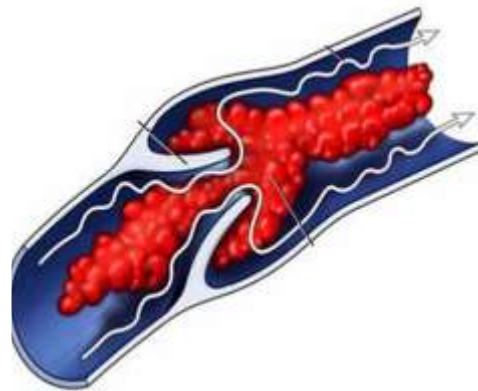


NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS

MSc

Thrombosis – Bleeding – Transfusion Medicine

Director of MSc: Professor M. Politou



STUDY GUIDE
2022-2023

<https://tbtm-msc.gr>

OBJECT-PURPOSE

Purpose of the MSC "Thrombosis-Bleeding-Transfusion Medicine" is the provision of high-level postgraduate education in the scientific field of understanding and studying the mechanism of Hemostasis and its disorders. In addition, it aims to educate the principles of transfusion therapy and its applications at the clinical and laboratory level. The scientific field of hemostasis disorders and transfusion therapy has greatly expanded during the last two decades. It is of interest to practically all the different specialties of medicine and related basic sciences (biochemistry, biology, etc.), as well as scope for both the above scientists and other health professionals (nurses, medical laboratory technologists, etc.). The MSC aims to prepare scientists for further studies or research by giving them the basis for carrying out an autonomous research project, while at the same time strengthening interdisciplinary synergies for the benefit of the cognitive research object it serves. MSC graduates are provided with the theoretical background and laboratory skills to participate as staff in Hematology Laboratories, Blood Donation Units, Surgical, Pathology, Cardiology, Anesthesiology Clinics, Intensive Care Units of the public and private sector as well as Research Laboratories and Competent Authorities (as defined by national and European legislation), in positions that require special expertise and knowledge in the laboratory investigation, clinical decision making and treatment of disorders of Hemostasis and Transfusion Therapy - offer educational work in universities and colleges - prepare research papers and make publications in Greek and international conferences and scientific journals - prepare doctoral theses - participate in competitive national and international research projects. Postgraduate students. have access to continuous scientific information and training on Hemostasis- Transfusion Therapy through seminars and workshops organized by the MSC annually, relevant conferences, etc. In addition, the goal of the MSC is the thorough training of students in the research methodology of the health sciences, with the aim of being able to produce and apply new knowledge. The MSC leads to the award of a Postgraduate Diploma in "Thrombosis - Bleeding - Transfusion Medicine" after full and successful completion of the studies based on the curriculum. The titles are awarded by the Medical School of the National and Kapodistrian University of Athens. Specifically, the fundamental purpose of MSC is the specialized training of students, so that upon completing their education the graduates: Have acquired the required knowledge regarding the mechanism of Hemostasis and its disorders as well as the principles of transfusion therapy . Have understood the applications of early intervention in the clinical and research fields, are familiar with research methodology issues in the health sciences. Utilize the acquired knowledge and skills in early intervention services.

STRUCTURE AND INSTRUMENTS OF THE MSC

Competent bodies for the operation of the MSC according to law 4957/2022 are:

At the Foundation level: the Postgraduate Studies Committee and the Senate.

At the level of the School of Medicine:

The Assembly of the Faculty of Medicine The responsibilities of the Assembly are to:

a) recommend to the Senate, through the Postgraduate Studies Committee, the necessity of establishing/amending the MSC, as well as extending the duration of the MSC,

- b) designate the Director and the members of the Steering Committee of each MSC of the School of Medicine,
- c) recommend representatives for the appointment of the Study Program Committees of the DMSC in which the School of Medicine participates,
- d) set up Committees for the evaluation of the applications of prospective postgraduate students and approves their registration in the MSC,
- e) assign the teaching work among the teachers of MSC and may assign auxiliary teaching work to MSC to the PhD candidates of the School of Medicine, under the supervision of MSC
- f) set up examination committees for the examination of postgraduate students' theses and designates the supervisor for each thesis,
- g) certify the successful completion of the course and award the Graduate Diploma,
- h) approve the report of the MSC, following the recommendation of the Steering Committee (S.E.),
- i) assign postgraduate students to carry out auxiliary teaching work in first cycle study programs of the School of Medicine.
- j) exercise any other legal authority

By decision of the Assembly of the Medical School, the responsibilities of paragraphs d) and f) may be transferred to the S.E. of MSC

The Steering Committee (SC)

Steering Committee consists of the Director of the MSC and four (4) of the School of Medicine and emeritus professors, who have a related subject to that of the MSC and undertake teaching work at MSC The members of S.E. are determined by decision of the Medical School Assembly. S.E. is responsible for monitoring and Steering the operation of the program and in particular:

- a) prepares the initial annual budget of the MSC and its amendments, since the MSC has resources, and recommends its approval to the Research Committee of the Special Research Funds Account (SRA),
- b) draws up the report of the program and recommends its approval to the Assembly of the Medical School,
- c) approves the financial budget of the MSC,
- d) approves the granting of scholarships, remunerative or non-remunerative, in accordance with what is defined in the founding decision of the MSC and the Regulations for postgraduate and doctoral studies,
- e) recommends the distribution and assignment of educational material to the Assembly of the Medical School,
- f) recommends the invitation of Visiting Professors to meet the teaching needs of the MSC to the Assembly of the Medical School,
- g) draws up a plan for the modification of the study program, which is submitted to the Assembly of the Medical School,
- h) recommends the redistribution of courses among academic semesters, as well as issues related to the upgrading of the curriculum.

