professional development. Additionally, integrating a more balanced approach between in-person and online delivery, particularly for practical and research components, would help overcome the challenges posed by the current weekend-centric format.

R2.2 Introduce continuous assessment and formative feedback: The programme should incorporate continuous assessments such as assignments, quizzes, and projects that contribute to the final grade. This would allow students to receive regular feedback throughout the semester, ensuring they stay engaged with the course material and giving them an opportunity to address gaps in their understanding. Including more frequent assessments would foster a more dynamic learning process, helping students accumulate knowledge gradually and preparing them for the comprehensive final exams.

R2.3 Establish a clear and transparent curriculum revision process: It is crucial that the programme implements a structured procedure for curriculum revision, with active involvement from both internal and external stakeholders. Regular consultation with academic experts, industry partners, and alumni would ensure the curriculum remains aligned with the latest trends and advancements in Clinical Microbiology and Infectomics. A formal review cycle should be put in place to adapt the curriculum in response to new research, emerging diseases, and technological innovations, keeping the programme relevant and effective for future cohorts.

R2.4. Update and expand course bibliography: A minor point that could be implemented when the PSP starts is that the student's handbook should ensure that course materials, including reading lists and textbooks, are regularly updated to reflect the latest research and best practices in Infectomics and related fields. A comprehensive and up-to-date bibliography should be provided to students, ensuring they have access to state-of-the-art knowledge and resources. This would not only enhance the learning experience but also ensure that the programme stays up-to-date in a rapidly evolving field, particularly in areas like molecular diagnostics, bioinformatics, and infectious disease management.

# Principle 3: Regulations for Student Admission, Progression, Recognition of Postgraduate Studies, and certification

INSTITUTIONS SHOULD DEVELOP AND APPLY PUBLISHED REGULATIONS COVERING ALL ASPECTS AND PHASES OF STUDIES (ADMISSION, PROGRESSION, THESIS DRAFTING, RECOGNITION AND CERTIFICATION).

The Institution should develop and publish the internal regulations prescribed by law which, among other things, should regulate all issues of postgraduate studies from the beginning to the end of the studies.

Indicatively:

- The students' admission procedures and the required supporting documents
- Student rights and obligations, and monitoring of student progression
- Internship issues, if applicable, and granting of scholarships
- The procedures and terms for the drafting of assignments and the thesis
- The procedure of award and recognition of degrees, the duration of studies, the conditions for progression and for the assurance of the progress of students in their studies
- The terms and conditions for enhancing student mobility

In case that the PSP is offered through distance learning methods, the Institution should have in place a regulation for e-learning, including in particular the following issues:

- Services of the Institution to support e-learning
- > Methodology for the development and implementation of courses
- Ways of providing teaching and variety of teaching and assessment modes
- General standard of course structure
- Student support system
- Support of faculty/teachers with mandatory e-learning training for new staff members
- > Technological infrastructures made available by the Institution
- Student identity confirmation system (student identity check, assignment and exam writing process, security and certification issues).
- The Institution should establish rules for the provision of appropriate access and for the assurance of the participation of students affected by disability, illness, and other special circumstances.
- Ethical issues, such as those concerning data protection, intellectual property rights and rules for protection against fraud are governed by the e-learning regulation.

All the above must be made public within the context of the Student Guide.

#### Documentation

- Internal regulation for the operation of the postgraduate study programme
- Special regulation for the implementation of e-learning if the PSP is delivered through distance methods
- Research Ethics Regulation

Regulation of studies, internship, mobility, and student assignments
 Degree certificate template

#### **Study Programme Compliance**

#### I. Findings

The PSP was clearly outlined both in the material provided before the meeting and in the explanations given during the presentations.

The postgraduate students who will be admitted to the PSP are required to attend the courses of the current Program of Studies without fail. They are required to submit the required assignments for each course by the stipulated deadlines, to attend the stipulated exams, to respect and comply with the Postgraduate Studies Regulation, the decisions of the PSP bodies, the Department and IHU, as well as the academic ethics. They are also required to pay tuition fees and submit to the Secretariat, before the evaluation of their thesis, a solemn declaration that this thesis is not the product of plagiarism, either in its entirety or in individual parts.

