



HELLENIC REPUBLIC

# National and Kapodistrian University of Athens

— EST. 1837 —

*School of Health Sciences*

*School of Medicine and Department of Pharmacy*

## **Interdepartmental Postgraduate Studies Program in Nanomedicine**

### **Decision**

Approval of Regulation Interdepartmental Program Postgraduate Studies of the Medical School and Department Pharmacy School Health Sciences of the National and Kapodistrian University of Athens entitled "Nanomedicine".

### **THE SENATE OF NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS**

Bearing in mind:

1. the provisions of Law 4485/17 "Organization and operation of higher education, regulation for the research and other provisions" (FEK A' 114), in particular articles 30 to 37, 45 and 85
2. the no. 163204 / Z1 / 29-9-2017 Circular of the Ministry of Education, Research and Religious Affairs
3. the no. 216772 / Z1 / 8-12-2017 Ministerial Decision (FEK 4334 / 12-12-2017, vol. B') entitled "Way of setting up a detailed operating budget and the sustainability report of Postgraduate Studies Programs"
4. the provisions of Law 4009/2011 "Structure, operation, quality assurance and internationalization of higher education institutions (FEK A' 195), as amended and force
5. the provisions of Law 4386/2016 "Regulations for research and other provisions" (FEK A83), as amended and applied

6. the P.D. 85 / 31-5-2013 (FEK A124) "Establishment, renaming, reconstruction of Schools and establishment of a Department at the National and Kapodistrian University of Athens"
7. the provisions of Law 3374/2005 and in particular articles 14 and 15 (FEK 189, Part A, 02-08-2005) "Quality Assurance in Higher Education. Transport system and Credit points accumulation - Diploma Supplement "as amended and applied
8. paragraphs 7 and 8 of article 19 of Law 4521/2018 (FEK A38) "Establishment of the University of West Attica and other provisions"
9. the Extract of the minutes of the meeting to Medical School of the University of Athens
10. the Extract of the minutes of the department of Pharmacy of the NKUA
11. the Special Cooperation Protocol of the Cooperating Departments
12. the minutes of the Committee of Postgraduate Studies of the University of Athens
13. the Extract from the minutes of the Senate of the University of Athens
14. the fact that with the present no expense is incurred against on the state budget

**we decide:**

Approval of the Regulation of the Interdepartmental Program of Postgraduate Studies of the School of Medicine and the Department Pharmacy of the School of Health Sciences of the NKUA, entitled “Nanomedicine” / “Nanomedicine”, from the academic year 2018/2019, as follows:

**ARTICLE 1**

**OBJECT-PURPOSE**

The aim of the IPSP " "Nanomedicine" is to provide high-level post-graduate education in Nanomedicine.

The IPSP leads to the award of a "Postgraduate Diploma" in Nanomedicine (MSc in Nanomedicine) after full and successful completion of curriculum-based studies.

**ARTICLE 2**

**STRUCTURE AND BODIES OF THE IPSP**

Competent bodies for the operation of the IPPC in accordance with Law 4485/2017 are:

**1. The Special Interdepartmental Committee (SIC)**

The program will be managed by the Special Interdepartmental Committee (SIC) consisting of 7 members: 5 members TRS and 2 representatives of postgraduate students. Regarding the members of SIC, three of them will be designated by the Medical School Meeting and 2 will be appointed by the Assembly of the Department of Pharmacy. The tenure of TRS members in SIC will be 2 years. At the beginning of each academic year, two postgraduate students will be elected from the active postgraduate students of the IPSP, who will be members of SIC with a one-year term. An Academic Staff member who will be discharged or resigns or for any other reason ceases to belong to the academic staff of the NKUA will be replaced by the Assembly of the Department which appointed him for the remaining term of his service. Similarly, will occur with the postgraduate students of SIC.

The responsibilities of SIC will be:

- Determining the specific conditions of attendance, as well as determining the amount of tuition fees
- Setting a scholarship policy
- Proclamation to IPSP
- Timetable and deadlines for applications from potential postgraduate students
- Presentations and tolerated absences
- Progress assessment of PS
- Decision to review or resume courses
- Processing of the results of the evaluation sheets of the courses and the teachers of the IPSP and their exploitation (praise, recommendations, interruption, scholarships)
- Designation of committees of the IPSP
- Editing the course program , appointing coordinators of the modules and supervising the course of the program in collaboration with them
- Viewing the IPSP and attracting candidates
- Definition, with the recommendation of the Coordinator of each Educational Unit, a Consultant who will monitor and guide each PS
- Modify the course schedule when required
- Follow-up of each PS based on (a) the written progress report of the PS that it submits to the SK or EK for evaluation and (b) the evaluation of the presentation of the progress made by the PS in its team
- Proposal for the allocation of the Program funds and budget preparation, including any fees for teaching tasks and teachers.

