ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
Α Δ Ι Π
ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ
ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΣΤΗΝ ΑΝΩΤΑΤΗ
ΕΚΠΑΙΔΕΥΣΗ

HELLENIC REPUBLIC
H Q A
HELLENIC QUALITY ASSURANCE
AND ACCREDITATION AGENCY

Accreditation Report
for the Undergraduate Study Programme of:

Pharmacy
Institution: National and Kapodistrian University of Athens
Date: 30 – 11 – 2019

Report of the Panel appointed by the HQA to undertake the review of the
Undergraduate Study Programme of
Pharmacy of the National and Kapodistrian University of Athens
for the purposes of granting accreditation

PART A: BACKGROUND AND CONTEXT OF THE REVIEW

I.   The Accreditation Panel

The Panel responsible for the Accreditation Review of the Undergraduate Study Programme of **Pharmacy of the National and Kapodistrian University of Athens (NKUA)** comprised the following five (3) members, drawn from the HQA Register, in accordance with the Law 4009/2011:

1. **Emmanuel Theodorakis, PhD   (Chair)**
   Professor
   Department of Chemistry & Biochemistry
   University of California San Diego, USA

2. **Marie Paule Mingeot Leclerque, PhD**
   Professor
   Department of Pharmaceutical Sciences
   Catholic University of Louvain (UCL)
   Ottignies-Louvain-la-Neuve, Belgium

3. **Serafim Zikas**
   Vice President
   Panhellenic Pharmaceutical Association, Athens, Greece

II.   Review Procedure and Documentation

• General information and review material

All relevant review material was received by all members of the Accreditation Panel (AP*) about 1 week prior to the accreditation process. Additional material with extensive detailed information concerning research and educational aspects/activities was received during the site visit.

• Dates of the site visit

The visit at the Department of Pharmacy of the National and Kapodistrian University of Athens (NKUA*) was carried out from Monday November 25, 2019 until Tuesday November 26, 2019.

• Panel meetings

On Monday November 25, 2019, a briefing took place at the HQA* offices from 9.30 to 12:00. Prof. P. Kyprianos (President of HQA) and Dr. C. Besta (General Director of HQA) informed the AP* members about the agency mission and overall guidelines of the accreditation process. The AP members were then transported to the Department of Pharmacy, NKUA where, at 13:00, they met with Profs. K. Bouraselis (Vice Rector Academic Affairs, President of QAU*) and D. Rekkas (Chair of the Pharmacy Department, NKUA). At 14:00 the above group was joined by the OMEA* members: G. Valsami (Professor), H. Skaltsa (Professor), O. Tzakou (Professor), E. Mikros (Professor), A. Kolokouris (Assoc. Professor), G. Lamprinidis (EDIP*) and K. Graikou (EDIP) as well as with the MODIP* members: K. Bourletidis (Secretary) and V. Katsviki (Administrative support). The Panel discussed with the group the overall process of internal/external evaluation of the Department.

On Tuesday November 26, at 9:30, the AP members met with representative members of the Department teaching staff including: N. Pouli (Prof., Pharmaceutical Chemistry), I. Doutsikas (Assist. Prof., Pharmaceutical Analysis), A. Papapetropoulos (Prof., Pharmacology), A.L. Skaltsounis (Prof., Pharmacognosy), V. Roussis (Prof., Pharmacognosy), K. Demetzos (Prof., Pharmaceutical Technology), C. Reppas (Prof., Pharmaceutical Technology) and S. Markantonis-Kyroudi (Prof. Pharmaceutical Technology). The discussion was focused on professional development, mobility and workload of the teaching staff. At 11:00, the AP members met with a representative group of current undergraduate students to discuss study experience and student welfare. At 12:30 the AP members visited various resources of the Department such as undergraduate/graduate laboratories, lecture rooms, computer rooms, instrumentation and research infrastructure. At 13:30 the Panel met with various employers and stakeholders of the Department to discuss networking between the Department and the private/public sector. At 14:30 the AP members met with representative graduate students of the Department to discuss the impact of the educational programme of the Department to their professional goals. The Panel also made an unannounced visit in a classroom during a lecture to discuss with undergraduate students any challenges related to their undergraduate studies. At 16:00, the AP members met again with OMEA and QAU representatives to discuss updates and clarifications and subsequently they made closing remarks to both QAU and OMEA members.

* Abbreviations:

NKUA: National and Kapodistrian University of Athens

AP: Accreditation Panel (also referred to as the Panel);

HQA: Hellenic Quality Assurance and Accreditation Agency (also referred to as **ΑΔΙΠ**: Αρχή Διασφάλισης και Πιστοποίησης της Ποιότητας στην Ανώτατη Εκπαίδευση);

EDIP: Εργαστηριακο Διδακτικο Προσωπικο (Laboratory Teaching Personnel);

QAU: Quality Assurance Unit (also referred to as **ΜΟΔΙΠ**: Μονάδα Διασφάλισης Ποιότητας);

OMEA: Ομάδα Εσωτερικής Αξιολόγησης (also referred to as Internal Evaluation Committee).

Summary: The Department of Pharmacy at NKUA organized an extensive schedule that allowed meetings and discussions with the QAU and OMEA groups as well as with various faculty members, instructors, administrative personnel and support staff. The AP members had the opportunity to visit most undergraduate/graduate laboratories as well as various departmental facilities and resources. The Panel also met formally and informally with a group of students, selected alumni and stakeholders of the Department. Overall, the visit was very well organized and proceeded as planned. The AP members are thankful to the entire Departmental staff for their generous hospitality and kind assistance with the evaluation process.

III.   Study Programme Profile

The Department of Pharmacy was founded in 1835 and joined the "Hellenic University of Otto" in 1843 as an autonomous Department of the Medical School. Its goal is to promote education and research into the pharmaceutical sciences and technology. To this end, it continually updates its undergraduate curriculum in line with the changes in the nature/demands of the pharmaceutical profession. Its educational and research activities are distributed among three sections: (a) Pharmaceutical Chemistry, (b) Pharmacognosy & Chemistry of Natural Products, and (c) Pharmaceutical Technology.   The Pharmaceutical Chemistry section is composed of 17 faculty members (ΔΑΠ), 2 members of Laboratory Teaching Personnel (ΕΔΙΠ), 1 Technical Laboratory member (ΕΤΕΠ) and 1 administrative assistant. This section oversees the laboratories of Pharmaceutical Chemistry, Pharmaceutical Analysis, and Pharmacology. The Pharmacognosy & Chemistry of Natural Products Section is composed of 13 faculty members (ΔΑΠ) and 4 members of Laboratory Teaching Personnel (ΕΔΙΠ). This section oversees the laboratory of Pharmacognosy & Chemistry of Natural Products. The Pharmaceutical Technology Section is composed of 13 faculty members (ΔΑΠ), 1 member of ΕΤΕΠ and 1 member ΙΔΑΧ (Ιδιωτικου Δικαιου Αοριστου Χρονου).   This section oversees the laboratories of Pharmaceutical Technology and of Biopharmaceutics & Pharmacokinetics. In total, the human capital of the Department (academic year 2018-2019) is 43 faculty members, 10 members of laboratory personnel and 9 members for administrative support.   More information on the Department of Pharmacy can be found at: https://en.pharm.uoa.gr/the_department/