The duration of studies leading to the award of a Postgraduate Diploma is three (3) semesters and cannot exceed eight (8) semesters. To graduate , the students must have attended and successfully passed ten (10) compulsory courses, five (5) in the first semester and five (5) in the second semester. In addition, it is necessary to prepare a postgraduate thesis in the third semester of studies. The attendance and examination of the courses takes place in the first and second semesters. The postgraduate thesis can be started in the 2nd semester and completed in the 3rd semester of studies. The program is considered to end upon completion of the minimum number of years of study and upon completion of the writing and public presentation of the Postgraduate Thesis.

The teaching of the courses will take place on Fridays 17:00-22:00, but mostly on Saturdays and Sundays from 10:00-18:00. The days and hours of teaching may be varied by decision of the Coordinating Committee or the Director of the PSP. The teaching will be conducted remotely or in combination for all or part of the students and teachers, either with the physical presence of the students and the teacher, or exclusively with the method of modern distance learning. The asynchronous (up to 25% of the total credit units) distance learning method may also be applied. Also, the exams will be conducted either with the physical presence of the students and the instructor, or with the synchronous distance examination method by utilizing all the digital tools available to the Institution, so that they are reliable and unbiased. The language of instruction is entirely in English. The courses will be presented in English, the study material will also be in

English, as well as the performance exams for the students. The exams for the semester courses are held at the end of each semester. The duration of the examination period for each semester is determined by decision of the relevant body. The control in the individual courses is carried out by written or oral exams, the preparation of assignments or a combination of the above.

The preparation of the diploma thesis is mandatory and the language is English. The length of the thesis can be a minimum of 10,000 words. Its topic must be part of the subject of the M.D.E. The students have the right to submit a topic if they have successfully completed the courses defined in the internal regulations. The intellectual property on the thesis belongs to the candidate and can be theoretical, applied or experimental and contain recognizable elements of originality and contribution to scientific knowledge. The text must meet the specifications and structure of a scientific paper.

The ways of supporting the educational process of all those involved are referred to Secretarial Support and technical support with a communication schedule, educational support from the instructor, the use of on-line chat or Frequently Asked Questions (FAQs) Forums, online Resources, Instructors' course implementation guides, course attendance guides, the Academic Advisor, the Student Advocate and the Complaints Mechanism. The operating regulations of the student complaints and objections management mechanism have been drawn up based on the internal regulations of the Greek Academic Council. The Diploma Supplement is issued automatically in Greek and English for all graduates without application.

#### II. Analysis

The PSP enhances student accessibility and promotes inclusion. Student progress will be monitored through the Electronic Secretariat. The ECTS system is rationally applied throughout the curriculum. There is a defined set of quality requirements for the implementation of the program. A thesis manual and a Research Ethics Code for the PSP are available. The Diploma Supplement is issued automatically without application for all graduates in Greek and English. The PSP has developed and implemented published regulations covering all aspects and phases of the program studies. All issues from the beginning to the end of the studies are governed by the internal regulations of Law 4957/2022. Although the study regulations refer also to practice, there are no clear provisions that the students would have the opportunity to spend time in labs for exposure to various methods and working environments. The study guide states that courses are not offered for Erasmus students. The PSP accepts students with very diverse backgrounds, a situation that may affect the efficiency of the PSP.

#### III. Conclusions

The PSP ensures that regulations have been developed and published concerning all aspects and phases of the program (introduction, progression, recognition and

award of the degree). Several issues are in question, such as internships and Erasmus mobility. EEAP considers the PSP as substantially compliant to Principle 3.

#### Panel Judgement

| Principle 3: Regulations for Student Ad<br>Progression, Recognition of Postgraduate Stuc<br>certification |   |
|---|---|
| Fully compliant   |   |
| Substantially compliant   | х |
| Partially compliant   |   |
| Non-compliant   |   |

#### **Panel Recommendations**

R3.1 Practical training should be integrated into the program in collaboration with the network of social partners, stakeholders, and teaching staff.

R3.2 The department should be more aggressive in its policy on mobility through the Erasmus+ program.

R3.3 The department could consider narrowing the admitted students' background so that the enrolled students would have better understanding of the subject - otherwise additional courses should be arranged to help those students with no sufficient knowledge of the subject.

