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Date: 30/09/2020

External Evaluation Report

(Programmatic within the framework of Departmental Evaluation)

- **Higher Education Institution:**
University of Cyprus
- **Town:** Nicosia
- **School/Faculty:** Pure and Applied Sciences
- **Department:** Chemistry
- **Programme(s) of study - Name (Duration, ECTS, Cycle)**
Programme 1 – Chemistry
In Greek:
Programme Name
In English:
Chemistry (4yrs /240 ECTS, Bachelor Degree)
Language(s) of instruction: Greek and English
- **Programme 2 – [Title 2]**
In Greek:
Programme Name
In English:
Programme Name
Language(s) of instruction: Language(s)
- **Programme 3 – [Title 3]**
In Greek:
Programme Name
In English:
Programme Name
Language(s) of instruction: Language(s)



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 2019” [N. 136 (I)/2015 to N. 35(I)/2019].

A. Introduction

This part includes basic information regarding the onsite visit.

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The External Evaluation Committee was asked to review the UG Chemistry Programme. We were provided with an extensive written application well in advance of the review. However, it did not cover all assessment criteria. This was further supplemented with a presentation and the opportunity to ask questions (28/9/2020) of with the pro rector for academic affairs, academic staff including the department chair, professional support services staff, students and graduates. The meetings were constructive and informative and the questions from the EEC were addressed directly. We thank the students and staff of the department for contributing constructively to this review. The total duration of the virtual onsite visit of 4-5 hours (Sept. 28th 2020) and another meeting for an hour (Sept. 29th 2020) for both departmental and programmatic evaluation was somewhat short, which meant that some relevant questions had to be left out and discussions shortened.

The virtual tour of the University, which the EEC was provided, was not very informative and importantly didn't cover the teaching, study and laboratory facilities at the Department of Chemistry. Hence our conclusions on these matters are entirely based on second-hand information. Our numerical scoring in this report is based on the data, which the ECC has collected from the written application material, the onsite visit and the following meeting with the internal evaluation committee. In cases where the ECC felt that data were insufficient, we have not provided a score. This is intended to facilitate and simplify the responses from the department on these points

The External Evaluation Committee recognize that this review is taking place under extraordinary circumstances and that the Covid-19 pandemic has impacted upon many processes. We would particularly like to thank Anthi Prokopa of The Cyprus Agency of Quality Assurance and Accreditation in Higher Education for her support though this review.

B. External Evaluation Committee (EEC)

<i>Name</i>	<i>Position</i>	<i>University</i>
Maria Aletrari	Chief Chemist	State General Laboratory
Jesper Bendix	Professor	University of Copenhagen
Xenarou Styliani	Student	Cyprus University of Technology
Moniek Tromp	Professor	University of Groningen
Tom Welton	Professor	Imperial College London
Name	Position	University

C. Guidelines on content and structure of the report

- *The external evaluation report follows the structure of assessment areas.*
- *At the beginning of each assessment area there is a box presenting:*
 - standards which are relevant to the European Standards and Guidelines (ESG)*
 - some questions that EEC may find useful.*
- *The questions aim at facilitating the understanding of each assessment area and at illustrating the range of topics covered by the standards.*
- *Under each assessment area 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 HEI and/or of the programme of study, N/A (= Not Applicable) should be noted and a detailed explanation should be provided on the HEI'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 Higher Education Institution (HEI), based on elements from the application for external evaluation and on findings from the onsite visit.

Strengths

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

Areas of improvement and recommendations

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

- **The report may also address other issues which the EEC finds relevant.**

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

Standards

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

- *The programme of study:*
 - *is designed with overall programme objectives that are in line with the institutional strategy and have explicit intended learning outcomes*
 - *is designed by involving students and other stakeholders*
 - *benefits from external expertise*
 - *reflects the four purposes of higher education of the Council of Europe (preparation for sustainable employment, personal development, preparation for life as active citizens in democratic societies, the development and maintenance, through teaching, learning and research, of a broad, advanced knowledge base)*
 - *is designed so that it enables smooth student progression*
 - *defines the expected student workload in ECTS*
 - *includes well-structured placement opportunities where appropriate*
 - *is subject to a formal institutional approval process*
 - *results in a qualification that is clearly specified and communicated, and refers to the correct level of the National Qualifications Framework for Higher Education and, consequently, to the Framework for Qualifications of the European Higher Education Area*
 - *is regularly monitored in the light of the latest research in the given discipline, thus ensuring that the programme is up-to-date*
 - *is periodically reviewed so that it takes into account the changing needs of society, the students' workload, progression and completion, the effectiveness of procedures for assessment of students, student expectations, needs and satisfaction in relation to the programme*
 - *is reviewed and revised regularly involving students and other stakeholders*