Since 1993, the duration of the Pharmacy Degree is five years (10 semesters) and requires completion of a minimum of 300 ECTS units. The undergraduate curriculum contains 38 compulsory courses, 7 compulsory laboratory-based courses and 21 elective courses that account for 260 ECTS units. A research-based Diploma Thesis can substitute some of the elective classes and accounts for 12 ECTS units. During the last year, students are also required to complete a semester-long practical internship in a community or hospital pharmacy (40 ECTS units) in order to be eligible for the Pharmacy Board Examinations that is administered by the Ministry of Health. Only graduates who have passed the Pharmacy Board Examinations are considered registered pharmacists.   More information on the undergraduate curriculum of the Department can be found at: https://en.pharm.uoa.gr/curriculum/

Since 1992, the Department of Pharmacy is housed within the School of Sciences on the University Campus of the National and Kapodistrian University of Athens (NKUA). The departmental teaching facilities include 1 large amphitheater (289 seats), 5 medium-size lecture rooms (91 seats each), 5 laboratories, and 1 computer room (36 computer stations). All lecture rooms and labs are equipped with internet and audiovisual facilities and all computers are equipped with the appropriate software. Since the last external review, all these facilities have been renovated. The undergraduate laboratories are appropriately equipped and well-maintained. In addition, the graduate/research laboratories are equipped with state-of-the-art instrumentation. The secretariat is scheduled for renovation within 2019. Other facilities, such as University library, cafeterias, restaurants, exercise rooms and dormitories are close by and are accessible to the students.

The past 5 years, the Department of Pharmacy admits about 130 students/year and graduates about 110 students/year. The student input/output ratio seems reasonable since about 10% of the incoming students leave the Department at the end of their first year to pursue their studies elsewhere. The graduating students have sufficient opportunities to further advance their education (postgraduate programs) or enter the workforce in pharmacies, pharmaceutical companies or analytical/toxicological laboratories. Overall, the undergraduate programme of the Department is of comparable structural depth and quality to its international peers and compliant with the EU Framework for Higher Education. It is worth mentioning that in one recent ranking the Department of Pharmacy at NKUA was placed

among the 100 best Departments of Pharmaceutical Sciences worldwide (see: https://www.usnews.com/education/best-global-universities/search?country=greece&region=europe&subject=pharmacology-toxicology/)

PART B: COMPLIANCE WITH THE PRINCIPLES

Principle 1: Academic Unit Policy for Quality Assurance

INSTITUTIONS SHOULD APPLY A QUALITY ASSURANCE POLICY AS PART OF THEIR STRATEGIC MANAGEMENT. THIS POLICY SHOULD EXPAND AND BE AIMED (WITH THE COLLABORATION OF EXTERNAL STAKEHOLDERS) AT ALL INSTITUTION'S AREAS OF ACTIVITY, AND PARTICULARLY AT THE FULFILMENT OF QUALITY REQUIREMENTS OF UNDERGRADUATE PROGRAMMES. THIS POLICY SHOULD BE PUBLISHED AND IMPLEMENTED BY ALL STAKEHOLDERS.

The quality assurance policy of the academic unit is in line with the Institutional policy on quality, and is included in a published statement that is implemented by all stakeholders. It focuses on the achievement of special objectives related to the quality assurance of study programmes offered by the academic unit.

The quality policy statement of the academic unit includes its commitment to implement a quality policy that will promote the academic profile and orientation of the programme, its purpose and field of study; it will realise the programme's strategic goals and it will determine the means and ways for attaining them; it will implement the appropriate quality procedures, aiming at the programme's continuous improvement.

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

a) *the suitability of the structure and organization of the curriculum;*
b) *the pursuit of learning outcomes and qualifications in accordance with the European and the National Qualifications Framework for Higher Education;*
c) *the promotion of the quality and effectiveness of teaching;*
d) *the appropriateness of the qualifications of the teaching staff;*
e) *the enhancement of the quality and quantity of the research output among faculty members of the academic unit;*
f) *ways for linking teaching and research;*
g) *the level of demand for qualifications acquired by graduates, in the labour market;*
h) *the quality of support services such as the administrative services, the Library, and the student welfare office;*
i) *the conduct of an annual review and an internal audit of the quality assurance system of the undergraduate programme(s) offered, as well as the collaboration of the Internal Evaluation Group (IEG) with the Institution's Quality Assurance Unit (QAU);*

Study Programme compliance

The curriculum offers courses which are either theoretical or include additional laboratory training. A total of more than 60 courses are offered, including compulsory (e.g., analytical chemistry, human anatomy, inorganic chemistry, biopharmaceutics and pharmacokinetics, biochemistry, toxicology), laboratory-based practical courses and elective courses (e.g., drug design, clinical chemistry, drug metabolism, stability of pharmaceutics). All courses as well as credits can be found at the following address https://en.pharm.uoa.gr/curriculum/elective_courses/. During the last two semesters (9th and 10th) students are also required to complete a practical internship in a community

or hospital pharmacy in order to be eligible for the Pharmacy Board Examinations administered by the Ministry of Health. Only graduates who have passed the Pharmacy Board Examinations are considered registered pharmacists. Overall, the programme is compliant with the EU Framework for Higher Education.

• The Department has highly qualified and motivated teaching staff. Effective efforts are made to ensure and promote the quality and value of teaching. Evaluation of the quality and effectiveness of teaching is accomplished with a standardized questionnaire that the students are asked to complete for each class/instructor.

• In accordance with the ongoing process of evaluation and accreditation, the Department has instituted an internal evaluation mechanism (Ομάδα Εσωτερικής Αξιολόγησης, OMEA). On an annual basis, OMEA receives the student questionnaires, correlates the input/output of teaching performance and makes recommendations to the faculty.

• The study programme undergoes annual reviews by the Undergraduate Committee that oversees the curriculum. Overall, there is continuous effort by the Department to improve its educational activities in order to address the continuously evolving role of the pharmacist in the society. An example is the recent introduction of classes related to pharmaceutical care in the curriculum.