# Principle 4: Teaching Staff of New Postgraduate Study Programmes

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE LEVEL OF KNOWLEDGE AND SKILLS OF THEIR TEACHING STAFF, AND APPLY FAIR AND TRANSPARENT PROCESSES FOR THEIR RECRUITMENT, TRAINING, AND FURTHER DEVELOPMENT.

The Institution should attend to the adequacy and scientific competence of the teaching staff at the PSP, the appropriate staff-student ratio, the proper staff categories, the appropriate subject areas, the fair and objective recruitment process, the high research performance, the training, the staff development policy (including participation in mobility schemes, conferences, and educational leaves-as mandated by law).

More specifically, the academic unit should set up and follow clear, transparent, and fair processes for the recruitment of properly qualified staff for the PSP and offer them conditions of employment that recognise the importance of teaching and research; offer opportunities and promote the professional development of the teaching staff; encourage scholarly activity to strengthen the link between education and research; encourage innovation in teaching methods and the use of new technologies; promote the increase of the volume and quality of the research output within the academic unit; follow quality assurance processes for all staff (with respect to attendance requirements, performance, self-assessment, training, etc.); develop policies to attract highly qualified academic staff.

#### Documentation

- Procedures and criteria for teaching staff recruitment, policy for attracting highly qualified staff, and PSP Obligation Regulation
- List of the intended for recruitment teaching staff including subject areas, employment relationship, Institution of origin, Department of origin and relevant individual achievements

#### **Study Programme Compliance**

#### I. Findings

Teaching responsibilities in the PSP will be assigned to various categories of instructors, including Teaching and Research Staff ( $\Delta E\Pi$ ), Special and Laboratory Teaching Staff (EE $\Delta I\Pi$ ), Special Technical Laboratory Staff (ETE $\Pi$ ), emeritus professors, contracted lecturers, visiting professors, and recognized experts. Faculty has already been recruited from the Department of Biomedical Sciences and from other academic institutions in Greece and abroad. The allocation of teaching duties is determined by the relevant PSP body, often based on recommendations from the Coordination Committee or the Director of the PSP. Instructors will be compensated exclusively from PSP resources. Additional remuneration is possible for services beyond minimum legal obligations, following relevant regulations. Supplementary teaching responsibilities may be assigned to doctoral candidates under specific conditions, with remuneration set at a percentage (30%) of postdoctoral researcher rates.

Students will be requested to provide feedback on teaching staff through anonymous questionnaires conducted via a secure Quality Assurance System. This feedback is expected to stimulate teaching improvements and enrich staff development. Postgraduate dissertations and research projects will be integrated into teaching. Academic advisors will assist students with their studies and transition to higher education.

Staff selection is based on overall academic record, including research experience, publications, participation in conferences and programs, and metrics based on established evaluation platforms (e.g., Google Scholar, Scopus). Criteria include teaching, research, and administrative contributions.

The PSP will employ methods such as distance learning, video, and electronic materials to support dynamic education. The use of modern teaching methods is expected to enhance the connection between teaching and research.

The PSP encourages staff mobility and participation in professional development through programs like Erasmus+, training seminars, and conferences.

#### II. Analysis

Recruitment of the PSP teaching staff is merit-based and guided by a transparent and defined process. Criteria are based on academic excellence. Additionally, relevant training is considered, ensuring alignment with the PSP's objectives. The merit-based selection process and a balanced faculty-to-student ratio (1.12) ensure a robust academic environment.

Professional development is encouraged and supported. The PSP promotes teaching staff mobility and training opportunities, offering financial support (full or partial) for participation in training seminars, international conferences, and programs like Erasmus+. If implemented, this will ensure the continual enhancement of the teaching staff's expertise in fields relevant to the PSP. In addition, enabling staff to engage in international collaborations will expand their academic and research horizons.

The workload appears to be appropriate. It includes lectures, seminars, interactive teaching, laboratory exercises, and supervision of assignments and dissertations. The accreditation proposal ensures that staff can fulfill their teaching obligations while engaging in research activities, supported by a framework that aligns teaching responsibilities with academic research.

The accreditation proposal indicates that teaching staff will be regularly evaluated by students via secure anonymous questionnaires. These evaluations will occur at the end of each semester and are expected to provide valuable feedback for improving teaching quality and enriching staff development.