- Attracting funds for the postgraduate course and issuing relevant evidence in the framework of the relevant general rules deriving from the laws and rules for the operation of ELKE of the National and Kapodistrian University of Athens.

## **2. The Coordination Committee (CC)**

Consisting of five (5) faculty members of the collaborating institutions, who have undertaken postgraduate work and are appointed by the Special Interdepartmental Committee. Three members of the CC will come from the Medical School and two members from the Department of Pharmacy. The CCP is set for a two-year term. The term of the President of the CC can be renewed once.

The Coordinating Committee has the following responsibilities:

- Approve the subjects of the dissertations diplomas
- Suggests to the relevant bodies for each issue of the IPSC.
- Elects the President and the Director of the IPSC

## **3. President of SIC**

The responsibilities of the President of SIC are the convergence of SIC meetings, the definition of agenda, the coordination and the responsibility for the proper functioning of the SIC. He comes from the Medical School that has the secretariat support of the IPCC. In case of his absence for any reason, his duties shall be exercised by the Assistant Professor Director of the IPSP.

## **4. The Director and Deputy Director of the IPCC**

The duties of the Director will be exercised by the President of the SIC. The Director is replaced by Deputy Director from the Department of Pharmacy, who will be appointed Vice President of SIC.

The Director of the IPSP and Deputy are TRS members is of first degree or postgraduate members of the faculty and is of the same or similar subject as the subject of the IPCC. Their service is two years.

The responsibilities of the Director of the IPCC are as follows:

- Ensures the implementation of SIC's decisions
- Manages the program's finances and in this context carries out the costs decided by the SAD, concludes contracts with the program's participants, makes payments to suppliers, implements the necessary procedures for the payment of scholarships

and generally makes all financial moves of the IPSP in accordance with SIC decisions, the ELKE procedures and the laws.

- Present to the SAD New Year's Budget at least 2 months before the end of the previous year.
- Prepares the administrative and financial report and submits it to the SIC at least 2 months before the end of the year.

### **ARTICLE 3**

#### **CATEGORIES AND NUMBER OF ENTRANTS**

The IPSP accepts titles of the first cycle of studies of the Departments Medicine, Pharmacy and related scope of the Greek Universities or of the non-governmental organizations recognized by DOATAP.

The number of students admitted to the IPPC will be forty (40) each academic year (as long as there are so many candidates who have the qualifications of attending the IPSP in Nanomedicine).

### **ARTICLE 4**

#### **WAY OF ADMISSION**

Students are selected in accordance with Law 4485/2017 and the provisions of this Postgraduate Studies Regulation.

Each July, a decision of the Special Interactive Commission is published and posted on the website of the two Departments and the Foundation a notice for the admission of postgraduate students to the IPSP.

The relevant applications together with the necessary supporting documents are submitted to the Secretariat of the Program within a deadline set in the notice and may be extended by decision of the Special Interactive Commission of the IPSP.

Required supporting documents are:

1. Application form (to be issued by the Secretariat of the IPSP).
2. Clear photocopy of a diploma or certificate of completion of studies. It is also required to indicate the degree. Lastly, it is necessary that the average of the degree programs of the Department based on two (2) last years.
3. Certificate of analytical grade.

4. Full curriculum vitae, which will contain, in any case, data on the study, research and / or professional activity and the possible scientific work of the Candidate.
5. Publications in journals or conferences with judges, if any.
6. Evidence of professional or research activity, if any.
7. Photocopy of two faces of the police ID.
8. Documentation of sufficient knowledge of the English language (B2 level). In case of that the candidate is a foreigner, at least C1 is required, unless he / she is a graduate of a Greek Educational Institution.
9. Two letters of recommendation, which must contain the name, title, address and telephone of the author. Students from foreign institutions must submit a certificate of correspondence and parity from DOATAP, according to article 34, paragraph 7 of Law 4485/17.