• The teaching faculty members are also involved in frontier research and maintain sizeable research groups and state-of-the-art research facilities. In turn, this allows undergraduate students of the Department to be exposed to cutting-edge research activities.

• The employers highlighted the quality of the education received by the students who followed the curriculum. They emphasized as major strengths: (i) the multidisciplinarity of the courses, (ii) the opportunity of students to be well trained in experimental skills, and (iii) the continuous adaptation of the cursus to the need of the current society.

Panel judgement

Principle 1: Institution policy for Quality Assurance	
Fully compliant	
Substantially compliant	X
Partially compliant	
Non-compliant	

Panel Recommendations

1. The synchronization between classes and laboratories could be improved in certain courses since the break between the end of the theoretical courses and the start of laboratories courses is very short. This should be done without lengthening the total duration of the presence for the student on the site.

2. Although in general the curriculum is very well appreciated, the employers suggest enhancing the exposure of students to economy, regulatory affairs, marketing and management. The elective course "Business administration /Marketing" could be identified as a compulsory course instead of being an elective one.

3. Additional efforts should be placed in polishing the presentation skills of the students. They should learn to prepare, present information in a professional manner. This request is coming from employers but also from alumni students. This would also allow a more active learning process.

Principle 2: Design and Approval of Programmes

INSTITUTIONS SHOULD DEVELOP THEIR UNDERGRADUATE PROGRAMMES FOLLOWING A DEFINED WRITTEN PROCESS WHICH WILL INVOLVE THE PARTICIPANTS, INFORMATION SOURCES AND THE APPROVAL COMMITTEES FOR THE PROGRAMME. THE OBJECTIVES, THE EXPECTED LEARNING OUTCOMES, THE INTENDED PROFESSIONAL QUALIFICATIONS AND THE WAYS TO ACHIEVE THEM ARE SET OUT IN THE PROGRAMME DESIGN. THE ABOVE DETAILS AS WELL AS INFORMATION ON THE PROGRAMME'S STRUCTURE ARE PUBLISHED IN THE STUDENT GUIDE.

Academic units develop their programmes following a well-defined procedure. The academic profile and orientation of the programme, the objectives, the subject areas, the structure and organisation, the expected learning outcomes and the intended professional qualifications according to the National Qualifications Framework for Higher Education are described at this stage. The approval or revision process for programmes includes a check of compliance with the basic requirements described in the Standards, on behalf of the Institution's Quality Assurance Unit (QAU).

Furthermore, the programme design should take into consideration the following:

- *the Institutional strategy*
- *the active participation of students*
- *the experience of external stakeholders from the labour market*
- *the smooth progression of students throughout the stages of the programme*
- *the anticipated student workload according to the European Credit Transfer and Accumulation System*
- *the option to provide work experience to the students*
- *the linking of teaching and research*
- *the relevant regulatory framework and the official procedure for the approval of the programme by the Institution.*

Study Programme compliance

• In general, the Department provides its students a balanced blend of education and training in pharmaceutical sciences and technology. To this end, it evaluates the curriculum and strives to induce changes and revisions to meet the evolving needs of the pharmaceutical profession.

• The Department has responded favorably and diligently toward implementing an educational programme at the undergraduate level that took into account earlier recommendations. New classes such as "Pharmaceutical care" have been introduced to the curriculum. The AP members have noted these revisions to the curriculum and applaud the Department for their efforts.

• In response to the previous external recommendations, the Department reduced the obligatory "practical training" in community pharmacies from two semesters to one. This change was also followed by the conversion of the Diploma Thesis from elective to obligatory (30 ECTS).

• Students participate in the curriculum development by providing feedback via the class questionnaires and participating in the Department Assembly.

- The external stakeholders praise the Department for the quality of education. They offer several opportunities for scientific collaborations as well as paid internships that often lead to full-time hires. In certain cases, they also influence the curriculum design.

- The departmental website contains sufficient information, e.g., teachers and topics, for all classes and labs that is written in both English and Greek. Additional details are available in the e-class site. In that site several class notes have been uploaded only in Greek.

- The connection between undergraduate and postgraduate education/training is clear, fluid and well explained to the students.

- The role and function of pre-requisite classes is not well established. It is evident that certain more advanced classes require knowledge from more basic classes. For example, medicinal or pharmaceutical chemistry require knowledge of basic organic chemistry while pharmaceutical analysis builds upon the foundations of analytical chemistry. Implementing the function of prerequisite classes ensures that the students know the basic material (i.e., have passed the basic classes) before they enroll in more advanced classes.

Panel judgement

Principle 2: Design and Approval of Programmes	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

4. The schedule of classes/labs is very heavy and proceeds almost without breaks during the day. In certain semesters, the load seems to reach 9 hours/day. This situation does not allow the students to digest the material. The Department should reevaluate the contents of the classes and decrease the load of each class at about 10%.

5. The Department should find ways, in synergy with Pharmacy Associations and the Government, to monitor the quality of student education/mentoring during the 6-months long practical training in pharmacies. Also, it is not clear whether the student insurance covers student activities during practical training. If not, this issue should be effectively addressed.

6. The role of prerequisites should be applied as needed in order to ensure overall quality of education. Class instructors should have the authority to introduce prerequisites for their own classes in order to methodically build knowledge.

7. The contents of certain classes, such as Pharmacology, are too dense and difficult to be learned and digested by the students within one year. The Curriculum committee should compare the contents of this class with similar classes offered at other departments and adjust accordingly the material. In addition, this class may be easier to be taught when it is synchronized with Medicinal Chemistry.

8. Certain classes with heavy load of contents may need to offer few midterms in addition to one final exam in order to diminish the load at the end.

9. All class material, including class notes and related information, should be available to the students in both English and Greek. This would help the students familiarize with English technical terminology thus becoming more competitive at the international professional stage.

10. Certain classes, especially the ones taught by instructors who are not faculty members at the Pharmacy Department, are not tuned to the pharmacy students. The Undergraduate Curriculum Committee should fine-tune the contents to clarify to the students why such knowledge is beneficial to their careers.

11. Continuous effort is needed to educate students on pharmaceutical care in order to meet the rapidly evolving societal needs.

Principle 3: Student-centered Learning, Teaching and Assessment

INSTITUTIONS SHOULD ENSURE THAT THE UNDERGRADUATE PROGRAMMES ARE DELIVERED IN A WAY THAT ENCOURAGES STUDENTS TO TAKE AN ACTIVE ROLE IN CREATING THE LEARNING PROCESS. THE ASSESSMENT METHODS SHOULD REFLECT THIS APPROACH.

