

Doc. 300.3.1

Date: Date

External Evaluation Report (Departmental)

- **Higher Education Institution:**

University of Cyprus

- **Town:** Nicosia

- **School/Faculty:** Pure and Applied Sciences

- **Department:** Physics

- **Department's Status:** Currently Operating

- **Programme(s) of study under evaluation:**
Name (Duration, ECTS, Cycle)

Programme 1

In Greek:

Πτυχίο Φυσικής

In English:

Bachelor in Physics

Programme 2

In Greek:

Μάστερ στη Φυσική

In English:

MSc in Physics

Programme 3

In Greek:

Διδακτορικό στη Φυσική

In English:

Ph.D. in Physics



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION



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



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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Department's programmes (to be filled by the CYQAA officer and verified by the EEC):

DEPARTMENT	PROGRAMMES OF STUDY

A. Introduction

This part includes basic information regarding the onsite visit.

The External Evaluation Committee (hereafter referred to as the “Committee”) met in Cyprus between the 10th and 14th of April 2023, to carry out the Evaluation of the Department of Physics (hereafter referred to as the “Department”) of the University of Cyprus. In the morning of April 10th, the Committee first attended an introductory presentation in the University of Cyprus, providing general guidelines for the evaluation procedure. This was followed by an introductory presentation for the whole University given by the Rector of the University Professor T. Chrstofides who also provided some remarks on the legislative framework and highlighted some current concerns regarding the organisational processes of the University.

Following that, a series of 4 presentations by Professor N. Toumbas, Chairperson of the Department, Professor S. Skourtis, ViceChairperson of the Department, Professor G. Archontis, Coordinator of Undergraduate Studies and Professor F. Ptochos, Coordinator of Graduate Studies. A number of questions were posed by the members of the Committee for further clarification on various aspects of their presentations. During the above presentations the Committee was provided with factual data of the Departmental activities and statistical elements concerning the undergraduate and graduate programs and data on educational and research matters, student performance statistics, age profile of the academic staff, future plans and other relevant information. More specifically, the presenters described the Departmental structure, the number of academic, research, technical and administrative staff, the student intake and load at both undergraduate and postgraduate levels, as well as the number of courses offered at these levels. The Committee was provided with some information with regards to the technical and administrative personnel, including the Department’s secretariat and the provision of information technology services (number of employees, status and current concerns on their employment).

On the morning of April 11th, a meeting with the undergraduate, master and PhD students took place in the premises. The interaction with the students was very fruitful and provided information on teaching assistantship procedures, textbooks provided, access to the Library and internet.

A guided tour to the Stelios Ioannou Library as well as a visit to the teaching and research laboratories and teaching rooms was organised after the meeting with the students.

Following that, an exit meeting with the Heads of the Department and the programmes’ coordinators took place on April 11th where some clarifications were requested in order to assist the Committee in the writeup of the evaluation report.

Finally, closed sessions took place, from the afternoon of April 11th until April 13th, for the Committee members to consider all the information collected, to evaluate the Department and to write the External Evaluation Reports.

For the evaluation, the members of the Committee received and took into consideration the following electronic documents provided by the CYQAA:

1. The Applications for Evaluation – Accreditation for the Undergraduate and Graduate programmes of study, including the tables and annexes concerning the personnel and course programs and information on research programs, full CVs of the faculty members (with publications and citations).
2. Undergraduate and graduate studies curricula.
3. Presentations provided by the Chairman and the ViceChairperson of the Department, the Coordinators of Undergraduate and Graduate Studies.