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

You may also consider the following questions:

- *What is the procedure for quality assurance of the programme and who is involved?*
- *What is done to reduce/prevent academic fraud? How does the higher education institution address fraud cases?*
- *Who is involved in the study programme's design and development (launching, changing, internal evaluation) and what is taken into account (strategies, the needs of society, etc.)?*
- *Please evaluate a) whether the study programme remains current and consistent with developments in society (labour market, digital technologies, etc.), and b) whether the content and objectives of the study programme are in accordance with each other?*
- *Do the content and the delivery of the programme correspond to the European Qualifications Framework (EQF)?*
- *How is coherence of the study programme ensured, i.e., logical sequence and coherence of courses? How are substantial overlaps between courses avoided? How is it ensured that the teaching staff is aware of the content and outputs of their colleagues' work within the same study programme?*
- *How does the study programme support development of the learners' general competencies (including digital literacy, foreign language skills, entrepreneurship, communication and teamwork skills)?*
- *What are the scope and objectives of practical training in the study programme (where appropriate)?*
- *What are the scope and objectives of the foundation courses in the study programme (where appropriate)? What are the pass rates?*
- *How long does it take a student on average to graduate?*
- *How has the feedback from students, alumni, employers, teaching staff been taken into account? Provide some concrete examples.*
- *Has the study programme been compared to other similar study programmes when designed, including internationally, and to what purpose? Explain.*
- *Is the graduation rate for the study programme analogous to other European programmes with similar content?*
- *How is it ensured that the actual student workload is in accordance with the workload expressed by ECTS?*
- *What is the pass rate per course/semester?*
- *What are the opportunities for international students to participate in the study programme (courses/modules taught in a foreign language)?*
- *Is information related to the programme of study publicly available?*

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 - 5		
1.	Study programme and study programme's design and development	<i>Chemistry</i>	[Title 2]	[Title 3]
1.1	Academic oversight of the programme design is ensured.	4	Choose mark	Choose mark
1.2	Internal Quality Assurance processes safeguard the quality and the fulfillment of the programme's purpose, objectives and the achievement of the learning outcomes. Particularly, the following are taken into consideration:			
1.2.1	The programme webpage information and material	4	Choose mark	Choose mark
1.2.2	The procedures for the fulfillment of undergraduate and postgraduate assignments / practical training	3	Choose mark	Choose mark
1.2.3	The procedures for the conduct and the format of the examinations and for student assessment	3	Choose mark	Choose mark
1.2.4	Students' participation procedures for the improvement of the programme and of the educational process	5	Choose mark	Choose mark
1.3	The knowledge (theoretical and/or factual) gained is of the appropriate level to which the programme of study corresponds to, according to the European Qualifications Framework (EQF).	4	Choose mark	Choose mark
1.4	The skills (cognitive and practical) obtained are of the appropriate level to which the programme of study corresponds to, according to the European Qualifications Framework (EQF).	3	Choose mark	Choose mark
1.5	Samples of assignments and exams ensure the ability of the learner to apply knowledge and skills autonomously and with responsibility, according to the European Qualifications Framework (EQF).	4	Choose mark	Choose mark

1.6	The content of the programme's courses reflects the latest achievements / developments in science, arts, research and technology.	4	Choose mark	Choose mark
1.7	Students' command of the language of instruction is appropriate.	5	Choose mark	Choose mark
1.8	The learning outcomes and the content of the courses are consistent.	4	Choose mark	Choose mark
1.9	The European Credit Transfer System (ECTS) is applied and there is correspondence between credits, workload and expected learning outcomes per course and per semester.	5	Choose mark	Choose mark
1.10	The higher education qualification and the programme of study conform to the provisions for registration to their corresponding professional and vocational bodies for the purpose of exercising a particular profession.	N/A	Choose mark	Choose mark

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

1.2.1: It is noticeable that the English Language webpages are different to the Greek ones. Given the ambition of the department for more international student recruitment, this should be fixed. It is not a good recruitment channel.