Student-centered learning and teaching plays an important role in stimulating students' motivation, self-reflection and engagement in the learning process. The above entail continuous consideration of the programme's delivery and the assessment of the related outcomes.
The student-centered learning and teaching process

- *respects and attends to the diversity of students and their needs, enabling flexible learning paths;*
- *considers and uses different modes of delivery, where appropriate;*
- *flexibly uses a variety of pedagogical methods;*
- *regularly evaluates and adjusts the modes of delivery and pedagogical methods aiming at improvement*
- *regularly evaluates the quality and effectiveness of teaching, as documented especially through student surveys;*
- *reinforces the student's sense of autonomy, while ensuring adequate guidance and support from the teaching staff;*
- *promotes mutual respect in the student - teacher relationship;*
- *applies appropriate procedures for dealing with students' complaints.*

    In addition :

- *the academic staff are familiar with the existing examination system and methods and are supported in developing their own skills in this field;*
- *the assessment criteria and methods are published in advance;*
- *the 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;*
- *student assessment is conducted by more than one examiner, where possible;*
- *the regulations for assessment take into account mitigating circumstances*
- *assessment is consistent, fairly applied to all students and carried out in accordance with the stated procedures;*
- *a formal procedure for student appeals is in place.*

Study Programme compliance

• In addition to the regular classroom education and laboratory training, the Department organizes additional educational activities such as visits to local industries and hospitals, coordination of seminars and student presentations.

• Certain classes with a heavy load of contents, such as pharmacognosy, have explored student presentations as a way to improve student engagement and overall learning. These efforts are welcomed and applauded by both the students and the AP members.

• Class attendance is not obligatory but strongly recommended. The AP members made an unscheduled visit of a classroom during a lecture and observed that the majority of students were present.

• All students are assigned an academic advisor. In addition, a specific faculty member has been identified and assigned to advise all students on any personal and confidential issues.

• Student evaluation is performed based on written examinations for classes and written/verbal examination for labs. In addition, students who have completed 6 semesters of study can request re-examination to improve their grade in up to 10 classes.

• Student satisfaction surveys are performed regularly using the electronic system established by the Quality Assurance Unit of the University. The results for each course are communicated to the instructor and to the Chair and the OMEA members of the Department who can take steps to correct any issues pointed out in these surveys.

• All classrooms and laboratories are accessible to students with impaired mobility. The E-Class software effectively supports the teaching activities of the Department. Moreover, students with disabilities are accommodated according to institutional policy.

Panel judgement

Principle 3: Student- centered Learning, Teaching and Assessment	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

12. The Department needs to more systematically explore new pedagogical methods that go beyond the traditional lecture-based format with the use of available technology. This is particularly significant for classes with a heavy load that often lead to memorization. Strategies that include assignment of group projects, student presentations, analysis of a research paper, short instructional videos and web-based problem solving should be explored in order to promote active learning and critical thinking. If possible, the student presentations should be done in English to help them acquire/polish their skills at the international stage.

Principle 4: Student Admission, Progression, Recognition and Certification

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

> *Institutions and academic units need to put in place both processes and tools to collect, manage and act on information regarding student progression.*
>
> *Procedures concerning the award and recognition of higher education degrees, the duration of studies, rules ensuring students progression, terms and conditions for student mobility should be based on the institutional study regulations. Appropriate recognition procedures rely on institutional practice for recognition of credits among various European academic departments and Institutions, in line with the principles of the Lisbon Recognition Convention.*
> *Graduation represents the culmination of the students' study period. Students need to receive documentation explaining the qualification gained, including achieved learning outcomes and the context, level, content and status of the studies that were pursued and successfully completed (Diploma Supplement).*

Study Programme compliance

•   The program currently admits about 130 students per year. This number is determined by the Ministry of Education but the Department only asks for 60 students/year.

•   During orientation day, the Department explains in detail to all entering student the content of their studies and the requirements for a Degree. The program uses the ECTS system and each graduating student is given a Diploma Supplement.

•   All incoming students are informed about the function and structure of the Department, the medical facilities, the university library and the (electronic) access to all services.

•   The Department has established the function of academic advisor in order to facilitate and monitor student progress. The students are aware of this support mechanism and use it as needed.

•   Student mobility, primarily through the Erasmus program, is encouraged. The two last years (2017-2018 and 2018-2019), 19 outgoing students/year and 6-7 incoming students/year supported by the Erasmus program. The number of outgoing/ingoing Erasmus students is substantial.

•   The Department of Pharmacy of Athens is a founding member of "CIVIS – a European Civic University". This initiative aims to develop 20 alliances of European universities by 2024. Through this initiative, the Commission has the ambition to bring Europeans closer together and to improve the international competitiveness of our higher education institutions.

•   From 2013-2014 to 2018-2019, the number of students who conduct their diploma thesis at the Department of Pharmacy of Athens has significantly increased (from 77 to 143).

•   The program offers Practical Training (Internships) to local industry, hospital, research labs, and public organizations. Both students and employers value this arrangement.

•   The students are fully aware about the possibilities to pursue their education and to be selected to enter the postgraduate programs. The Department has, from the academic year 1993-1994, organised and carried out the Program of Postgraduate Studies. The Department runs an excellent doctoral program producing high quality research results and has good international reputation. The faculty members should be congratulated for their efforts and success in this area.

Panel judgement

Principle 4: Student Admission, Progression, Recognition and Certification	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

13. Although the institution of Student Advisor exists, in practice it is underutilized. The Department should find ways to initiate contact of incoming students with their advisor. In turn, this can lead to a tailor-made student-centered approach to education and training.

14. The academic advisors could explain how classes are connected (prerequisites) in order to facilitate transition of the students from one class to another. This is especially important to students who face adverse situations during their studies or those having specific needs.

15. Student mobility could be advertised, promoted and recommended by providing all relevant information on the departmental website.

16. It is highly recommended that the Department adopt a policy of promoting and rewarding academic excellence. For instance, the Department Chair can send once a semester/year a congratulatory email to all students who have achieved academic excellence. If appropriate, names and pictures of such students should also be uploaded to the departmental website.

Principle 5: Teaching Staff

INSTITUTIONS SHOULD ASSURE THEMSELVES OF THE QUALIFICATIONS AND COMPETENCE OF THE TEACHING STAFF. THEY SHOULD APPLY FAIR AND TRANSPARENT PROCESSES FOR THE RECRUITMENT AND DEVELOPMENT OF THE TEACHING STAFF.