B. External Evaluation Committee (EEC)

Name	Position	University
George Palasantzas	Professor - Chair	University of Groningen, The Netherlands
Christos N. Likos	Professor - Member	University of Vienna, Austria
Margarita Niki Assimakopoulos	Associate Professor -Member	National and Kapodistrian University of Athens
Evangelos Kyriakides	Student - Member	Cyprus University of Technology, Cyprus
Name	Position	University
Name	Position	University



C. Guidelines on content and structure of the report

- *The external evaluation report refers to the Department as a whole (programmes offered, teaching staff, administrative staff, infrastructure, resources, etc.).*
- *The external evaluation report follows the structure of assessment areas and sub-areas.*
- *Under each assessment area there are quality indicators (criteria) to be scored by the EEC on a scale from one (1) to five (5), based on the degree of compliance for the above mentioned quality indicators (criteria). The scale used is explained below:*

1 or 2:	Non-compliant
3:	Partially compliant
4 or 5:	Compliant

- *The EEC must justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.*
- *It is pointed out that, in the case of indicators (criteria) that cannot be applied due to the status of the Department, N/A (= Not Applicable) should be noted and a detailed explanation should be provided on the Department's corresponding policy regarding the specific quality indicator.*
- *In addition, for each assessment area, it is important to provide information regarding the compliance with the requirements. In particular, the following must be included:*

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - 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 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.***
- *The report may also address other issues which the EEC finds relevant.*



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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1. Department's academic profile and orientation

(ESG 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9)

Sub-areas

- 1.1 Mission and strategic planning (including SWOT analysis)
- 1.2 Connecting with society
- 1.3 Development processes

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*

3: *Partially compliant*

4 or 5: *Compliant*

Quality indicators/criteria		
1. Department's academic profile and orientation		
1.1 Mission and strategic planning (including SWOT analysis)		1 - 5
1.1.1	The Department has formally adopted a mission statement, which is available to the public and easily accessible.	5
1.1.2	The Department has developed its strategic planning aiming at fulfilling its mission.	4
1.1.3	The Department's strategic planning includes short, medium-term and long-term goals and objectives, which are periodically revised and adapted.	4
1.1.4	The programmes of study offered by the Department reflect its academic profile and are aligned with the European and international practice.	5
1.1.5	The academic community is involved in shaping and monitoring the implementation of the Department's development strategies.	5
1.1.6	Stakeholders such as academics, students, graduates and other professional and scientific associations participate in the Department's development strategy.	5
1.1.7	The mechanism for collecting and analysing data and indicators needed to effectively design the Department's academic development is adequate and effective.	5



Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

Despite the existence of a clear strategy and vision on behalf of the Department, the fulfilment of its mission in the future is crucially dependent on the department maintaining or even increasing the number of its faculty members. In view of the upcoming retirement of 7 faculty members, which will reduce in half the academic staff of the department, the Committee strongly recommends immediate actions to be taken towards the replacement of the retiring professors.

Additionally, provide information on the following:

1. Coherence and compatibility among programmes of study offered by the Department.
2. Coherence and compatibility among Departments within the School/Faculty (to which the Department under evaluation belongs).

1. The Committee has found that the Bachelor's, Master's and Ph.D. programmes of the Departments are coherent, well thought-of and consistent with international standards. In particular, the buildup from the introductory towards the advanced level of lectures, labs and courses is not only very well organised but also well-received and appreciated by the students.

2. Corporations with the Departments of Chemistry and Mathematics, which offer service courses to Physics, are well-established.

Provide suggestions for changes in case of incompatibility.

Click to enter text.

1. Department's academic profile and orientation

1.2 Connecting with society

1 - 5

1.2.1	The Department has effective mechanisms to assess the needs and demands of society and takes them into account in its various activities.	5
1.2.2	The Department provides sufficient information to the public about its activities and offered programmes of study.	5
1.2.3	The Department ensures that its operation and activities have a positive impact on society.	5
1.2.4	The Department has an effective communication mechanism with its graduates.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The Committee highly commends the Department and Faculty Members for their initiative and efforts regarding the making of New High School textbooks for use in the Republic of Cyprus. This required a tremendous amount of preparation, perseverance and time, and occurred on a fully voluntary basis.