While the accreditation proposal does not explicitly mention a formal research strategy, it highlights a focus on research activities related to the PSP's scientific interests. The PSP encourages participation of faculty in relevant research programs and supports innovative teaching methods that promote research integration into the curriculum.

#### III. Conclusions

EEAP appreciated the enthusiasm and commitment of the faculty and teaching staff. The interviews with instructors and stakeholders gave the impression that the PSP covers an important educational gap and will offer significant professional opportunities to students. However, EEAP also identified limitations related to the part-time format of the PSP and the lack of continuous on-site presence of students, which may compromise research activities and performance. During the interviews with the PSP organizers and teaching staff, this was acknowledged as a general problem to almost all PSPs offered in Greek Universities, which is imposed by professional commitments of many graduate students. EEAP considers the PSP as substantially compliant to Principle

#### **Panel Judgement**

| Principle 4: Teaching Staff of New Postgraduate Study<br>Programmes |   |
|---|---|
| Fully compliant   |   |
| Substantially compliant   | x |
| Partially compliant   |   |
| Non-compliant   |   |

#### Panel Recommendations

R4.1 Develop a Clear Research Strategy: Formally outline a specific research strategy that identifies key scientific areas and objectives, ensuring alignment with the PSP's academic and professional goals.

R4.2 Expand Research Opportunities for Students: Strengthen the integration of student projects with faculty research to further enhance the link between teaching and research. R4.3 Enhance Feedback Mechanisms: Provide a formal process for discussing and acting on the outcomes of student evaluations to ensure continuous teaching improvements.

R4.4. Support full-time engagement of students: Creating conditions to support continuous engagement of students in research and teaching activities during weekdays would increase quality of the PSP.

R4.5 Include staff information on the web site: Key performance indicators for staff and link to their CV should be available on-line on the PSP's site.

# **Principle 5: Learning Resources and Student Support**

INSTITUTIONS SHOULD HAVE ADEQUATE FUNDING TO COVER THE TEACHING AND LEARNING NEEDS OF THE POSTGRADUATE STUDY PROGRAMMES. THEY SHOULD -ON THE ONE HAND- PROVIDE SATISFACTORY INFRASTRUCTURE AND SERVICES FOR LEARNING AND STUDENT SUPPORT, AND- ON THE OTHER HAND- FACILITATE DIRECT ACCESS TO THEM BY ESTABLISHING INTERNAL RULES TO THIS END (E.G. LECTURE ROOMS, LABORATORIES, LIBRARIES, NETWORKS, CAREER AND SOCIAL POLICY SERVICES ETC.).

Institutions and their academic units must have sufficient resources and means, on a planned and long-term basis, to support learning and academic activity in general, so as to offer PSP students the best possible level of studies. The above means include facilities such as the necessary general and more specialised libraries and possibilities for access to electronic databases, study rooms, educational and scientific equipment, IT and communication services, support, and counselling services.

When allocating the available resources, the needs of all students must be taken into consideration (e.g., whether they are full-time or part-time students, employed and foreign students, students with disabilities), in addition to the shift towards student-centered learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the Institutional context. However, the internal quality assurance proves -on the one hand- the quantity and quality of the available facilities and services, and -on the other hand- that students are aware of all available services.

In delivering support services, the role of support and administration staff is crucial and therefore this segment of staff needs to be qualified and have opportunities to develop its competences.

#### Documentation

- Detailed description of the infrastructure and services made available by the Institution to the academic unit for the PSP, to support learning and academic activity (human resources, infrastructure, services, etc.) and the corresponding firm commitment of the Institution to financially cover these infrastructure-services from state or other resources
- Administrative support staff of the PSP (job descriptions, qualifications, and responsibilities)
- Informative / promotional material given to students with reference to the available services
  Tuition utilisation plan (if applicable)

#### **Study Programme Compliance**

I. Findings

The Alexandria Campus is located in the municipality of Delta (Sindos area in the west of the Municipality of Thessaloniki) and hosts a total of 14 of the 32 Departments of Undergraduate Studies of the IHU. The Department of Biomedical Sciences belongs to the School of Health Sciences and is located on the Alexandria Campus. It is equipped with logistical infrastructure that covers the operational

needs of the PSP, a secretariat room, and office space. Special care has been taken for people with disabilities with the construction of special and safe ways of approaching the teaching spaces and specially designed toilets. A restaurant that offers lunch for students and staff and a canteen operate on the campus.