> *The Institutions and their academic units have a major responsibility as to the standard of their teaching staff providing them with a supportive environment that promotes the advancement of their scientific work. In particular, the academic unit should:*
>
> - *set up and follow clear, transparent and fair processes for the recruitment of properly qualified staff and offer them conditions of employment that recognize the importance of teaching and research;*
> - *offer opportunities and promote the professional development of the teaching staff;*
> - *encourage scholarly activity to strengthen the link between education and research;*
> - *encourage innovation in teaching methods and the use of new technologies;*
> - *promote the increase of the volume and quality of the research output within the academic unit*
> - *follow quality assurance processes for all staff members (with respect to attendance requirements, performance, self-assessment, training etc.);*
> - *develop policies to attract highly qualified academic staff;*

Study Programme compliance

• The Department has 43 faculty members (17 Full Professors, 9 Associate Professors and 17 Assistant Professors). The distribution in each step appears reasonable and indicates successful hiring. In addition, the Department has 10 members of technical support and 9 members of administrative personnel.

• The Department has a merit-based and extrovert attitude in recruitment of new faculty.

• The average weekly load of each faculty member for the undergraduate education is estimated about 22 hours. This load includes 8-9 hours/week of classwork, 5 hours/week of preparation and 8-10 hours/week of exam grading. This load is significantly increased when considering the time spent for the education and training of postgraduate students.

• The qualifications and competence of the teaching staff are excellent as evidenced by their participation in various symposia/events. As an example, over the past 5 years, the staff has participated in 130 International symposia and 44 conference organizing committees and has delivered more than 100 invited seminars. In addition, 11 faculty members have been invited to teach classes in various European Universities. This mobility is expected to increase due to the participation of the Department to the CIVIS initiative.

• The Department is commended for its efforts to organize seminars/events for the continuing education of pharmacists. As an example, during June-November 2019, about 500 pharmacists from various geographical areas of Greece participated in these activities.

• The Department offers opportunities for professional development to its staff and faculty members. Sabbatical activities are encouraged. Administrative staff and support personnel also have opportunities to further develop their knowledge and skills by attending training events and seminars.

Panel judgement

Principle 5: Teaching Staff	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

17. The Department should establish formal mechanisms to reward excellence for both teaching and service. It is recommended that a process of peer evaluation system is adopted that allows for a frank and collegial input on an annual basis. Alternatively, or in addition, senior students could be asked each year to recommend a professor based on his/her teaching and with no involvement of the faculty. These nominations can help select the "Teacher of the Year". Similarly, administrative personnel and related professionals who perform an outstanding service could be rewarded with an "Exemplary Service Award".

Principle 6: Learning Resources and Student Support

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

> *Institutions and their academic units must have sufficient funding and means to support learning and academic activity in general, so that they can offer to students the best possible level of studies. The above means could include facilities such as libraries, study rooms, educational and scientific equipment, information and communications services, support or counselling services.*
>
> *When allocating the available resources, the needs of all students must be taken into consideration (e.g. whether they are full-time or part-time students, employed or international students, students with disabilities) and the shift towards student-centred learning and the adoption of flexible modes of learning and teaching. Support activities and facilities may be organised in various ways, depending on the institutional context. However, the internal quality assurance ensures that all resources are appropriate, adequate, and accessible, and that students are informed about the services available to them.*
> *In delivering support services the role of support and administrative staff is crucial and therefore they need to be qualified and have opportunities to develop their competences.*

Study Programme compliance

•   The Department has a dedicated building for education and research. The Department undertook a huge effort to completely refurbish and fully equip (audio visual facilities) classrooms and amphitheater. The Department has one Amphitheater with a capacity of 289 seats and five Classrooms with a capacity of 91 seats /classroom for the delivery of theoretical courses. They also have five institutionalized laboratories well equipped with the necessary equipment / tools and training tools for teaching laboratory courses and for the preparation of thesis work

•   The students have access to a computer room that is equipped with several workstations for modeling, statistical analysis and related online studies.

•   All rooms, facilities and labs are in excellent condition. The Panel was impressed by the clean and odor-free state of both the labs and lecture rooms and congratulates the teaching staff, the students and the cleaning crew for maintaining such a pleasant environment.

•   In delivering support services, the role of support and administrative staff is crucial. The Department benefits from the expertise and competence of a dedicated staff.

•   All class and lab material (notes, reports, exercises, power point presentations, e.g.) are uploaded onto the web and are readily available to all enrolled students. The chosen textbooks are of high quality and also selected in other European countries (e.g., Belgium). They are available to all students. The e-class and related software are available to all students and provide comprehensive syllabi and updates for all classes.

•   The service and facilities at the gym are good and greatly appreciated by the students, including Erasmus students.

•   Despite the insufficient funding from the Ministry of Education, the Department makes huge efforts to update laboratory instruments and provide needed consumables for all undergraduate

students thus ensuring and enhancing the quality of education. The help of industry is greatly appreciated for providing consumables for laboratory work (e.g. in pharmaceutical technology).

• During their practical training students have the opportunity to perform research in local companies and research laboratories thus strengthening their technical and communication skills. Some research work that have emerged with undergraduate students are presented in a poster session in scientific meetings or published in scientific journals with reviewers.

Panel judgement

Principle 6: Learning Resources and Student Support	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

18. In certain classes the powerpoint slides and related class notes were not accessible to the students before the class presentation. It is likely that this is done in order to enforce student attendance in the classroom. However, this strategy is not correct since it does not help the students prepare for the class and does not help students who for some justified reasons cannot attend the class. We strongly recommend that all class notes and related educational material is uploaded on the web and accessible by the students <u>before and well in advance</u> of the class presentation.

19. Certain classes are offered at the School of Medicine that is in a different campus about 20 minutes away from the Dept of Pharmacy. There is no convenient transport between the two campuses and the students have problems attending the classes due to the problematic commute. One recommendation is to introduce more shuttles between the two campuses. Alternatively, the instructors of the School of Medicine should come and present their lectures at the Dept of Pharmacy.

Principle 7: Information Management

INSTITUTIONS BEAR FULL RESPONSIBILITY FOR COLLECTING, ANALYSING AND USING INFORMATION, AIMED AT THE EFFICIENT MANAGEMENT OF UNDERGRADUATE PROGRAMMES OF STUDY AND RELATED ACTIVITIES, IN AN INTEGRATED, EFFECTIVE AND EASILY ACCESSIBLE WAY.

Institutions are expected to establish and operate an information system for the management and monitoring of data concerning students, teaching staff, course structure and organisation, teaching and provision of services to students as well as to the academic community.

Reliable data is essential for accurate information and for decision making, as well as for identifying areas of smooth operation and areas for improvement. Effective procedures for collecting and analysing information on study programmes and other activities feed data into the internal system of quality assurance.

The information gathered depends, to some extent, on the type and mission of the Institution. The following are of interest:

- *key performance indicators*
- *student population profile*
- *student progression, success and drop-out rates*
- *student satisfaction with their programme(s)*
- *availability of learning resources and student support*
- *career paths of graduates*

A number of methods may be used for collecting information. It is important that students and staff are involved in providing and analyzing information and planning follow-up activities.