1. Department's academic profile and orientation

1.3 Development processes

1 - 5

1.3.1	Effective procedures and measures are in place to attract and select teaching staff to ensure that they possess the formal and substantive skills to teach, carry out research and effectively carry out their work.	5
1.3.2	Planning teaching staff recruitment and their professional development is in line with the Department's academic development plan.	5
1.3.3	The Department applies an effective strategy of attracting high-level students from Cyprus and abroad.	5
1.3.4	The funding processes for the operation of the Department and the continuous improvement of the quality of its programmes of study are adequate and transparent.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

Additionally, write:

- Expected number of Cypriot and international students
- Countries of origin of international students and number from each country

40 positions offered per year for the Undergraduate program and 20 positions per year for the Graduate Program (12 Msc and 8 PhD positions) for Cypriot and international students

International students – Department of Physics

For the Academic Year 2022/2023, including Spring Semester, the numbers are as follows:

PhD: 6 international students (1 from UK, 1 from Iran, 1 from Italy, 1 Pakistan, 1 Russia, 1 Greece)

Master: 1 international student from Greece

Undergraduate: 9 international students (1 from Bulgaria, 8 from Greece)

For the period 2015 – 2022, see table below (page 10 of Departmental Report)

Programs of study	Nationality	2015	2016	2017	2018	2019	2020	2021	2022
PhD in Physics	British				1	1	1	1	1
	Costa Rican				1	1	1	1	
	Cypriot	13	19	18	18	15	14	18	18
	Greek		1	2	1	1	1	1	1
	Iranian								1
	Italian	3	3	3	7	4	4	4	1
	Pakistani	1	1	1	1				
Master in Physics	Cypriot	14	8	7	4	3	4	5	2
	Greek	1							1
Undergraduate Program in Physics	Bulgarian							1	1
	Cypriot	111	102	101	98	96	95	101	108
	Greek	4	3	5	7	4	5	6	8
	Iraqi						1		

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The Department is characterised by a strong international research presence at the forefront of current physics areas. There is a clear spirit of cooperation and collegiality among its faculty members, expressed, e.g., in drawing future strategies, assigning teaching duties as well as sharing administrative tasks. Moreover, the Department executes in full compliance its teaching duties at all levels. The administrative and technical personnel offer invaluable assistance, which often exceeds their assigned duties.

Strengths

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

1. Strong research orientation and publications in internationally leading journals.
2. Commitment to high-level teaching.
3. The Department has achieved a very positive reputation, so that its graduates, with whom the Department maintains excellent contacts, pursue successful careers in academia and various branches of the industry.
4. Strong international character, as evidenced by joint publications, exchanges as well as participation in joint doctorates and other EU-funded programmes.
5. A unique achievement of the Department pertains to its connection to the Cypriot society regarding the writing of High-School Physics textbooks for both Senior and Junior High.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

1. The age profile of the Department shows that a large number of the academic staff will reach the age of retirement within the next couple of years. The Department will have to face the challenge of evolving in the next generation and the University has to take actions towards the replacement of the resulting vacancies.
2. Funding of the PhD students who also assume duties of Teaching Assistants guarantees continuity in both teaching and research and it is strongly recommended.



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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
1.1 Mission and strategic planning	Compliant
1.2 Connecting with society	Compliant
1.3 Development processes	Compliant



2. Quality Assurance

(ESG 1.1, 1.2, 1.3, 1.4, 1.6, 1.7, 1.8)

Sub-areas

2.1 System and quality assurance strategy

2.2 Quality assurance for the programmes of study

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*

3: *Partially compliant*

4 or 5: *Compliant*

Quality indicators/criteria		
2. Quality Assurance		
2.1 System and quality assurance strategy		1 - 5
2.1.1	The Department has a policy for quality assurance that is made public and forms part of the Institution's strategic management.	5
2.1.2	Internal stakeholders develop and implement a policy for quality assurance through appropriate structures and processes, while involving external stakeholders.	5
2.1.3	The Department's policy for quality assurance supports guarding against intolerance of any kind or discrimination against students or staff.	5
2.1.4	The quality assurance system adequately covers all the functions and sectors of the Department's activities:	
2.1.4.1	Teaching and learning	5
2.1.4.2	Research	5
2.1.4.3	The connection with society	5
2.1.4.4	Management and support services	5
2.1.5	The quality assurance system promotes a culture of quality.	5
2.1.6	Students' evaluation and feedback	5



Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

[Click to enter text.](#)

2. Quality Assurance

2.2 Quality assurance for the programmes of study

1 - 5

2.2.1	The responsibility for decision-making and monitoring the implementation of the programmes of study offered by the Department lies with the teaching staff.	5
2.2.2	The system and criteria for assessing students' performance in the subjects of the programmes of studies offered by the Department are clear, sufficient and known to the students.	5
2.2.3	The quality control system refers to specific indicators and is effective, which have been presented and discussed.	5
2.2.4	The results from student assessments are used to improve the programmes of study.	5
2.2.5	The policy dealing with plagiarism committed by students as well as mechanisms for identifying and preventing it are effective.	5
2.2.6	The established procedures for examining students' objections/ disagreements on issues of student evaluation or academic ethics are effective.	5
2.2.7	The Department publishes information related to the programmes of study, credit units, learning outcomes, methodology, student admission criteria, completion of studies, facilities, number of teaching staff and the expertise of teaching staff.	5
2.2.8	Names and position of the teaching staff of each programme are published and easily accessible.	5
2.2.9	The Department has a clear and consistent policy on the admission criteria for students in the various programmes of studies offered.	5
2.2.10	The Department flexibly uses a variety of teaching methods.	5

2.2.11	The Department systematically collects data in relation to the academic performance of students, implements procedures for evaluating such data and has a relevant policy in place.	5
2.2.12	The Department analyses and publishes graduate employment information.	5
2.2.13	The Department ensures adequate and appropriate learning resources in line with European and international standards and/or international practices, particularly:	
2.2.12.1	Building facilities	5
2.2.12.2	Library	5
2.2.12.3	Rooms for theoretical, practical and laboratory lessons	5
2.2.12.4	Technological infrastructure	5
2.2.12.5	Academic support	5
2.2.14	There is a student welfare service that supports students in regard to academic, personal problems and difficulties.	5
2.2.15	The Department's mechanisms, processes and infrastructure consider the needs of a diverse student population such as mature, part-time, employed and international students as well as students with disabilities.	5
2.2.16	Mentoring of each student is provided and the number of students per each permanent teaching member is adequate.	5
2.2.17	The provision of quality doctoral studies is ensured through doctoral studies regulations, which are publicly available.	5
2.2.18	The number of doctoral students, under the supervision of a member of the teaching staff, enables continuous and effective feedback to the students and it complies with the European and international standards.	4
2.2.19	The Department has mechanisms and funds to support writing and attending conferences of doctoral candidates.	5
2.2.20	There is a clear policy on authorship and intellectual property.	5

Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

The number of graduate students is low, so that downward fluctuations can have a detrimental effect on the adequacy of undergraduate teaching in the form of Teaching Assistantships. Permanent graduate fellowships would decisively help addressing the problem.



A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The Department has implemented all appropriate measures for quality control, compliant with international best practice.

Strengths

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

1. The building- and lab-facilities are outstanding.
2. Innovative solutions for the teaching labs have been implemented.
3. Atmosphere of openness and transparent communication between students, TAs and Professors.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

There is ample room for improvement in ascertaining that a constant flow of support exists for incoming graduate students, so that quality in teaching support can be maintained at high level.

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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
2.1 System and quality assurance strategy	Compliant
2.2 Quality assurance for the programmes of study	Compliant



3. Administration (ESG 1.1, 1.3, 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
3. Administration		1 - 5
3.1	The administrative structure is in line with the legislation and the Department's mission.	4
3.2	The members of the teaching and administrative staff and the students participate, at a satisfactory degree and on the basis of specified procedures, in the management of the Department.	5
3.3	The administrative staff adequately supports the operation of the Department.	5
3.4	Adequate allocation of competences and responsibilities is ensured so that in academic matters, decisions are made by academics and the Department's council competently exercises legal control over such decisions.	5
3.5	The Department applies effective procedures to ensure transparency in the decision-making process.	5
3.6	Statutory sessions of the Department are held and minutes are kept.	5
3.7	The Department's council operates systematically and autonomously and exercises the full powers provided for by the law and / or the constitution of the Department without the intervention or involvement of a body or person outside the law provisions.	5
3.8	The manner in which the Department's council operates and the procedures for disseminating and implementing their decisions are clearly formulated and implemented precisely and effectively.	5
3.9	The Department applies procedures for the prevention and disciplinary control of academic misconduct of students, teaching and administrative staff, including plagiarism.	5