1.2.2. We noted that while final research dissertations are marked by two members of staff, and we were told that staff meet to agree marks, there is no formal (minuted) procedure for dealing with disagreements among markers

1.2.2. and 1.2.3. Information was not available. It was emphasized that the teaching and assessment methods were chosen to fit the intended learning outcomes of each course, but no further insight is available. There is no formal mechanism in place to ensure quality of the courses and exams/assessments, this is all left to the individual staff. The university has decided upon a "ongoing active learning" methodology, meaning that no re-exams are possible and multiple assessment methods are required per course, throughout the course. It is not clear how this is embedded in the Chemistry courses and programme.

1.2.4 The EEC learned about constructive influence of the students on the program.

1.3: The content of the programme looks good. However, the detailed content of the courses was only available in Greek and hence could not be assessed in detail. The EEC was informed that some students going to high-profile institutions abroad perceived some discrepancy in the both the level and extent of subject coverage relative to UC.

1.4. Similar to 1.3. Moreover, skills are not explicitly included in learning objectives or intended learning outcomes and as such a clear overview is missing.

1.8. The learning outcomes are defined at a very high level (in a very general manner) for the overall program. They do not define the actual knowledge (areas) nor skills which the student should

master. The LOs for individual courses are internally consistent, but do not map clearly onto the Los of the overall programme. Staff indicate this is discussed and checked at an informal level.

Provide information on:

1. Employability records

The information has been provided to us for BSc, MSc and PhD level students

2. Pass rate per course/semester

15-20% of the registered students never show up and are dismissed after the first semester. The success rate in examinations across the different courses varies; theory courses in year 2 and 3 have a failure rate of 40-50%, whereas laboratory courses have a pass rate of almost 100%. Further detailed information is not available. The majority of the undergraduate students complete their study in 5 years (8 semester course) with an overall degree between 8.5 and 9.5 (“very good”)

Findings

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

Findings for Chemistry

The department has a good and successful programme in place. Given the age of the department and the small size of the staff team, the informal alignment of courses and content seems to work effectively. However, given the strategy of the department and the ambition to grow as a department and attract more students, the processes require more formal alignment. Similarly, quality assurance requires a more transparent and solid process. A good number of students graduate with high level grades, it would however be good to investigate the level of knowledge and skills acquired in more detail, in relation to international degree programmes.

Strengths

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

The relatively small staff team works very closely together towards achieving a high standard programme and responsibility is given to individual staff.

The “ongoing active learning” approach is very interesting and appealing and is likely a way to ensure long term, deep learning with the students.

Areas of improvement and recommendations

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

A more formal method of defining and assessing the learning objectives and intended learning outcomes should be considered together and not in isolation for each course. Whereas the small community of staff can now cover the programme in an informal manner. However, in view of the departments strategy to grow, as well as the ambition apply for RSC accreditation, more structured and documented processes need to be put in place.

The learning objectives and intended learning outcomes should be defined more explicit in terms of knowledge and skills to be obtained. In a next step, the LO and ILOs of the individual courses need to be aligned with the LO and ILOs of the programme. Not every course will cover all ILOs

and by having a good overview (record) of all courses, achieving the LO and ILOs of the overall programme can be checked and ensured. At the same time, we recommend that more formal quality assurance is carried out, i.e. next to student evaluations, courses are regularly assessed by experts/peers for their teaching and assessment methods and their quality (towards achieving the ILOs as set out). Involving students and external bodies more explicit in programme and course development will enhance student engagement and employability.