The way they are selected is by evaluating the qualifications of the candidates from the SAD. The evaluation criteria are:

1. Essential typical qualifications
  - 1.1. Bachelor of University or TPI of Health Sciences or of Science or other related subjects according to SIC judgment.
  - 1.2. Good knowledge (level B2) of the English language according to the Common European Framework of Reference for Languages.
2. Additional Qualified Qualifications
  - 2.1. The degree is graduated with 2 points per grade with a maximum of 20 points (with 20 points the student who has a grade 10 in his degree, with 18 he who has 9 and so on). The fractionation at this point may be a decimal number (proportional) that will have one decimal place. Maximum number of points 20.
  - 2.2. Professional experience in the field of cognitive objects of the program. It is graded every year with 1 molecule with a maximum of 10 points.
  - 2.3. Professional experience in the field of nano-medicine. It is graded every year with 1 molecule with a maximum of 10 points. In the case of parallel or simultaneous employment in medical and nanotechnology subjects, the classification will be made by this criterion with a maximum of 10points.
  - 2.4. Publications in international journals with judges. They are graded with 2 points each with a maximum of 20 points.
  - 2.5. Announcements at international scientific conferences. They are graded with 0.5 points each with a maximum of 10 points.

- 2.6. Excellent knowledge of English language, graduated with 5 points.  
(same as 1.2)
- 2.7. Invited speeches at international scientific conferences. They are simulated with 1 point each with a maximum of 10 points
- 2.8. Motivation letter submission of the program with a maximum of 15 points.

Total of points 100.

On the basis of the overall criteria, the Coordinating Committee draws up an Assessment Panel for postgraduate students and submits it to the Special Interdepartmental Committee for approval.

Successful candidates must be register with the Program Secretariat within 10 days of SIC's decision.

In the event of a tie, all tiered candidates will be selected.

## **ARTICLE 5**

### **DURATION OF STUDIES**

The length of time spent in the IPSP leading to a Bachelor's Degree is set at two (2) academic semesters, including the time for diploma thesis.

Post-graduate students are provided with the possibility of part-time attendance. Students in this category must have a proven track record of working and submitting an employment contract or an employer certificate.

Full-time attendance is also provided for non-working students who are unable to meet full-time requirements for health, family, military or other. In this case, an application is made to the SIC by the interested party explaining the reasons relied on by the student and the SIC decides definitively.

The duration of part-time studies cannot exceed four (4) academic semesters.

The postgraduate student with application may request a reasoned suspension of study after a report and a justification of the reasons for the request. The SIC examines the application and as long as it approves it determines the student's program.

Student suspension periods do not exceed the two consecutive academic semesters and do not count towards the expected maximum duration of normal study.

## ARTICLE 6

### CURRICULUM

The IPSP starts in the winter semester of each academic year.

A total of sixty (60) credits (ECTS) are required to acquire IPSP.

During postgraduate studies, postgraduate students are required to attend and successfully study postgraduate courses, research work and writing scientific papers, as well as undertake postgraduate diploma theses.

The curriculum is shaped as follows (in brackets the teaching hours per lesson are shown on a weekly basis):

<b>A' SEMESTER</b>	
<b>Courses</b>	<b>ECTS</b>
<b>UNIT 1 : Introduction to Nanotechnology</b> <b>Lesson 1.1. Basic principles I (5)</b> 1.1.1 The wider context of Nanotechnology 1.1.2 The Fundamental Science of Nanotechnology <b>Lesson 1.2. Basic principles II (5)</b> 1.2.1 Main types of nanosystems 1.2.2 Physiochemical characterization techniques of nanosystems <b>Lesson 1.3. Basic principles III (5)</b> 1.3.1 Short overview of in vitro and in vivo imaging techniques 1.3.2 Principles of Nanomedicine 1.3.3 Bio-Nanotechnology: structural biology; Experimental Cell and Molecular Biology 1.3.2 Future perspectives 15 teaching hours per week	15
<b>UNIT 2: Applications of Nanotechnology in Medicine</b> <b>Lesson 2.1. Basics of nanomedicine (5)</b> 2.1.1 Introduction to the nanotools for medical applications 2.1.2 Basic applications of nanotechnology in diagnosis: Radiology, Nuclear Medicine, Biophotonic imaging <b>Lesson 2.2. Basic applications of nanotechnology in therapy (5)</b> 2.2.1 Applications in Drug Delivery 2.2.2 Applications in Therapy: Radiotherapy, Nuclear therapy and Biophotonic therapy	15



2.2.3 Applications in Surgery: Image guided surgery with nano-contrast agents, Nanoparticle Assisted Destruction of Cancer Tissues, Nano-tools <b>Lesson 2.3. Theranostics and regenerative medicine (5)</b> 2.3.1 Imaging and Theranostics: Micro-nano fabrication and cell patterning, Molecular markers for medical imaging, Image processing 2.3.2 Main biomaterials used in Regenerative Medicine, tissue engineering. 2.3.3 Applications in Regenerative medicine: types of embryonic, fetal and adult stem cells  15 teaching hours per week	
<b>SET A' SEMESTER</b>	<b>30</b>