3.10	The Department has appropriate procedures for dealing with students' complaints.	5
3.11	Internationalization of the Department and external collaborations.	5
Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies. The technical support (2 persons) for teaching and supervising at the laboratories is evidently insufficient to cover the needs of the curriculum.		

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

1. The administrative infrastructure in the Department and the technical resources need enhancement in terms of personnel support .
2. The Department has established procedures for dealing with students' complaints. The students can discuss complaints with their Academic Advisor, the Coordinator of Undergraduate studies and the Chair of the Department. The students may also file complaints to the University authorities.
3. Regarding grades and exam marks, the students are entitled to request clarification from the Instructor. If the Instructor does not agree with the student, the student has the right to request the mediation of the Department Chair, in order to be given the relevant explanations. If an incorrect grading is ascertained, a correction is made with the written approval of the Chair.
4. For other issues, the students can also seek assistance and support from the Academic Affairs and Student Welfare Service.

Strengths

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

The technical staff is well-educated and committed to supporting the teaching laboratories which is beyond their job description.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

1. One of the Department's priorities should be the recruitment of new technical personnel and the update of their job description as they obviously act as teaching assistants in laboratories.
2. New secretarial personnel should be employed and undergo professional training.

Please select what is appropriate for the following assessment area:

Assessment area	Non-compliant / Partially Compliant / Compliant
3. Administration	Compliant



ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
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4. Learning and Teaching

(ESG 1.2, 1.3, 1.4, 1.9)

Sub-areas

4.1 Planning the programmes of study

4.2 Organisation of teaching

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*

3: *Partially compliant*

4 or 5: *Compliant*

Quality indicators/criteria		
4. Learning and Teaching		
4.1 Planning the programmes of study		1 - 5
4.1.1	The Department provides an effective system for designing, approving, monitoring and periodically reviewing the programmes of study.	5
4.1.2	Students and other stakeholders, including employers, are actively involved in the programmes' review and development.	5
4.1.3	Intended learning outcomes, the content of the programmes of study, the assignments and the final exams correspond to the appropriate level as indicated by the European Qualifications Framework (EQF).	5
4.1.4	The programmes of study are in compliance with the existing legislation and meet the professional qualifications requirements in the professional courses, where applicable.	N/A
4.1.5	The Department ensures that its programmes of study integrate effectively theory and practice.	5
Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.		
Click or tap here to enter text.		
4. Learning and Teaching		
4.2 Organisation of teaching		1 - 5



4.2.1	The Department establishes student admission criteria for each programme, which are adhered to consistently.	5
4.2.2	Recognition of prior studies and credit transfer is regulated by procedures and regulations that are in line with European standards and/or international practices.	5
4.2.3	The number of students in the teaching rooms is suitable for theoretical, practical and laboratory lessons.	5
4.2.4	The teaching staff of the Department has regular and effective communication with their students, promoting mutual respect within the learner-teacher relationship.	5
4.2.5	Student-centred learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process.	5
4.2.6	The teaching staff of the Department provides timely and effective feedback to their students.	5
4.2.7	The criteria and the method of assessment as well as the criteria for marking are published in advance.	5
4.2.8	The assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved.	5
<p>Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.</p> <p>Click to enter text</p>		

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The teaching methodology is based on a series of lectures, complemented by exercise classes. The laboratory exercises are performed by all the students in the sessions on a rotational basis in order for them to perform all the exercises of the curriculum.

Strengths

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

1. A very positive aspect of the curriculum is the bridge-course on Physics Foundations in order to facilitate the smooth transition from high-school to university level.
2. The teaching load is evenly distributed amongst the teaching staff.
3. The teaching staff-to-student ratio is satisfactory.