Please tick one of the following for each programme:

Study programme and study programme's design and development

	Non-Compliant	Partially Compliant	Compliant
<i>Chemistry</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. Teaching, learning and student assessment

(ESG 1.3)

Standards

- *The process of teaching and learning supports students' individual and social development and respects their needs.*
- *The process of teaching and learning is flexible, considers different modes of delivery, where appropriate, uses a variety of pedagogical methods and facilitates the achievement of planned learning outcomes.*
- *Students are encouraged to take an active role in creating the learning process.*
- *The implementation of student-centered learning and teaching encourages a sense of autonomy in the learner, while ensuring adequate guidance and support from the teacher.*
- *Teaching methods, tools and material used in teaching are modern, effective, support the use of modern educational technologies and are regularly updated.*
- *Practical and theoretical studies are interconnected.*
- *The organisation and the content of practical training, if applicable, support achievement of planned learning outcomes and meet the needs of the stakeholders.*
- *Mutual respect within the learner-teacher relationship is promoted.*
- *Assessment is appropriate, transparent, objective and supports the development of the learner.*
- *The criteria for and method of assessment, as well as criteria for marking, are published in advance.*
- *Assessment allows students to demonstrate the extent to which the intended learning outcomes have been achieved. Students are given feedback, which, if necessary, is linked to advice on the learning process.*
- *Assessment, where possible, is carried out by more than one examiner.*

You may also consider the following questions:

- *How is it monitored that the teaching staff base their teaching and assessment methods on objectives and intended learning outcomes? Provide samples of examination papers (if available).*
- *How are students' different abilities, learning needs and learning opportunities taken into consideration when conducting educational activities?*
- *How is the development of students' general competencies (including digital skills) supported in educational activities?*
- *How is it ensured that innovative teaching methods, learning environments and learning aids that support learning are diverse and used in educational activities?*
- *Is the teaching staff using new technology in order to make the teaching process more effective?*
- *How is it ensured that theory and practice are interconnected in teaching and learning?*

- *How is practical training organised (finding practical training positions, guidelines for practical training, supervision, reporting, feedback, etc.)? What role does practical training have in achieving the objectives of the study programme? What is student feedback on the content and arrangement of practical training?*
- *Are students actively involved in research? How is student involvement in research set up?*
- *How is supervision of student research papers (seminar papers, projects, theses, etc.) organised?*
- *Do students' assessments correspond to the European Qualifications Framework (EQF)?*
- *What is the proportion and role of independent work by students in the learning process? How is independent work defined within a subject, how is it supervised and assessed, what are the conditions for independent work?*
- *How are the assessment methods chosen and to what extent do students get supportive feedback on their academic progress during their studies?*
- *How is the objectivity and relevance of student assessment ensured (assessment of the degree of achievement of the intended learning outcomes)?*
- *Are people outside of the HEI involved in the assessment of learning outcomes (including during the defense of theses)?*

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 - 5		
2.	Teaching, learning and student assessment	<i>Chemistry</i>	[Title 2]	[Title 3]
2.1	The teaching and learning process is adequate and effective for the achievement of the expected learning outcomes.	4	Choose mark	Choose mark
2.2	The actual/expected number of students in each class compares positively to the current international standards and/or practices.	3	Choose mark	Choose mark
2.3	The methodology implemented in each course leads to the achievement of the course's purpose and objectives and those of the individual modules.	4	Choose mark	Choose mark
2.4	Constructive formative assessment for learning and feedback are regularly provided to the students.	3	Choose mark	Choose mark

2.5	The assessment system and criteria regarding student course performance are clear, adequate, and known to the students.	3	Choose mark	Choose mark
2.6	Educational activities which encourage students' active participation in the learning process are implemented.	5	Choose mark	Choose mark
2.7	Teaching incorporates the use of modern educational technologies that are consistent with international standards, including a platform for the electronic support of learning.	5	Choose mark	Choose mark
2.8	Teaching materials (books, manuals, journals, databases, and teaching notes) meet the requirements set by the methodology of the programme's courses and are updated regularly.	5	Choose mark	Choose mark
2.9	It is ensured that teaching and learning are continuously enriched by research.	5	Choose mark	Choose mark
2.10	The programme promotes students' research skills and inquiry learning.	4	Choose mark	Choose mark
2.11	Students are adequately trained in the research process.	5	Choose mark	Choose mark

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

Grades of 3 indicate the prevalence of informal process in place (see also 1.) and the associated lack of record keeping. Whereas the staff/student ratio is very high, ensuring close supervision and guidance of the students, the low number of students does mean that several courses do not run every year, the number of courses overall (esp. toward specialization) is lower, which is seen as a clear drawback by the students.