<b>B' Semester</b>	
<b>Courses</b>	<b>ECTS</b>
<b>UNIT 3: Nanotoxicity and Regulatory Aspects</b>	10
<b>Lesson 3.1. Toxicity aspects (3)</b> 3.1.1 Nanotoxicity, Medical Toxicology; Molecular Medical Microbiology with Essay <b>Lesson 3.2. Clinical applications (4)</b> 3.2.1 Clinical Nanomedicine 3.2.2 Nanomedicines in Market <b>Lesson 3.3. Ethics and regulatory aspects (3)</b> III.1. Regulatory and Ethics in Nanomedicine. III.2 Intellectual properties. Patenting and Commercialization of Biotech and Medtech Inventions 10 teaching hours per week	
<b>Dissertation</b>	20
<b>Set B' semester</b>	<b>30</b>
<b>Total</b>	<b>60</b>

Teaching is done in classroom or by distance learning. The language of the Master is English.

The diploma thesis will be implemented in the workshops of the two departments participating in the program but also in the workshops of other universities and research institutes whose teachers will participate in the program.

The dissertation will begin at the beginning of the second semester and the total of ECTS is 20.

**Total 60 ECTS for presentation of IPSP.**

## B. Content / Course Description

Each lesson is described in the following table:

<b>A` Semester</b>	
<b>Courses</b>	<b>ECTS</b>
<b>UNIT 1 : Introduction to Nanotechnology</b> <b>Lesson 1.1. Basic principles I</b> 1.1.1 The wider context of Nanotechnology 1.1.2 The Fundamental Science of Nanotechnology Nanoscience and Nanotechnology are relatively young scientific and nanotechnological fields which investigate the structure, properties, morphology and functionality of nanomaterials and nanostructures. Nanotechnology is a collective term for a range of scientific fields, technologies, techniques, processes and applications that involve the treatment and the investigation of matter at nanoscale. Nanoscience and nanotechnology can offer advantages in the development process of new drugs and they represent a new approach to research in this field. These areas offer benefits for the development of innovative products and promote new properties of the materials used, which could be essential in the effectiveness of the final product. Scientists in this field work at the atomic, molecular and supramolecular levels, and can manufacture new nanodevices and nanosystems with new properties and functions. Nanotechnology is the scientific area of the design and the development of devices at the mesoscopic and molecular scale. These systems could be correlated to the living organisms due to their self-assembly properties, their hierarchical structural organization, as well as to their biocompatibility and biodegradability characteristics. <b>Lesson 1.2. Basic principles II</b> 1.2.1 Main types of nanosystems 1.2.2 Physicochemical characterization techniques of nanosystems The main types of nanosystems are lipid (i.e. liposomes, trasferosomes etc.); polymeric (i.e. micelles, polymersomes etc.) and inorganic (i.e. gold nanoparticles etc.). The physicochemical characteristics of nanosystems (play a key role on administration, distribution, metabolism, and excretion (ADME profile) of the encapsulated Active Pharmaceutical Ingredients (APIs) or the imaging agent. The most important techniques including light scattering (dynamic, static, and electrophoretic), thermal analysis (especially differential scanning calorimetry), and imaging techniques are presented for the physico-chemical characterization of nanosystems. These techniques are used extensively for the detailed characterization of nanosystems, i.e. in the research and development of innovative nanocarriers, and are required from the regulatory authorities. <b>Lesson 1.3. Basic principles III</b> 1.3.1 Short overview of in vitro and in vivo imaging techniques 1.3.2 Principles of Nanomedicine 1.3.3 Bio-Nanotechnology: structural biology; Experimental Cell and Molecular Biology	15