Areas of improvement and recommendations





A list of problem areas followed by or linked to the recommendations of how to improve the situation.

Every effort should be made so that sufficient funds are secured for the Department aiming at:

1. sustaining/growing the number of faculty members necessary to support the existing curricula and their evolution towards emerging fields.
2. supporting and motivating the Teaching Assistants to continue their studies in higher education
3. maintaining and updating teaching and research equipment.
4. enabling access to textbooks (e.g. electronic copies)

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

Sub-area	<i>Non-compliant / Partially Compliant / Compliant</i>
4.1 Planning the programmes of study	Compliant
4.2 Organisation of teaching	Compliant



5. Teaching Staff (ESG 1.5)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
5. Teaching Staff		1 - 5
5.1	The number of teaching staff - full-time and exclusive work - and the subject area of the staff sufficiently support the programmes of study.	5
5.2	The teaching staff of the Department has the relevant formal and substantive qualifications for teaching the individual subjects as described in the relevant legislation.	5
5.3	The visiting Professors' subject areas adequately support the Department's programmes of study.	N/A
5.4	The special teaching staff and special scientists have the required qualifications, sufficient professional experience and expertise to teach a limited number of programmes of study.	N/A
5.5	The ratio of special teaching staff to the total number of teaching staff is satisfactory.	N/A
5.6	The ratio of the number of subjects of the programme of study taught by teaching staff working fulltime and exclusively to the number of subjects taught by part-time teaching staff ensures the quality of the programme of study.	N/A
5.7	The ratio of the number of students to the total number of teaching staff is sufficient to support and ensure the quality of the programme of study.	5
5.8	Feedback processes for teaching staff in regard to the evaluation of their teaching work, by the students, are satisfactory.	5
<p>Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.</p> <p>Click to enter text</p> <p>Also, write the following:</p> <ul style="list-style-type: none">- Number of teaching staff working full-time and having exclusive work <p>Academic Personnel (14+1)</p>		



Professors (6): C. Alexandrou, C. Christofides, A. Othonos, H. Panagopoulos, F. Ptochos, P. Razis

Associate Professors (6): G. Archontis, G. Itskos, K. Mouloupoulos, S. Skourtis, S. Theodorakis, N. Toubas

Assistant Professors (1+1): T. Trypiniotis + new faculty member to assume duties in 09/2023

Lecturers (1): H. Saka

- Number of special teaching staff working full-time and having exclusive work

- Number of visiting Professors

- Number of special scientists on lease services

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The academic staff of the Department is currently composed of 14+1 faculty members; 6 Professors, 6 Associate Professors, 1 Assistant Professors + new faculty member to assume duties in 09/2023, 1 Lecturer. The department also has 2 lab technicians, 2 secretaries and 1 computational/IT support..

The teaching staff-to-active student ratio is satisfactory being approximately as the international standards (1:10) dictates. However, in the near future, this number will decay because no detailed planning for replacements of the retired faculty members has been put in place.

Except for the technicians, the Department staff is sufficient to fulfil the needs of the current educational program, both at undergraduate and graduate levels.

The Committee visited the Department's research and teaching laboratories and the overall infrastructure, room-space availability and accompanying teaching material are satisfactory.

A positive aspect of the undergraduate program that should be underlined is the possibility offered for the students to participate in the European exchange program Erasmus, allowing them to gain experience within the European Area of Higher Education.

The Department has introduced the collection of data for the evaluation of the teaching personnel (questionnaire), which enables the academic staff to draw useful conclusions about their overall performance.

The intake of the Department is approximately 40+20 students per year for the undergraduate and graduate programs respectively.

According to the statistics provided by the Department, the total number of undergraduate students currently enrolled is about 140.

The minimum duration of undergraduate studies is 4 years. The average duration of MSc studies is 4.5 semesters, and the PhD program is on the average 11 semesters.

Strengths

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

Fully committed and dedicated staff offering high quality of studies .



The Department's research and teaching laboratories and the overall infrastructure, room-space availability and accompanying teaching material are satisfactory.