Findings

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

Findings for Chemistry

The quality assurance of the programme and courses is difficult to assess due to the lack of (recorded) information and the lack of formal processes in place (see 1). Moreover, the small numbers of staff and students limit the number and breadth of courses on offer. However, the high staff to student ratio and the informal working methodologies, provide excellent supervision and guidance to students, at all levels, which is greatly appreciated by all.

Strengths

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

Strengths for Chemistry

Excellent supervision due to the high staff to student ratio. Much of the teaching is research-led, which is an excellent way to motivate and engage students. Disabled students, students with problems in any way or form, are well guided and all required support is in place.

Areas of improvement and recommendations

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

Areas of improvement and recommendations for Chemistry

See recommendations under 1.

Please tick one of the following for each programme:

Teaching, learning and student assessment

Chemistry
Non-Compliant
Partially Compliant
Compliant

3. Teaching Staff

(ESG 1.5)

Standards

- *Fair, transparent and clear processes for the recruitment and development of the teaching staff are set up.*
- *Teaching staff qualifications are adequate to achieve the objectives and planned learning outcomes of the study programme, and to ensure quality and sustainability of the teaching and learning.*
- *The teaching staff collaborate in the fields of teaching and research within the HEI and with partners outside (practitioners in their fields, employers, and staff members at other HEIs in Cyprus or abroad).*
- *Recognised visiting teaching staff participates in teaching the study programme.*
- *The teaching staff is regularly engaged in professional and teaching-skills training and development.*
- *Assessment of the teaching staff takes into account the quality of their teaching, their research activity, the development of their teaching skills and their mobility.*

You may also consider the following questions:

- *How are (novice) members of the teaching staff supported with regard to the development of their teaching skills? How is feedback given to members of the teaching staff regarding their teaching results and teaching skills?*
- *How is the teaching performance assessed? How does their teaching performance affect their remuneration, evaluation and/or selection?*
- *Is teaching connected with research?*

- *Does the HEI involve visiting teaching staff from other HEIs in Cyprus and abroad?*
- *What is the number, workload, qualifications and status of the teaching staff (rank, full/part timers)?*
- *Is student evaluation conducted on the teaching staff? If yes, have the results of student feedback been analysed and taken into account, and how (e.g., when planning in-service training for the teaching staff)?*

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 - 5		
3. Teaching Staff		<i>Chemistry</i>	[Title 2]	[Title 3]
3.1	The number of full-time teaching staff, occupied exclusively at the institution, and their fields of expertise, adequately support the programme of study.	4	Choose mark	Choose mark
3.2	The members of teaching staff for each course have the relevant formal and fundamental qualifications for teaching the course, including the following:			
3.2.1	Subject specialisation	4	Choose mark	Choose mark
3.2.2	Research and Publications within the discipline	4	Choose mark	Choose mark
3.2.3	Experience / training in teaching in higher education	3	Choose mark	Choose mark
3.3	The programme attracts visiting professors of recognized academic standing.	N/A	Choose mark	Choose mark
3.4	In the programme of study, the ratio of the number of courses taught by full-time staff, occupied exclusively at the institution, to the number of courses taught by part-time staff, ensures the quality of the programme of study.	5	Choose mark	Choose mark
3.5	The ratio of the number of students to the total number of teaching staff supports and safeguards the programme's quality.	5	Choose mark	Choose mark
3.6	The teaching load allows for the conduct of research and contribution to society.	4	Choose mark	Choose mark
3.7	The programme's coordinator has the qualifications and experience to coordinate the programme of study.	4	Choose mark	Choose mark
3.8	The teaching staff is provided with adequate training opportunities in teaching methods, adult education and new technologies.	5	Choose mark	Choose mark

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

There is currently no formal teaching training for staff in place (teaching qualifications) and quality of teaching is not assessed by experts or peers. There are student assessments, but these are only seen by staff member and chair.

3.8 The Teaching and Learning Centre is a large, and outgoing resource, but we note that teacher training programmes are only soon to be initiated and we recommend that the department engage with these fully.

Provide information on the following:

In every programme of study, the special teaching staff should not exceed 30% of the permanent teaching staff.

All staff member are teaching in 2-3 courses per year.

Findings

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

Findings for Chemistry

The staff members are clearly experts in their own fields and perfectly qualified to teach the courses they are assigned. There is no formal teaching training or quality assurance in place just yet. The high staff to student ratio is clearly of benefit to the student experience and their training.