<p>1.3.2 Future perspectives</p> <p>This lesson addresses the applications of quantitative imaging to study multiple physiological variables of living tissues. Protocols are presented for investigations ranging from in vitro cell and tissue approaches to in vivo imaging of intact organs. These include the measurement of cytosolic parameters both in vitro and in vivo. Additionally, Magnetic Resonance Imaging (MRI), an imaging technique primarily used as diagnostic tool in clinical/preclinical research, will be analyzed in depth. Cell and Molecular Biology area will focus on cancer, cell biology and cellular dynamics, plant biology and bioenergetics. Experimental approaches in cell signaling and differentiation, molecular biology, proteomics, genomics and genetics, and advanced cell imaging are interwoven throughout these major focus areas.</p>	
<p><b>UNIT 2: Applications of Nanotechnology in Medicine</b></p>	<p>15</p>
<p><b>Lesson 2.1. Basics of nanomedicine</b></p> <p>2.1.1 Introduction to the nanotools for medical applications</p> <p>2.1.2 Basic applications of nanotechnology in diagnosis: Radiology, Nuclear Medicine, Biophotonic imaging</p> <p>Recent advances in nanotechnology have led to the development of various nanoparticle formulations for diagnostic and therapeutic applications. Diagnostic nanoparticles aim to visualize pathologies and to improve the understanding of important (patho-) physiological principles of various diseases and disease treatments. Special attention and examples will be given in the diagnosis in early stages of cancer. The field of Radiology, Nuclear Medicine and Biophotonic imaging are offering the nanotools for diagnosis of several diseases (i.e. cancer etc.).</p> <p><b>Lesson 2.2. Basic applications of nanotechnology in therapy</b></p> <p>2.2.1 Applications in Drug Delivery</p> <p>2.2.2 Applications in Therapy: Radiotherapy, Nuclear therapy and Biophotonic therapy</p> <p>2.2.3 Applications in Surgery: Image guided surgery with nano-contrast agents, Nanoparticle Assisted Destruction of Cancer Tissues, Nano-tools</p> <p>Pharmaceutical nanotechnology presents potential opportunities to design and develop more effective and safe medicines by using nanomaterials and nanostructures, widely known as advanced drug delivery nano systems (aDDnSs). These systems are liposomes, micelles, polymersomes, niosomes, etc. these systems have biocompatibility and enhanced pharmacokinetic properties, as well as biodistribution. These colloidal nanosystems or their degradation materials and products should not have any toxic, carcinogenic, allergic and inflammatory effects. The drug nanovectors should also protect the activity of the drugs and improve their transport through biological carriers, ADME (absorption, biodistribution, metabolism and excretion) profile and pharmacokinetic properties.</p> <p>Special attention will be given to the applications in Therapy (i.e. Radiotherapy, Nuclear therapy and Biophotonic therapy and in</p>	

<p>Surgery: Image guided surgery with nano-contrast agents, Nanoparticle Assisted Destruction of Cancer Tissues, etc.).</p> <p><b>Lesson 2.3. Theranostics and regenerative medicine</b></p> <p>2.3.1 Imaging and Theranostics: Micro-nano fabrication and cell patterning, Molecular markers for medical imaging, Image processing</p> <p>2.3.2 Main biomaterials used in Regenerative Medicine, tissue engineering.</p> <p>2.3.3 Applications in Regenerative medicine: types of embryonic, fetal and adult stem cells</p> <p>Theranostics is a new field of medicine which combines specific targeted therapy based on specific targeted diagnostic tests. The theranostics paradigm involves using nanotechnology to unite/combine diagnostic and therapeutic applications to form a single nanocarrier, allowing for diagnosis, drug delivery and treatment response monitoring. Micro-nano fabrication and cell patterning, Molecular markers for medical imaging and Image processing will be analyzed for building up nanoparticle-based theranostics.</p> <p>Tissue engineering evolved from the field of nanobiomaterials development and refers to the practice of combining biopolymers, scaffolds, cells, and biologically active molecules into functional tissues. The goals of tissue engineering and regenerative medicine are to assemble functional constructs that restore, maintain, or improve damaged tissues or whole organs using types of embryonic, fetal and adult stem cells.</p>	
<b>Total A' semester</b>	<b>30</b>

<b>B' Semester</b>	
<b>Courses</b>	<b>ECTS</b>
<b>UNIT 3: Nanotoxicity and Regulatory Aspects</b>	10
<p><b>Lesson 3.1. Toxicity aspects</b></p> <p>3.1.1 Nanotoxicity, Medical Toxicology; Molecular Medical Microbiology with Essay</p> <p>Nanotoxicology involves different aspects of science, from molecular biology to quantum physics and chemistry and lays the foundations for eliminating all risks related to nanoparticles manufacturing and their applications. The major obstacle associated with nanoparticles hazardous impact determination is the variety of parameters that are suspects of their adverse effects. It is widely known that nanoparticles, dosage, size, composition, aggregation, surface charge, structure and chemistry even the route of administration and the exposure duration, are the main characteristics upon which Nanotoxicity depends.</p> <p><b>Lesson 3.2. Clinical applications</b></p> <p>3.2.1 Clinical Nanomedicine</p> <p>3.2.2 Nanomedicines in Market</p>	