#### II. Analysis

The department has 9 laboratory rooms with appropriate equipment. All laboratories are fully equipped with instruments, utensils and consumables for student practice, such as the Laboratory of Molecular Biology - Biotechnology, Immunology, Medical Microbiology, etc. It also has 8 research laboratory rooms, 2 classrooms, 1 Postgraduate Conference-Presentation Room, 1 computer island, while it is served by the amphitheater and the library of the School of Health Sciences. In the department's rooms, where the courses will be held, there are fresh air supply and exhaust systems, modern air conditioning machines that ensure adequate heating and cooling, projection screens, overhead projectors, speakers as well as teleconferencing or distance learning capabilities. The PSP has electronic and technical equipment, audiovisual media and digital educational materials and digital tools for conducting courses. The E-Learning support processes are: SSO Services for easy access Academic to all Resources/Applications; Content Management and E-Learning Environments (moodle/eclass) to support synchronous and asynchronous distance learning; Teleconferencing Services (Zoom, Google meet, Microsoft Teams, Jitsi, etc.); Streaming Services; Question Submission/Complaint Management/Academic Advisor Services.

The competent bodies for the organization and operation of the Postgraduate Program are the Senate of the IHU, the Department Assembly, the Coordinating Committee (SC), and the Director of the Postgraduate Program. The SC consists of the Director of the Postgraduate Program and four (4) members of the Department's Teaching and Research Staff ( $\Delta E\Pi$ ), who have a relevant field of knowledge to that of the Postgraduate Program and undertake teaching work in the Postgraduate Program. The Director of the Postgraduate Program comes from the Faculty members of the Department, with priority at the rank of Professor or Associate Professor, and is appointed by decision of the Department's Assembly for a two-year term, renewable without limitation. The permanent administrative employees of the IHU will support the Postgraduate Programs, outside of their working hours at the University; those who have been assigned work related to the PSP may be paid for additional work they provide. In addition to the permanent administrative employees, contract employees may be hired for additional support of the PSP.

Postgraduate students, upon their admission to the postgraduate program, will be informed by the Dean, the teaching staff and the Head of the Secretariat, in order to benefit from the available services, which are also posted on the PSP's website. Postgraduate students who do not have medical and hospital care from an insurance provider are entitled to full medical and hospital care in the National Health System (NHS) in accordance with the provisions in force at that time.

The University ensures the accessibility of students with special needs to the external (e.g. sidewalks, parking lots) and internal spaces (elevators, offices, event spaces, etc.) of the Institution. Academic Advisors inform, advise, and support first-year students on matters related to their studies, as well as on matters related to their progress and successful completion.

Postgraduate students have the right to submit complaints regarding their studies. Complaints may concern the quality of educational, research and administrative services provided by the Department, which organizes the Postgraduate Program. They have the right to submit a complaint to the Student Ombudsman, the Institution's Ethics Committee, the Gender Equality Committee, and the Data Protection Officer.

There is a tuition utilization plan, the payment of tuition fees is made by the student himself, where the resources of the PSP may come from tuition fees (the main source of resources for this specific program), donations, sponsorships, various forms of financial aid, bequests, resources from research projects or programs, university's own resources and the state budget or the public investment program.

#### III. Conclusions

The department is adequately equipped in terms of its facilities and laboratories to ensure good education for postgraduate students. Postgraduate students also have access to various services, such as study and career counseling. All services provided are linked to the department's website. EEAP considers the PSP as fully compliant to Principle 5.

#### **Panel Judgement**

| Principle 5: Learning Resources and Student Support |   |
|---|---|
| Fully compliant                                     | Х |
| Substantially compliant                             |   |
| Partially compliant                                 |   |
| Non-compliant                                       |   |

#### **Panel Recommendations**

R5.1 Develop and implement strategies to promote primary research within the PSP, ensuring that research activities are well integrated with program delivery to enhance academic quality. R5.2 Create detailed contingency plans for scenarios where enrolment targets are not met, including potential adjustments to lecturer compensation and exploration of alternative funding sources such as grants, donations, and sponsorships, as presented in the application. R5.3 Establish a plan to provide studentships and awards for outstanding students to attract high-caliber candidates and support academic excellence within the PSP.