Strengths

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

Strengths for Chemistry

All staff teach in their own discipline, which ensure their expertise is well embedded in the program. There is a clear guidance on the number of courses they teach, which all seem to adhere too. The number of staff cover the entire programme well ensuring a good student supervision overall. All staff is conducting research at a good level, with sufficient output and visibility.

The requirement to study 2 languages equips the students well for employment in the globalized chemical industries and academia.

Areas of improvement and recommendations

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

Areas of improvement and recommendations for Chemistry

There is currently no quality assurance of the teaching by the staff, nor does the staff get formal training in teaching and assessment methods, course alignment etc. The committee has however learned that the Educational center of the University of Cyprus is putting an extensive programme in place, which covers all aspects of teaching. We would recommend the staff to follow the courses on offer to enhance and demonstrate the teaching quality.

Please tick one of the following for each programme:

Teaching Staff

	Non-Compliant	Partially Compliant	Compliant
<i>Chemistry</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
[Title 2]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Title 3]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Students

(ESG 1.4, 1.6, 1.7)

Standards

- *Pre-defined and published regulations regarding student admission, progression, recognition and certification are in place.*
- *Access policies, admission processes and criteria are implemented consistently and in a transparent manner.*
- *Information on students, like key performance indicators, profile of the student population, student progression, success and drop-out rates, students' satisfaction with their programmes, learning resources and student support available, career paths of graduates, is collected, monitored and analysed.*
- *Fair recognition of higher education qualifications, periods of study and prior learning, including the recognition of non-formal and informal learning, are essential components for ensuring the students' progress in their studies, while promoting mobility.*
- *Students receive certification explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed.*
- *Student support is provided covering the needs of a diverse student population (such as mature, part-time, employed and international students, as well as students with disabilities).*
- *A formal procedure for student appeals is in place.*
- *Students are involved in evaluating the teaching staff.*
- *Students' mobility is encouraged and supported.*

You may also consider the following questions:

- *What are the admission requirements for the study programme? How is the students' prior preparation/education assessed (including the level of international students, for example)?*
- *What are the objectives for the students' academic progress, counselling, mobility, etc., as set by the HEI? How have these objectives been achieved within the given study programme? What indicators are used to assess the fulfilment or degree of achievement of these objectives?*
- *What are the reasons for dropping out (voluntary withdrawal)? What has been done to reduce the number of such students?*
- *How is student learning within the standard period of study supported (student counselling, flexibility of the study programme, etc.)?*
- *How students' special needs are considered (different capabilities, different levels of academic preparation, special needs due to physical disabilities, etc.)? How/to what extent can students themselves design the content of their studies? What are students' options within the study programme and outside of it?*
- *How is the HEI evaluating the success of its graduates in the labor market? What is the feedback from graduates of the study programme on their employment and/or continuation of studies?*

- *How is student mobility being supported?*
- *Evaluate student feedback on support services. Based on student feedback, which support services (including information flow, counselling) need further development?*
- *How is the procedure of recognition for prior learning and work experience ensured, including recognition of study results acquired at foreign higher education institutions?*

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 - 5		
4. Students		<i>Chemistry</i>	[Title 2]	[Title 3]
4.1	The student admission requirements for the programme of study are based on specific regulations and suitable criteria that are favourably compared to international practices.	5	Choose mark	Choose mark
4.2	The programme's evaluation mechanism, by the students, is effective.	4	Choose mark	Choose mark
4.3	Students' participation in exchange programmes is compared favourably to similar programmes across Europe.	4	Choose mark	Choose mark
4.4	Statutory mechanisms, for the support of students and the communication with the teaching staff, are effective.	5	Choose mark	Choose mark
4.5	Students are satisfied with their learning experiences.	5	Choose mark	Choose mark
4.6	Students' command of the language of instruction is appropriate.	5	Choose mark	Choose mark

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

- 4.2. The primary interaction with the students on the programme seems to be the evaluation of individual courses, which is private and only used for self-assessment of the staff member. In many universities this process is public and transparent.

Findings

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

Findings for Chemistry

There are many measures in place to support students at all levels, in their study as well as on private matters. The students highly value this and highly appreciate their learning experience. .