<p>Clinical Nanomedicine deals with the use of nanomedicines in clinical use and practice. Special attention will be given to cancer nanotherapy. There are several liposomal and polymeric drugs in market approved by FDA and EMA. In this lesson, case studies and examples will be presented focusing on the advantages of nanocarriers in clinical use.</p> <p><b>Lesson 3.3. Ethics and regulatory aspects</b></p> <p>III.1. Regulatory and Ethics in Nanomedicine.</p> <p>III.2 Intellectual properties. Patenting and Commercialization of Biotech and Medtech Inventions</p> <p>The entire "product life cycle," from the creation of nanomedical products to their final market introduction will be discussed in the above lesson. While focusing on critical issues relevant to nanoproduct development and translational activities, it tackles topics such as regulatory science, patent law, FDA and EMA law, ethics, personalized medicine, risk analysis, toxicology, nano-characterization and commercialization activities.</p>	
<p><b>Dissertation</b></p> <p>The dissertation (or final year project), is taking place after the end of the lessons and may last until mid-September. The expectation is that the student takes responsibility for his own learning and he produces a literature review, chooses a method for undertaking a study, writes up his findings and discusses the outcomes in a discussion section. The work for dissertation may be either a literature review or a small research project that lasts for two-three months. The student is being supervised by a faculty member during his work and at the end is being examined by a three-member committee.</p>	20
<b>Total B' semester</b>	<b>30</b>
<b>Total</b>	<b>60</b>

## ARTICLE 7

### EXAMINATIONS AND EVALUATION OF POSTGRADUATE STUDENTS

The academic work of each academic year is structured in two semesters of study, winter and spring, each of which includes at least 13 weeks of teaching and three weeks of exams. The lessons winter and spring semester are reviewed repeatedly during the September period.

The attendance of courses / workshops, etc. is mandatory.

If a course is prevented, it will be replenished. The date and time of replenishment are posted on the IPSP website.

For the acquisition of the DPS each postgraduate student is required to attend and successfully examine all the offered courses of the MSc. and to prepare a postgraduate dissertation, bringing together sixty (60) ECTS.

If a postgraduate student fails to attend a course or courses so that according to the provisions of the Postgraduate Studies Regulation it is considered that the program has not been successfully completed, a three-member committee of faculty members shall be examined at his / her request of the Associate Departments, the members of which have the same or similar object as the subject under study and are appointed by the Special Interdepartmental Committee. The committee is exempted from the examination of teachers (par. 6, article 34, law 4 485/2017).

The subject of postgraduate diploma thesis must be of a research character and be original.

The writing language of the postgraduate diploma thesis is English

### **Testing rules and performance evaluation for postgraduate students**

Exams are written and oral for each module (UNIT). The written part includes multiple choice questions and development topics from all the tutors in each module.

Following oral examination of the students in groups of related subjects of the unit is carried out at the same time by the lecturers of the particular courses in order to ensure the objectivity of the examination. The course score is submitted to the Secretariat of the Program within 15 days of the end of the examination period.

### **Time of execution and duration of the IPSP examination periods**

The examination periods are defined by decision of the Special Interactive Commission at the end of each semester, taking into account the Academic Calendar approved by the Senate.

### **Conditions for successful completion of the courses**

Each student successfully completes attendance in each unit when:

- (a) attended 80% of the hours of the course with a physical attendance
- (b) has attended physically 80% of the parallel activities included in the program (attendance of conferences, conferences or lectures outside the program of the theoretical courses of the IPSP)

Control of course attendance and supporting documentation is carried out by the Secretariat of the Program on the basis of presentations submitted by the teachers at the end of the courses and seminars.

In case the absences of the student exceed the allowed limit, the subject of the student is deleted. This issue is dealt with by the SC, which delivers its opinion to the Special Interdepartmental Committee.

(c) has successfully completed (written 5) both written and oral tests.

Part of the written or oral examination of some lessons can be done through work done under the responsibility of the instructor.

In case of a student fails to review a module, it will be reviewed in September in the academic year of the program on dates to be determined by the SIC. If it fails again, then to complete the program, it will have to re-enroll and track the section in which it failed and re-test it. In this case the student has to reimburse the attendance fees for each unit in which he / she failed and re-enrolled, which is 500 euro for each module. Note that each student has the ability to re-enroll only once in each module. If he fails to pass successfully the unit examinations which re-enrolled then student is removed and is not awarded DPS.