Study Programme compliance

• The Department of Pharmacy has established procedures for collection of data regarding student body, teaching methods, student progression, employability and career paths. Statistics from entrance exams, class questionnaires, feedbacks from collaborators as well as exit surveys from graduating students are collected and stored at the Secretariat office.

• OMEA, the internal evaluation committee, analyzes the student data and uses this information to improve performance of both students and all teaching personnel.

• Data from entrance exams show that about 30% of the incoming students declared pharmacy as their first choice. At the end of year one, only about 10% of the students leave the program. This low attrition rate indicates that the students become convinced that pharmacy is the right degree for them. Student progression through the programme is satisfactory since more than 90% of the incoming students graduate with a Pharmacy degree within 7 years of studies.

Panel judgement

Principle 7: Information Management	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

20.   A yearly analysis of the student graduation over the years of study can provide meaningful information on the time-to-degree. In addition, data on the student progress during the semesters of study can provide information on overloaded semesters, low grade classes etc.

Principle 8: Public Information

INSTITUTIONS SHOULD PUBLISH INFORMATION ABOUT THEIR TEACHING AND ACADEMIC ACTIVITIES WHICH IS CLEAR, ACCURATE, OBJECTIVE, UP-TO-DATE AND READILY ACCESSIBLE.

> *Information on Institution's activities is useful for prospective and current students, graduates, other stakeholders and the public.*
> *Therefore, institutions and their academic units provide information about their activities, including the programmes they offer, the intended learning outcomes, the qualifications awarded, the teaching, learning and assessment procedures used, the pass rates and the learning opportunities available to their students, as well as graduate employment information.*

Study Programme compliance

• The Department maintains a comprehensive and regularly updated website that contains a wide variety of information about news, classes, personnel, curriculum, research activities and contact information. The information is well categorized and easily accessed.

• The Department maintains a Linkedin page that has about 170 followers.

• The Department should be commended for its outreach activities that include high school visits, public talks by staff etc. It is noted that nine high schools, 130 students in total, visited the Department on November 2019. The Department also organizes and participates in various events and educational activities for the pharmacists and the public. Representative examples of such activities include the 7th Symposium on "Pharmacy; the New Era", the 6th Symposium EEOF, the 12th Cretan Pharmaceutical Symposium and the 3rd Symposium on Pharmaceutical Care. The Department also organizes and hosts a training program on Galenic formulations.

• The Department is commended for its efforts to maintain a strong relationship with several alumni members and stakeholders. The AP members noted several examples of alumni who present seminars to the students and host their internships in their professional environment. We also noted cases of close research collaborations between faculty members and local industry.

Panel judgement

Principle 8: Public Information	
Fully compliant	
Substantially compliant	**X**
Partially compliant	
Non-compliant	

Panel Recommendations

21. The Department should create a flyer/brochure with information on departmental activities, events, student/instructor awards/recognitions. The flyer/brochure should be updated once every semester and be emailed to its alumni in order to strengthen the network.

22. The Department should increase its efforts to advertise its activities and accomplishments in its website in order to reach the high school students and the broader society. These activities should highlight the impact of the pharmacist in society. Educational activities, research accomplishments and

societal contributions of the entire body and the individual Department members (students, professors, employees) should be recognized and broadcasted. Short videos of current students/employees that talk about the Department could be added. Success stories/videos related to its alumni could also be presented.

23. The relationship between alumni members, stakeholders and faculty should be enhanced. The Department has a unique opportunity to provide a forum for exchange of ideas between members of all professional associations. This will facilitate the development of common goals that, in turn can shape the education of the future pharmacist.

24. The Department should further increase the interaction between students and local/national/international industry by inviting its alumni and other professionals to participate in various related activities. Efforts should be made to maintain an alumni list. This list should be used to search for fundraising and employment opportunities.

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes

INSTITUTIONS SHOULD HAVE IN PLACE AN INTERNAL QUALITY ASSURANCE SYSTEM FOR THE AUDIT AND ANNUAL INTERNAL REVIEW OF THEIR PROGRAMMES, SO AS TO ACHIEVE THE OBJECTIVES SET FOR THEM, THROUGH MONITORING AND AMENDMENTS, WITH A VIEW TO CONTINUOUS IMPROVEMENT. ANY ACTIONS TAKEN IN THE ABOVE CONTEXT SHOULD BE COMMUNICATED TO ALL PARTIES CONCERNED.

Regular monitoring, review and revision of study programmes aim to maintain the level of educational provision and to create a supportive and effective learning environment for students.

The above comprise the evaluation of:
- *the content of the programme in the light of the latest research in the given discipline, thus ensuring that the programme is up to date;*
- *the changing needs of society*
- *the students' workload, progression and completion;*
- *the effectiveness of the procedures for the assessment of students*
- *the students' expectations, needs and satisfaction in relation to the programme;*
- *the learning environment, support services and their fitness for purpose for the programme*

Programmes are reviewed and revised regularly involving students and other stakeholders. The information collected is analysed and the programme is adapted to ensure that it is up-to-date. Revised programme specifications are published.

Study Programme compliance

• The Department has established an Internal Evaluation Committee, named OMEA, that is composed of 6 faculty members and 2 laboratory teaching personnel. Its function is to collect and analyze all data from the undergraduate programme and present the data on an annual basis at the faculty meeting.

• The Department has also created an Undergraduate Curriculum Committee that oversees the undergraduate programme, ensures its smooth operation and makes recommendations for improvements. Recommendations include updates/revisions of the curriculum and take into account revisions of relevant European universities. Revisions also address issues related to student needs, student expectations and social changes.

• The undergraduate programme is evaluated on an annual basis both by OMEA and the Undergraduate Curriculum Committee in order to improve its overall operation and achieve the stated goals.

Panel judgement

Principle 9: On-going Monitoring and Periodic Internal Review of Programmes	
Fully compliant	X
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

None

Principle 10: Regular External Evaluation of Undergraduate Programmes

PROGRAMMES SHOULD REGULARLY UNDERGO EVALUATION BY COMMITTEES OF EXTERNAL EXPERTS SET BY HQA, AIMING AT ACCREDITATION. THE TERM OF VALIDITY OF THE ACCREDITATION IS DETERMINED BY HQA.