Strengths

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

Strengths for Chemistry

Close supervision of students, enhancing their learning experience.

Areas of improvement and recommendations

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

Areas of improvement and recommendations for Chemistry

The students indicated that they would like to have a broader selection, or different, courses towards specialization, and they consider the overall level of the courses not always competitive internationally. Also, they do not always feel that the course is well aligned with a more industrial research career and would like to see more interaction with industry during their programme (lectures, courses, etc). The department should consider using its extensive collaboration network to enable this.

There is clearly an issue with the alignment of admission dates with Greek Universities that causes difficulties for the department (and presumably others). This should be reviewed for the University as a whole.

Please circle one of the following for each programme:

Students

	Non-Compliant	Partially Compliant	Compliant
<i>Chemistry</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
[Title 2]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Title 3]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Resources

(ESG 1.6)

Standards

- *Adequate and readily accessible resources (teaching and learning environments, teaching materials, teaching aids and equipment, financial, physical and human support resources*) are provided to students and support the achievement of objectives in the study programme.*
- ** Physical resources: premises, libraries, study facilities, IT infrastructure, etc.*
- *Human support resources: tutors/mentors, counsellors, other advisers, qualified*
- *administrative staff*
- *Adequacy of resources is ensured for changing circumstances (change in student numbers, etc.).*
- *All resources are fit for purpose and students are informed about the services available to them.*
- *Teaching staff is involved in the management of financial resources regarding the programme of study.*

You may also consider the following questions:

- *Evaluate the supply of teaching materials and equipment (including teaching labs, expendable materials, etc.), the condition of classrooms, adequacy of financial resources to conduct the study programme and achieve its objectives. What needs to be supplemented/ improved?*
- *What is the feedback from the teaching staff on the availability of teaching materials, classrooms, etc.?*
- *Are the resources in accordance with actual (changing) needs and contemporary requirements? How is the effectiveness of using resources ensured?*
- *What are the resource-related trends and future risks (risks arising from changing numbers of students, obsolescence of teaching equipment, etc.)? How are these trends taken into account and how are the risks mitigated?*

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 - 5		
5. Resources		<i>Chemistry</i>	[Title 2]	[Title 3]
5.1	Adequate and modern learning resources are available to the students.	5	Choose mark	Choose mark
5.2	The library includes the latest books and material that support the programme.	4	Choose mark	Choose mark
5.3	The library loan system facilitates students' studies.	5	Choose mark	Choose mark
5.4	The laboratories adequately support the programme.	5	Choose mark	Choose mark
5.5	Statutory administrative mechanisms for monitoring and supporting students are sufficient.	5	Choose mark	Choose mark
5.6	Suitable books and reputable journals support the programme of study.	5	Choose mark	Choose mark
5.7	An internal communication platform supports the programme of study.	5	Choose mark	Choose mark
5.8	The equipment used in teaching and learning (laboratory and electronic equipment, consumables etc.) are quantitatively and qualitatively adequate.	5	Choose mark	Choose mark

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

Click or tap here to enter text.

Findings

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

Findings for Chemistry

5.4: Our grades are based on the interviews with the technical staff. The virtual tour didn't provide much insight in the departmental facilities.

5.2: Our grades are based on the general library facilities. The departmental programme coordinator emphasized the lack of access to important databases (SciFinder). According to the librarians, this is for the department to request – and fund.

5.8: With respect to these facilities, UC chemistry is performing above expectations of the EEC.

Strengths

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

Strengths for Chemistry

5.8. With respect to these facilities, UC Chemistry is performing above the expectations of the EEC

The students pointed out that the department's response to the Covid-19 pandemic has been exemplary and that they feel that the minimum disruption to their learning has resulted.