### **Procedure for the appointment of a supervisor and a selection board for diplomatic work**

The diploma thesis starts with the beginning of the 2nd semester, along with the 4th unit (UNIT IV)

The Coordinating Committee after the request of the candidate, which registering the proposed title of the diploma thesis, the proposed supervisor and attached a summary of the proposed work, appoints the supervisor and establishes the three-member committee for approval of the work, one of its members who is also the supervisor. In order to approve the work, the student has to support it in front of the selection board. Postgraduate diploma theses, if approved by the examining committee, must be posted on the website of the Medical School.

The supervisor of postgraduate diploma thesis may be a faculty member or a researcher or a lecturer at the IPSP.

The members of the three-member examination board may be TRS members or researchers or lecturers of the IPSP.

Postgraduate diploma theses, if approved by the examining committee, must be posted on the website of the Medical School.

Also, an electronic submission of the diploma thesis is made to the digital repository "PERGAMOS", according to the decisions of the Senate of the University of Athens.

## **ARTICLE 8**

### **OBLIGATIONS AND RIGHTS OF POSTGRADUATE STUDENTS**

Postgraduate students have all the rights and benefits provided for students of the A' cycle, except for the right to provide free textbooks. The Foundation is required to provide students with disabilities and / or special needs with access to the proposed books and teaching (par. 3, No. 34, Law 4485/2017). The National and Kapodistrian University of Athens established and working since 2006 the Accessibility Unit for Students with Disabilities. Its mission is to achieve in practice equal access to the academic studies of students with different skills and requirements. The tools employed include Adaptations to the Environment, Assistive Technology and Access Services.

#### **Participation in other research or educational activities**

The SIC defines the program of parallel compulsory activities that are part of the IPSP program in addition to the regular curriculum (attendance of conferences, conferences or lectures outside the regular program). In addition, the SIC establishes a program of visits to other university laboratories or research centers for educational purposes. For these activities, the student is not examined but is required to attend them

#### **Obligations to obtain BMI**

The student is obliged:

- (a) attend the course program with a physical presence of at least 80%
- (b) attend the parallel events program with a physical presence of at least 80%
- (c) pass successfully (higher or equal to 5) both the written and the oral examinations in each module
- (d) pass successfully (higher or equal to 5) the examination of diploma thesis.

Postgraduate Diploma is not awarded to a student whose the first title of studies cycle from a foreign institution has not been recognized by the Interdepartmental Organization for the Recognition of Academic and Information Titles (DOATAP) 3328/2005 (A' 80).

#### **Dissertation**



The supervisor determines the protocol and the laboratory in which the diploma thesis is to be carried out and ensures its timely completion. If the student fails to complete work in good time, then a reasoned report will ask SIC to extend time and SIC will decide.

### **How to replenish the course**

Lessons that are postponed for any reason are replenished under the responsibility of the Director of the IPSP

### **Reasons and removing process from the IPSP**

It is possible to remove a student from the IPSP by decision of the SIC. Among the reasons for deleting a student are the following:

- Copying in examinations or in work or in solving exercises, inappropriate behavior, and other misconduct that is inconsistent with postgraduate student status.
- Using ideas, methods and results or copying part of the work of other scientists without mentioning them in their postgraduate diploma thesis or other work.
- Unsuccessful examination in more than one (1) course at the semester and unsuccessful review of a course.
- Unsuccessful examination in the postgraduate diploma thesis.
- Exceeding the period of study as set out in Article 5 of this Regulation.
- Delay for the student to pay the prescribed tuition fee within the time limits set out in this Regulation (Article 8).

Also, removal is provided if requested by the PS itself. In this case, the PS is not obliged to pay the attendance fees corresponding to the time leaves. The PS requesting its removal from the IPSP may apply for a certificate of attendance for the courses has successfully attended.

### **Supporting documents and grant award procedure**

The SIC decides to award scholarships to PS according to the available scholarship funds and grants scholarships with the criteria mentioned above for the selection of PS candidates or for their postgraduate studies.

### **Procedures for assessment of the courses and teachers by postgraduate students**

At the end of each semester, postgraduate students assess each lesson and each teacher based on a questionnaire that complements. The relevant form covers the lesson on the content, the way of teaching, the degree of its correlation with the act and the principles and philosophy of the postgraduate program.

The teacher's evaluation by the postgraduate students is based on the criteria of their knowledge and their teaching ability to the students, their preparation, the use of the most up-to-date internationally-for high-level postgraduate studies - bibliography, their willingness to answer questions, timely grading and return of papers and written examinations, and observance of course hours.