> *HQA is responsible for administrating the programme accreditation process which is realised as an external evaluation procedure, and implemented by a committee of independent experts. HQA grants accreditation of programmes, with a specific term of validity, following to which revision is required. The accreditation of the quality of the programmes acts as a means of verification of the compliance of the programme with the template's requirements, and as a catalyst for improvement, while opening new perspectives towards the international standing of the awarded degrees.*
>
> *Both academic units and institutions participate in the regular external quality assurance process, while respecting the requirements of the legislative framework in which they operate.*
>
> *The quality assurance, in this case the accreditation, is an on-going process that does not end with the external feedback, or report or its follow-up process within the Institution. Therefore, Institutions and their academic units ensure that the progress made since the last external quality assurance activity is taken into consideration when preparing for the next one.*

Study Programme compliance

• The current accreditation is in compliance with the Greek law and has benefited from the excellent function and effective interaction between various agencies and committees including OMEA, MODIP and HQA. All members of staff contributed to the review processes and evidence was provided that they appreciate the importance of both professional body accreditation and HQA peer review.

• The follow-up actions recommended by the previous external evaluation committee (conducted in 2013) have been implemented within the constraints of the Department.

• The stakeholders have expressed their willingness to contribute to the programme in various ways thus enhancing student education and career orientation.

• One of the international rankings (https://www.usnews.com/education/best-global-universities/search?country=greece&region=europe&subject=pharmacology-toxicology) shows that the Department of Pharmacy is ranked No 96 worldwide and is the best in Greece.

• In addition to the formal external evaluation, the Department of Pharmacy participates to the PHAR-QA project (Quality Assurance in European Pharmacy Education and Training) which aims to produce a competence framework for pharmacy education and practice in the European Union.

Panel judgement

Principle 10: Regular External Evaluation of Undergraduate Programmes	
Fully compliant	**X**
Substantially compliant	
Partially compliant	
Non-compliant	

Panel Recommendations

25.   A 5-year strategic plan could contribute to innovative thinking for the optimization of the quality of the Department in the future. Therefore, a strategic planning committee that would look into where the Department wants to be in the future is recommended and should be included with the material sent by the Department for review.

26.   Given that the AP members could be non-Greek speaking, it is strongly recommended that all internal evaluation reports as well as meetings/discussions are performed in English.

PART C: CONCLUSIONS

I.   Features of Good Practice

Overall, the undergraduate programme of Department of Pharmacy at NKUA is in full compliance with the principles of the European Framework for Higher Education. The infrastructure of the campus and the Department (building, facilities, library, etc.) is appropriate for its educational and research goals. The personnel is well-trained and well-respected by the undergraduate students. All class/lab-related material (e.g., class goals, notes, syllabi, grading requirements etc.) is readily available to all students. The teaching staff has been making sincere efforts to encourage student-centered learning and promote student-instructor interactions. The Department has established an internal evaluation committee (OMEA) that works in synchrony with the campus-wide evaluation committee (MODIP) and the Hellenic Quality Assurance and Accreditation Agency (HQA) to ensure quality of education. In addition, the Undergraduate Curriculum Committee continuously evaluates and revises the undergraduate curriculum. It is worth noting that the Department has made a serious effort to address all previous recommendations and is in a very good shape in terms of undergraduate education and training. Its students recognize that there is a high success of job placement after completion of their studies. Overall, the Department faculty and staff should be applauded for their efforts to welcome the students, provide significant support and excellent education. This point has been recognized by all students, alumni and employers.

It should also be noted that the Department of Pharmacy at NKUA has developed a broad range of graduate programs covering several areas of pharmaceutical sciences. It has built a strong network of national and international collaborations and its research activities attract significant funding from various funding agencies and companies. These activities place it among the top 100 Schools of Pharmaceutical Sciences worldwide, based on https://www.usnews.com/education/best-global-universities/search?country=greece&region=europe&subject=pharmacology-toxicology/

II.   Areas of Weakness

Certain weaknesses have been identified that once addressed will further elevate the current undergraduate programme. These are:

(a) The schedule of classes and labs is very heavy making it difficult for the students to digest the new information and participate in active learning processes. The Undergraduate Curriculum Committee should re-evaluate the table of contents of each class and consider reducing the class load (see recommendations #1, 4, 7, 8).

(b) The integration of classes between basic and pharmaceutical sciences is not optimal. Efforts to better integrate this material can decrease the overall class load and may partially address point (a) above (see recommendations: #2, 10, 11, 19).

(c) Completion of undergraduate studies within the predefined time (i.e., time-to-degree) is not optimal. The Department should intensify the efforts to produce a system where, without compromising the quality of education, the majority of its students can graduate within 10-12 semesters. To this end, tools like the prerequisites and the academic advisor should be more efficiently utilized (see recommendations #6, 13, 14).

(d) There is no unified vision on the principal characteristics of the pharmacist of the future. The Department should consult with all pharmaceutical associations and available stakeholders to better

define the education, technical and soft skills of the new generation of pharmacists (see recommendations #3, 4, 23, 25).

(e) The Department should intensify the efforts to disseminate its activities and accomplishments to the society. At least partially, this can be accomplished by a regularly updated website that broadcasts events and ideas and highlights individual achievements and excellence. In addition, it should better utilize social networking resources, e.g., facebook, tweeter, linkedin, to strengthen its function to the society and to attract the new generation of students (see recommendations #16, 17, 21, 22, 24).

As indicated above, the listed weaknesses are found in most international undergraduate programmes. As such, they do not affect accreditation nor compliance with the International standards.

III.   Recommendations for Follow-up Actions

Note: The recommendations below are a repetition of the ones suggested in each principle. Thus, their numbering does not reflect relative importance.

1.   The synchronization between classes and laboratories could be improved in certain courses since the break between the end of the theoretical courses and the start of laboratories courses is very short. This should be done without lengthening the total duration of the presence for the student on the site.

2.   Although in general the curriculum is very well appreciated, the employers suggest enhancing the exposure of students to economy, regulatory affairs, marketing and management. The elective course "Business administration /Marketing" could be identified as a compulsory course instead of being an elective one.

3.   Additional efforts should be placed in polishing the presentation skills of the students. They should learn to prepare, present information in a professional manner. This request is coming from employers but also from alumni students. This would also allow a more active learning process.

4.   The schedule of classes/labs is very heavy and proceeds almost without breaks during the day. In certain semesters, the load seems to reach 9 hours/day. This situation does not allow the students to digest the material. The Department should reevaluate the contents of the classes and decrease the load of each class at about 10%.

5.   The Department should find ways, in synergy with Pharmacy Associations and the Government, to monitor the quality of student education/mentoring during the 6-months long practical training in pharmacies. Also, it is not clear whether the student insurance covers student activities during practical training. If not, this issue should be effectively addressed.

6.   The role of prerequisites should be applied as needed in order to ensure overall quality of education. Class instructors should have the authority to introduce prerequisites for their own classes in order to methodically build knowledge.