Very recently the Department initiated a program offering placements in industry and research centres for the undergraduate program.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

Every effort should be made so that sufficient funds are secured by the Department for the maintenance of teaching and research equipment and staff. This will help to reduce the amount of time necessary for the completion of graduate studies. Moreover, the lack of predictable, continuous funding of doctoral students forces them to take up external jobs and causes long delays in the completion of their doctoral work.

A necessity exists for hiring more technicians.

The Committee encourages the faculty members to enhance advertising of the Department's educational programs. Furthermore, the Committee strongly believes that the number of students enrolled in the Department should be increased via the introduction of new and hot topics (machine learning, AI, quantum computing etc.), in order to maintain the good quality of the program.

Please ✓ what is appropriate for the following assessment area:

Assessment area	<i>Non-compliant / Partially Compliant / Compliant</i>
Teaching staff number, adequacy and suitability	Compliant
Teaching staff recruitment and development	Compliant
Synergies of teaching and research	Compliant



6. Research

(ESG 1.1, 1.3, 1.5, 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*

3: *Partially compliant*

4 or 5: *Compliant*

Quality indicators/criteria		
6. Research		1 - 5
6.1	The Department has a research policy formulated in line with its mission.	5
6.2	The Department consistently applies internal regulations and procedures of research activity, which promote the set out research policy and ensure compliance with the regulations of research projects financing programmes.	5
6.3	The Department provides adequate facilities and equipment to cover the staff and students' research activities.	5
6.4	The Department has the appropriate mechanisms for the development of students' research skills.	5
6.5	The results of the teaching staff research activity are published to a satisfactory extent in international journals which work with critics, international conferences, conference proceedings, publications, etc. The Department also uses an open access policy for publications, which is consistent with the corresponding national and European policy.	5
6.6	The Department ensures that research results are integrated into teaching and, to the extent applicable, promotes and implements a policy of transferring know-how to society and the production sector.	5
6.7	The Department provides mechanisms which ensure compliance with international rules of research ethics, both in relation to research activity and the rights of researchers.	5
6.8	The external, non-governmental, funding of research activities of teaching staff is similar to other Departments in Cyprus and abroad.	3
6.9	The policy, indirect or direct of internal funding of the research activities of the teaching staff is satisfactory, based on European and international practices.	5



Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.

Due to lack of a predictable flow of research funding through the Cyprus RIF, the research staff has significant difficulties in maintaining an uninterrupted research program.

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The Department is research oriented and it promotes it via the established research groups which comprise:

1. The Theoretical Nuclear Physics, Particle Physics and Cosmology Group focusing on Lattice QCD, String Theory and Quantum gravity, Particle Phenomenology at High Energies
2. The Experimental Nuclear Physics Group focusing on Particle Experiments and collaborations mainly with CERN
3. The Theoretical and Computational Biophysics and Molecular Physics Group focusing on Molecular Physics, Theoretical and Experimental Condensed Matter

The Department sustains state-of-the-art computational laboratories and are dedicated to high-performance computations in their areas of research. The computational resources have been obtained to a large extent via competitive research grants.

Strengths

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

1. The Department has a very clear research-oriented strategy and it is extroverted, as documented by the international collaborations, joint publications and participation in joint projects and activities.
2. The research laboratories employ cutting-edge techniques and equipment for the execution of the related research.
3. The researchers are keeping abreast with international developments in their fields of research.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

1. Research continuity and research-related outputs are compromised due to the lack of reliable and predictable national funding sources as well as due to the interruption of previously established fellowship programs supporting doctoral students. Efforts should be made to remedy these deficiencies at a national level.
2. The funding opportunities offered by EU programmes (Marie-Sklodowska-Curie, Horizon Europe etc.) should be further aggressively pursued by faculty members.
3. The Committee recommends that University policy regarding hiring practices should offer automatic tenure-track positions to ERC-Grant winners.