Teachers' assessment by postgraduate students is carried out under the responsibility of the IPSP Secretariat and the completed anonymous forms are stamped in a special dossier. The analysis of the evaluation forms with the observations of the postgraduate students and the comparative tables are also prepared under the responsibility of the Secretariat. The tables prepared are handed over to the SIC and to the Director of the IPSP. The Director of the IPSP informs each teacher of the outcome of the evaluation concerning after the submission of the grade for the course.

### **The amount of the study fees and the possibility of partial payment**

School fees are set at 2,000€ for the entire program. They are paid in 4 equal installments ( 500€ for each) as follows: 1st installment with registration, 2nd installment until November 15 of the year of the IPCC, 3rd installment with end of 1st semester and 4th installment until 15 March of the year implementation of the IPCC.

The students of the IPSP are exempt from the study fees who are citizens of the European Union, whose individual income, provided they have the same income, and the family's available equivalent income do not exceed separately, the individual one per cent (100%), and the family's seventy percent (70 %) of the national median disposable income equivalent, according to the most recently published data of the Hellenic Statistical Authority (ELSTAT). This exemption is granted for participation in a single MSc. In any case, exempt students do not exceed the percentage of thirty percent (30%) of the total number of students enrolled in the IPSP. If the beneficiaries exceed the percentage of the previous paragraph, they are selected in order of ranking starting with the ones with the lowest income (Article 35, paragraph 2, Law 4485/17).

The application for exemption from the study fees is submitted after the completion of the selection procedure for the students of the MSc. Those who receive a scholarship from another source are not entitled to an exemption (Article 35, par 3, Law 4485 / 17).

### **Graduation Ritual**

The discussion takes place at the Conference of the School of Medicine and in the School, in the presence of the Director of the SOS or his Deputy, the President of the School or his / her Vice-President and, where appropriate, the representative of the Priest.

### **Type of Postgraduate Studies (DPS)**

The DPS records the Foundation and the Departments of the IPSP, the title of the IPSP, the graduate's name and the date of the oath, as well as the President of SIC, the Program Manager and the Presidents of the 2 Departments (Medicine and Pharmacy) as well as the swearing-in day

### **Specific issues of the Diploma Supplement**

An appendix of the diploma gives the analytical grade of the courses as well as the parallel events attended by the student according to a special form issued by the Secretariat.

It is also provided the possibility of combining the Erasmus program with the participation of the IPSP and for accessibility will be used the process and the accessibility infrastructure of the NKUA.

## **ARTICLE 9**

### **INFRASTRUCTURE PPS**

#### **Management Support**

The Medical School's administrative support is provided by the IPSP. The SIC may decide to recruit staff to provide administrative support to the IPSP.

#### **Logistics**

#### **infrastructure**

For the operation of the IPSP, the School of Medicine and the Department of Pharmacy have the appropriate logistical equipment (classrooms, library, copiers, PC, etc.) and laboratory infrastructure to implement the objectives of the IPSP.

#### **Economic support**

Sources of income may be donations, sponsorships, benefits, legacies of public or private sector entities in general, legal or natural persons, research programs, community programs, state budget subsidies, and student study fees. If the operating costs of the IPSP are fully covered by the above sources of funding, except for the study fees, then no student fees will be charged to the Greek students.

Upon expiration of the term of the Coordination Committee, under the responsibility of the outgoing Director, made out an analytical account of the research and educational work and other activities of the IPSP, submitted to the Medical School of the NKUA. This account with the responsibility of the Delegation is sent without delay to the members of the SIC (par 5, article 44, law 4485/2017).

The internal and external evaluation of the IPSP will be made in accordance with the provisions of article 44 of Law 4485/2017.

## **ARTICLE**

**10**

### **TEACHING ASSISTANCE / TEACHERS IN THE PROGRAM**

The teaching of the courses and the laboratory and tutorial exercises, as well as the supervision of diploma theses in the IPSP, is awarded by decision of the SIC in accordance with the legislation in force mainly and primarily to faculty members of the Medical School and the Department of Pharmacy. At least 80% of the teachers will come from the two Departments of Medicine and Pharmacy.

Assignments may also be made to members of the EP or faculty members TRS of other HEIs, peer educators, visiting professors, and researchers of the first and second tier and specialists holding a PhD degree as scientific associate who have specialized knowledge or relevant experience in the subject of the IPSP.

For any other issue relating to the organization and operation of the "Nanomaterials" IPPC not provided for in this Regulation, the SAD shall decide in accordance with the applicable legislation.

The decision to be published in the Government Gazette.

Dean

Meletios-Athanasios Dimopoulos