Areas of improvement and recommendations

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

Areas of improvement and recommendations for Chemistry

No suggested improvements in this area

Please circle one of the following for each programme:

Resources

	Non-Compliant	Partially Compliant	Compliant
<i>Chemistry</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
[Title 2]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
[Title 3]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Additional for doctoral programmes

(ALL ESG)

Standards

- *Specific criteria that the potential students need to meet for admission in the programme, as well as how the selection procedures are made, are defined.*
- *The following requirements of the doctoral degree programme are analysed and published:*
 - *the stages of completion*
 - *the minimum and maximum time of completing the programme*
 - *the examinations*
 - *the procedures for supporting and accepting the student's proposal*
 - *the criteria for obtaining the Ph.D. degree*
- *Specific and clear guidelines for the writing of the proposal and the dissertation are set regarding:*
 - *the chapters that are contained*
 - *the system used for the presentation of each chapter, sub-chapters and bibliography*
 - *the minimum word limit*
 - *the binding, the cover page and the prologue pages, including the pages supporting the authenticity, originality and importance of the dissertation, as well as the reference to the committee for the final evaluation*
- *There is a plagiarism check system. Information is provided on the detection of plagiarism and the consequences in case of such misconduct.*
- *The composition, the procedure and the criteria for the formation of the advisory committee (to whom the doctoral student submits the research proposal) are determined.*
- *The composition, the procedure and the criteria for the formation of the examining committee (to whom the doctoral student defends his/her dissertation), are determined.*
- *The duties of the supervisor-chairperson and the other members of the advisory committee towards the student are determined and include:*
 - *regular meetings*
 - *reports per semester and feedback from supervisors*
 - *support for writing research papers*
 - *participation in conferences*
- *The number of doctoral students that each chairperson supervises at the same time are determined.*
- *The process of submitting the dissertation to the university library is set.*

You may also consider the following questions:

- *How is the scientific quality of the PhD thesis ensured?*
- *Is there a link between the doctoral programmes of study and the society? What is the value of the obtained degree outside academia and in the labour market?*
- *Can you please provide us with some dissertation samples?*

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 - 5
6.1	The structure and the content of a doctoral programme of study ensure the quality provision of doctoral studies.	N/A
6.2	The doctoral studies' supervisors have the necessary academic qualifications and experience for the supervision of the specific dissertations.	N/A
6.3	The research interests of academic advisors and supervisors adequately cover the thematic areas of research conducted by the doctoral students of the programme.	N/A
6.4	Research equipment, laboratories, workshops and existing bibliographic material support the programme of study.	N/A
6.5	The quality of the doctoral theses of the programme in this field is in line with international standards.	N/A
6.6	Doctoral candidates have publications in scientific journals and/ or participate in international conferences.	N/A
6.7	The candidates demonstrate skills in designing and in conducting productive self-directed research.	N/A
6.8	Candidates are aware of the ethical implications of their research and of their responsibilities as scientists.	N/A
6.9	Suitable procedures of monitoring and periodic assessment of students' research progress are set.	N/A

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

Click or tap here to enter text.

Findings

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

Click or tap here to enter text.

Strengths



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

Click or tap here to enter text.

Areas of improvement and recommendations

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

Click or tap here to enter text.

Please tick one of the following for:

Additional for doctoral programmes

	Non-Compliant	Partially Compliant	Compliant
PhD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D. Conclusions and final remarks

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

The department provides to the students a high level, contemporary programme of studies, which creates well-trained scientists, who are attractive to employers in Cyprus. It is also clear that a number of graduates progress to further study at prestigious international universities. Again, indicating the high quality of the graduating students. The department could look for opportunities for greater alignment of its UG programme with its Research Themes and the job market in Cyprus.

The students interviewed were praising of the staff within the department, particularly with regard to their accessibility and willingness to engage with student questions. Their relationship with the teaching staff is good and relies on mutual respect and student welfare. The students gain a range of theoretical as well as practical experience for their science.

The “ongoing active learning” approach is very interesting and appealing and is likely a way to ensure long term, deep learning with the students. However, the resultant inability to retake exams is clearly an issue, particular

rly for the students. This should be reviewed and if the outcome of the review is to maintain the current system, its advantages for student learning must be more clearly explained to the student body.

It may appear from the form that the EEC have many concerns regarding the programme provision by the Department of Chemistry. It is more that our primary concern has consequences for many areas. The department has until now relied very much on being a small and friendly community and deals with issues that arise in informal ways. In order to meet its future ambitions of growth and accreditation by the Royal Society of Chemistry, which the EEC fully support, the department will need to instigate more formal mechanisms.

E. Signatures of the EEC

Name	Signature
Maria Aletrari	
Jesper Bendix	
Xenarou Styliani	
Moniek Tromp	
Tom Welton	
Click to enter Name	

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