Please ✓ what is appropriate for the following assessment area:

Assessment area	Non-compliant / Partially Compliant / Compliant
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Research mechanisms and regulations	Compliant
External and internal funding	Compliant
Motives for research	Compliant
Publications	Compliant



7. Resources (ESG 1.6)

Mark from 1 to 5 the degree of compliance for each quality indicator/criterion

1 or 2: *Non-compliant*
3: *Partially compliant*
4 or 5: *Compliant*

Quality indicators/criteria		
7. Resources		1 - 5
7.1	The Department has sufficient financial resources to support its functions, managed by the Institutional and Departmental bodies.	3
7.2	The Department follows sound and efficient management of the available financial resources in order to develop academically and research wise.	5
7.3	The Department's profits and donations are used for its development and for the benefit of the university community.	N/A
7.4	The Department's budget is appropriate for its mission and adequate for the implementation of strategic planning.	3
7.5	The Department carries out an assessment of the risks and sustainability of the programmes of study and adequately provides feedback on their operation.	5
7.6	The Department's external audit and the transparent management of its finances are ensured.	5
7.7	The fitness-for-purpose of support facilities and services is periodically reviewed.	5
Justify the numerical scores provided for the quality indicators (criteria) by specifying (if any) the deficiencies.		
Regular Department funding is insufficient to secure, e.g., normal faculty- and doctoral-students travel abroad with the purpose of conference visits and collaborations.		

Findings

A short description of the situation in the Department based on evidence from the Department's application and the site - visit.

The Department is doing a good job in distributing fairly the available funds however the committee considers these resources to be insufficient.

The Departmental Budget is administered by the University Financial Services, who are responsible for the preparation of the annual financial statements. There is internal and external audit for each year, for the University as



well as the Departments. Research programs are also checked for transparent management, by independent external auditors, as specified by the requirements of the relevant funding agencies (Cyprus R.I.F, EU, etc).

Strengths

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

Given the current circumstances, the Committee feels that resources are distributed fairly and transparently amongst Departmental members and needs.

Areas of improvement and recommendations

A list of problem areas followed by or linked to the recommendations of how to improve the situation.

1. The maintenance of building infrastructure is on several occasions insufficient and therefore putting at risk proper operation of expensive and specialised research equipment.
2. The Committee strongly suggests that the University Administration allocate to the Department of Physics a larger budget in order to cover the Department's regular needs.

Please ✓ what is appropriate for the following assessment area:

Assessment area	Non-compliant / Partially Compliant / Compliant
7. Resources	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 Department under review may be achieved.

The Committee has been very positively impressed by the quality, dedication and collegial atmosphere of the Department of Physics of the University of Cyprus. The Department is unique in the Republic of Cyprus in its function as an institution offering higher education and cutting-edge research in a fundamental area such as Physics. The importance of Physics to society as a basic Natural Science and its connection to many areas of application cannot be overemphasised. Accordingly, the Committee has been able to identify three pillars of major contributions offered by this Department to Cyprus as a country and to the Cypriot society at large, namely:

1. Putting Cyprus-centred Physics research internationally on the map and increasing the visibility of the high-quality work done in investigating cutting-edge problems in Physics.
2. Providing high-level training in Physics to young Cypriots and international students, offering them thereby skills that are uniquely suited for their further employment in the industry of academia.
3. Doing a great service to the Cypriot society by developing High-School curricula and teaching material for Physics.

In line with the above, the Committee finds it indispensable that the Department not only continues but also strengthens and expands its operation after the “generation change” induced by upcoming retirements of as much as 50% of its current staff. Concomitantly, it strongly recommends expansion into novel, internationally booming areas of research, as summarised below.

Appointments should aim at strengthening existing research areas and at building critical mass in these areas, but remaining alert to opportunities to recruit truly outstanding candidates in areas which presently are not represented in the Department.

In particular, the following cutting-edge directions in Physics internationally can create powerful synergies with the present faculty at the Department:

- Quantum Computing - Quantum Communication
- New materials - Nanophysics - Quantum and Biomaterials
- Computational Physics - Data Science - Machine Learning: Their application to Elementary Particle Physics and Biophysics
- Astroparticle Physics and Cosmology
- Elementary Particle Physics - Keeping in line with ongoing international experiments
- Applications to Medical Physics