7.   The contents of certain classes, such as Pharmacology, are too dense and difficult to be learned and digested by the students within one year. The Curriculum committee should compare the contents of this class with similar classes offered at other departments and adjust accordingly the material. In addition, this class may be easier to be taught when it is synchronized with Medicinal Chemistry.

8. Certain classes with heavy load of contents may need to offer few midterms in addition to one final exam in order to diminish the load at the end.

9. All class material, including class notes and related information, should be available to the students in both English and Greek. This would help the students familiarize with English technical terminology thus becoming more competitive at the international professional stage.

10. Certain classes, especially the ones taught by instructors who are not faculty members at the Pharmacy Department, are not tuned to the Pharmacy students. The Undergraduate Curriculum Committee should fine-tune the contents to clarify to the students why such knowledge is beneficial to their careers.

11. Continuous effort is needed to educate students on pharmaceutical care in order to meet the rapidly evolving societal needs.

12. The Department needs to more systematically explore new pedagogical methods that go beyond the traditional lecture-based format with the use of available technology. This is particularly significant for classes with a heavy load that often lead to memorization. Strategies that include assignment of group projects, student presentations, analysis of a research paper, short instructional videos and web-based problem solving should be explored in order to promote active learning and critical thinking. If possible, the student presentations should be done in English to help them acquire/polish their skills at the international stage.

13. Although the institution of Student Advisor exists, in practice it is underutilized. The Department should find ways to initiate contact of incoming students with their advisor. In turn, this can lead to a tailor-made student-centered approach to education and training.

14. The academic advisors could explain how classes are connected (prerequisites) in order to facilitate transition of the students from one class to another. This is especially important to students who face adverse situations during their studies or those having specific needs.

15. Student mobility could be advertised, promoted and recommended by providing all relevant information on the departmental website.

16. It is highly recommended that the Department adopt a policy of promoting and rewarding academic excellence. For instance, the Department Chair can send once a semester/year a congratulatory email to all students who have achieved academic excellence. If appropriate, names and pictures of such students should also be uploaded to the departmental website.

17. The Department should establish formal mechanisms to reward excellence for both teaching and service. It is recommended that a process of peer evaluation system is adopted that allows for a frank and collegial input on an annual basis. Alternatively, or in addition, senior students could be asked each year to recommend a professor based on his/her teaching and with no involvement of the faculty. These nominations can help select the "Teacher of the Year". Similarly, administrative personnel and related professionals who perform an outstanding service could be rewarded with an "Exemplary Service Award".

18. In certain classes the powerpoint slides and related class notes were not accessible to the students before the class presentation. It is likely that this is done in order to enforce student attendance in the classroom. However, this strategy is not correct since it does not help the students prepare for the class and does not help students who for some justified reasons cannot attend the class. We strongly recommend that all class notes and related educational material is uploaded on the web and accessible by the students before and well in advance of the class presentation.

19. Certain classes are offered at the School of Medicine that is in a different campus about 20 minutes away from the Dept of Pharmacy. There is no convenient transport between the two campuses and the students have problems attending the classes due to the problematic commute. One recommendation is to introduce more shuttles between the two campuses. Alternatively, the instructors of the School of Medicine should come and present their lectures at the Dept of Pharmacy.

20. A yearly analysis of the student graduation over the years of study can provide meaningful information on the time-to-degree. In addition, data on the student progress during the semesters of study can provide information on overloaded semesters, low grade classes etc.

21. The Department should create a flyer/brochure with information on departmental activities, events, student/instructor awards/recognitions. The flyer/brochure should be updated once every semester and be emailed to its alumni in order to strengthen the network.

22. The Department should increase its efforts to advertise its activities and accomplishments in its website in order to reach the high school students and the broader society. These activities should highlight the impact of the pharmacist in society. Educational activities, research accomplishments and societal contributions of the entire body and the individual Department members (students, professors, employees) should be recognized and broadcasted. Short videos of current students/employees that talk about the Department could be added. Success stories/videos related to its alumni could also be presented.

23. The relationship between alumni members, stakeholders and faculty should be enhanced. The Department has a unique opportunity to provide a forum for exchange of ideas between members of all professional associations. This will facilitate the development of common goals that, in turn can shape the education of the future pharmacist.

24. The Department should further increase the interaction between students and local/national/international industry by inviting its alumni and other professionals to participate in various related activities. Efforts should be made to maintain an alumni list. This list should be used to search for fundraising and employment opportunities.

25. A 5-year strategic plan could contribute to innovative thinking for the optimization of the quality of the Department in the future. Therefore, a strategic planning committee that would look into where the Department wants to be in the future is recommended and should be included with the material sent by the Department for review.

26. Given that the AP members could be non-Greek speaking, it is strongly recommended that all internal evaluation reports as well as meetings/discussions are performed in English.

Recommendations to the State and the Greek Ministry of Education

It is clear that the Department of Pharmacy at the National and Kapodistrian University of Athens has built a highly successful undergraduate programme that is in full compliance with the principles of the European Framework for Higher Education. The dedication of the entire Departmental staff to the education, training, support, professional advances and overall welfare of its students is abundantly evident. Equally evident is the respect and admiration that the current students, alumni and stakeholders feel for their professors/mentors. This undergraduate programme can be further improved if the Ministry:

a. increases funding for the training of the students in the form of new laboratory equipment and additional staff;

b. reduces the excessive bureaucratic burden related to traveling and purchasing of supplies;

c. revises and homogenizes the exams needed for obtaining the Pharmacy Licence (for example, obtaining a Pharmacy License in Greece requires passing four written exams, while in other countries, e.g., Cyprus, requires only one exam).

In addition, the Ministry should consider that it is more cost-effective to provide the students with electronic versions of the books rather than distributing hard copies. All students have access to computers and the vast majority prefers studying from electronic files.

IV. Summary & Overall Assessment

The Principles where full compliance has been achieved are:
3, 5, 7, 9, and 10
The Principles where substantial compliance has been achieved are:
1, 2, 4, 6, and 8
The Principles where partial compliance has been achieved are:
NONE
The Principles where failure of compliance was identified are:
NONE

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

The members of the Accreditation Panel for the UGP of Pharmacy of the NKUA

Name and Surname   **Signature**

1. **Emmanuel Theodorakis, PhD**
   Professor
   Department of Chemistry & Biochemistry
   University of California San Diego, USA

2. **Marie Paule Mingeot Leclerque, PhD**
   Professor
   Department of Pharmaceutical Sciences
   Catholic University of Louvain (UCL)
   Ottignies-Louvain-la-Neuve, Belgium

3. **Serafim Zikas**
   Vice President
   Panhellenic Pharmaceutical Association, Athens, Greece