# Principle 6: Initial Internal and External Evaluation and Monitoring of New Postgraduate Study Programmes

INSTITUTIONS AND ACADEMIC UNITS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM, FOR THE AUDIT, INTERNAL AND EXTERNAL EVALUATION OF THE NEW POSTGRADUATE PROGRAMMES, THUS ENSURING COMPLIANCE WITH THE PRINCIPLES OF THE PRESENT STANDARDS. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

The internal evaluation of the new PSP includes the assessment of the accreditation proposal, as well as the documentation in accordance with the Principles of the present Standards and the quality procedures of the Institution's Internal Quality Assurance System (IQAS). The internal evaluation of new postgraduate study programmes also aims at maintaining the level of educational provision and creating a supportive and effective learning environment for students. The Institution, through its Quality Assurance Unit (QAU) and the corresponding academic units, organise and support the external evaluation procedures of the new PSP, according to the specific guidelines and directions provided by HAHE.

The above comprise the assessment of:

- the objectives, content, and structure of the curriculum, the knowledge offered and the level of science and technology in the given discipline, thus ensuring that the PSP is up to date, according to the relevant documentation listed in the decisions of the pertinent bodies
- the entailed students' workload for the progression and completion of postgraduate studies
- the satisfaction of the students' expectations and needs in relation to the programme
- the learning environment, support services, and their fitness for purpose for the PSP in question

Postgraduate study programmes are designed and established in accordance with the provisions of the Institution's internal regulations, involving students and other stakeholders.

#### Documentation

- The Quality Assurance Unit (QAU) procedure for verifying whether the requirements of the Standards for Quality Accreditation of New PSP are met, as well as the procedure for organising and supporting their external evaluation procedures
- Assessment and feedback mechanisms of the PSP strategy and quality targeting, and relevant decision-making processes (students, external stakeholders)

#### Study Programme Compliance

I. Findings

This is the first External Evaluation of the PSP "Innovative approaches in clinical microbiology and infectomics". The Development Strategy and the Quality Policy of IHU are published on the main website of

the Foundation, at the link: www.ihu.gr The responsibilities of the Quality Assurance Unit, the structure of the Internal Quality Assurance System and the Quality Manual of the Institution are published on the website of the Quality Assurance Unit, at the link: <a href="http://www.ihu.gr/modip">www.ihu.gr/modip</a>.

This PSP is addressed to graduates from a wild-range of specialities. It aims to deepen PSP students' understanding of the clinical infections and microbiology. The objectives, content, and structure of the curriculum are clearly described in the received documents. The content of this PSP is up to date; however, some important topics (e.g., personalized medicine, diagnostics, therapeutic approaches, AI) have been neglected. Similarly, the practical exercise (research oriented) is absent from this new PSP. Periodic internal evaluation and monitoring will be carried out on an annual basis by the MODIP. Quality data, such as the structure and organization of courses, teaching methods, degree of student satisfaction, etc., will be collected and evaluated. All the above information will be made public to be easily accessible to all interested participants. There are sufficient support services in place for the successful realization of this PSP. The PSP has a duration of one and a half years (3 semesters).

#### II. Analysis

The organization of internal evaluation by QAU is satisfactory and aims to provide high-quality studies, improving the benefits and services, as well as the efficiency of the faculty. Students contribute feedback on course content, teaching methods, and instructor effectiveness, which, along with qualitative analysis, would shape the annual internal report resulting in improvements. Evaluation criteria encompass goal achievement, sustainability, graduates' progress, and research contribution. Continuous improvement efforts involve exploring similar programs, holding regular meetings, enhancing syllabi, and updating program guidelines. This inclusive internal evaluation ensures a supportive learning environment and alignment with evolving academic and market demands, overseen by the University's quality assurance unit following national guidelines. Based on the results of all data indicators (student evaluations, research work, etc.), necessary measures are taken, and appropriate corrective interventions are implemented.

The external evaluation process of the PSP is clearly outlined. This underscores the need for practical implementation to gauge its effectiveness. Essentially, the process entails periodic evaluations by panels appointed by HAHE for certification purposes. The outcomes of these evaluations will be utilized to continuously improve institutions, academic units, and the PSP. Gathering feedback from stakeholders and along with representatives from local and national social institutions and partners, could further elevate the PSP'S quality and relevance.

A source of concern is the dependence of the internal evaluation process on student questionnaires for gathering feedback on various aspects of the program. While soliciting student input is essential for evaluating teaching effectiveness and satisfaction of the course content, reactive measures based solely on questionnaire responses may not always be effective. Issues such as low response rates, inadequate capturing of relevant feedback, or a small and unrepresentative sample size, especially at the program's inception, can hinder the usefulness of student questionnaires.

All courses in this PSP address current developments in computing and digital technologies that are linked to the healthcare system. PSP students can potentially obtain the necessary knowledge and training in this important and continuously evolving field linked to healthcare. It is not certain if the 3-semester period will allow for a strong and competitive PSP. The addition of a fourth semester will significantly strengthen this PSP. Collaboration with other major institutions will ensure that students will be provided with a good level of practical experience. This will allow PSP students to develop the appropriate skills to continue their careers. The services provided, both electronic (online secretariat) and academic, are of good quality. The better use of the financial resources (research-oriented budget, trophies and prizes for the best PSP students and teachers, organization of national or international meetings, etc.) and the qualifications of invited teachers for this PSP will also contribute to its improvement.

#### III. Conclusions

The structure and organization of the internal evaluation are satisfactory. The documents provided an outline of a robust framework for evaluating and monitoring the PSP, although the effectiveness of the measures would be ultimately tested in practice when the programme starts. EEAP considers the PSP as fully compliant to Principle 6.

#### **Panel Judgement**

| Principle 6: Initial Internal and External Evaluation and<br>Monitoring of New Postgraduate Study Programmes |   |
|--|---|
| Fully compliant  | Х |
| Substantially compliant  |   |
| Partially compliant  |   |
| Non-compliant  |   |

#### **Panel Recommendations**

R6.1 The PSP should develop alternative mechanisms for collecting feedback from lecturers, students, and stakeholders to ensure continuous program improvement.

R6.2 A steering committee should form to help in addressing issues and implementing corrective measures guided by the qualitative research findings.

R6.3 An alumni organization should be created and all mechanisms to follow up the careers of the graduates should be established.

R6.4 The PSP should consider adding in the regulations the completion of the questionnaires as an obligation of the students.

# PART C: CONCLUSIONS

## I. Features of Good Practice

- GP1. Experienced teaching staff.
- GP2. Experience from other PSPs taught in English.
- GP3. There is an internal quality mechanism in place.
- GP4. Rules and regulations are available in the Department's guide and on-line.

GP5. The submitted curriculum and the content of the courses are largely on par with what is expected.

### II. Areas of Weakness

- W1. Lack of connection with research.
- W2. No practical training.
- W3. Most lectures are given on-line.
- W4. No formal framework of interactions with stakeholders and social partners.

## III. Recommendations for Follow-up Actions

R1. Include practical training.

R2. The department should consider to narrow down the diversity of students that can apply to the PSP and accept only students who have graduated in subjects closely related to the PSP. R3. Increase the number of in-person teaching and improve the engagement of students in learning, teaching, and research.

R4. Establish clear and strong connection between the PSP and the research carried out in the department and collaborating departments. Provide on the PSP's web site links for each teaching staff member to their Scopus/Google Scholar/WoS profile, list of publications, and overview of their research.

R5. Establish a mechanism to award excellence for teaching and service.

R6. Provide a formal process for curriculum revision.

R7. Increase student's engagement by more weekday teaching sessions, incorporation of midterm exams, quizzes etc.

R8. Establish a mechanism to gather feedback from stakeholders and social partners.

R9. The department should be more aggressive on mobility through the Erasmus+ program.

# IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are: 5,6

The Principles where substantial compliance has been achieved are: 1,2,3,4

The Principles where partial compliance has been achieved are: None

The Principles where failure of compliance was identified are: None

| Overall Judgement       |   |
|-------------------------|---|
| Fully compliant         |   |
| Substantially compliant | X |
| Partially compliant     |   |
| Non-compliant           |   |

# The members of the External Evaluation & Accreditation Panel

Name and Surname

Signature

PAPAGEORGIOU TASSOS

CHRISTOPHIDES GEORGE

KYRIAKIDOU PANAGIOTA

PANTOPOULOS KONSTANTINOS