The Director of the MSC

The Director of the MSC originated from the teaching staff of the School of Medicine by priority at the rank of professor or associate professor and is appointed by decision of the Assembly of the School of Medicine for a two-year term, with the possibility of renewal without limitation.

The Director of the MSC has the following jurisdiction:

- a) presides over the S.E., prepares the agenda and convenes its meetings,
- b) proposes issues concerning the organization and operation of the MSC to the Assembly of the Faculty of Medicine,
- c) recommends to the S.E. and the other organs of the MSC issues related to the effective operation of the MSC,
- d) ~~is~~ acts as Scientific Manager of the program and exercises the corresponding responsibilities,
- e) monitors the implementation of the decisions of the bodies of the MSC and of the Internal Regulation of postgraduate and doctoral study programs, as well as the monitoring of the implementation of the budget of the MSC,
- f) exercises any other authority, which is defined in the decision establishing the MSC

The Director of the MSC, as well as the members of the S.E. they are not entitled to remuneration or any compensation for the implementation of the responsibilities assigned to them and related to the performance of their duties.

Secretarial support MSC

- a) The Secretariat of the School of Medicine is responsible for the secretarial and administrative support of the MSC
- b) In case the MSC has its own resources, it can hire, in accordance with the current legislation, external collaborators for secretarial and administrative support, who are again under the supervision of the Secretariat of the School of Medicine.

CATEGORIES AND NUMBER OF ENTRY

University graduates of the Schools/Departments who hold a title of the first cycle of studies of the Departments of Medicine, Dentistry, Pharmacy, Nursing, Biology, Veterinary Medicine, Biochemistry, Medical Laboratory Technology, Nursing ~~HEIs and ATEIs~~ and related Departments of the country or Departments of recognized cognate institutions from abroad, as well as graduates of related cognitive object are eligible candidates for the MSc course. The maximum number of students admitted to the Master's Program is set at thirty (30) in total. The maximum number of admissions is finalised taking into consideration the number of teaching staff and the student-teacher ratio, the logistical infrastructure, classroomst and the absorption of graduates by the labor market. In addition to the number of admissions, one (1) member of research staff of the University can be accepted. per year, as long as their work is related to the academic interest of the MSC Scholars of national or international institutions, are admitted without exams.

DURATION OF STUDIES

The duration of study at MSC leading to the award of a Master's Degree is completed in four (4) academic semesters during which the postgraduate students have to prepare an MSc thesis,

There is a possibility of extension, after submission of a justified application by the student and approval by the Assembly. The extension ~~does~~ can not exceed two semesters. Thus, the maximum time allowed to complete the studies is set at six (6) academic semesters.

Students who have not exceeded the upper limit of study, after their justified application to the Assembly of the Medical School, may interrupt their study for a period of time that does not exceed two (2) consecutive semesters. Suspension of studies is granted for serious reasons (military service, illness, ~~sergeants~~, absence abroad, etc.).

The application must be justified and accompanied by all relevant supporting documents from competent public authorities or organizations, which prove the reasons for suspension of studies. The student status is suspended during the interruption of studies and participation in any other educational process is not allowed. The semesters of suspension of the student status are not admeasured to the prescribed maximum duration of normal studies.

At least two weeks before the end of the suspension, the student is required to re-enroll in the program to continue his/her studies with the rights and obligations of an active student. Students may apply to suspend their studies and return to the Program only if they have requested suspension of studies for two consecutive academic semesters. The request to interrupt ~~stop~~ the study suspension must be submitted no later than two weeks before the start of the second semester of the suspension.

The duration of the suspension or extension of the study period is discussed and approved on a case-by-case basis by the S.E., which makes a recommendation to the Assembly of the Medical School.

CURRICULUM

The MSC begins in the spring semester of each academic year. The study is completed in four (4) semesters. Registration and initiation of the program begin right after completion of the administrative procedure.

A total of one hundred and twenty (120) credits (ECTS) are required in order to complete the studies and be awarded the MSc diploma. All courses are held on a weekly basis and, where appropriate, include laboratory exercises and seminars.

The official language of lectures and writing a thesis can be either Greek or English, postgraduate students are required to attend lectures and seminars and pass successfully exams, write scientific papers, as well as to prepare a postgraduate thesis.

The preparation of the diploma thesis takes place in the 4th semester of studies and is credited with thirty (30) ECTS.

Courses are taught live or remotely, in accordance with current legislation and what is defined in article 7 of this regulation.

The course schedule is structured as follows:

A' semester		
Courses	hours per week	ECTS
Principles of Immunology, Biochemistry, Molecular Biology and Genetics of Hemostasis	5	9
Methodology of research and practical applications on bleeding diathesis	4	7
Laboratory investigation of hemorrhagic disorders- Laboratory exercise	4	7
Evidence based Decision Making in the clinical management of bleeding	2	7

B' semester		
Courses	hours per week	ECTS
Methodology and practical applications of thrombosis research	5	6
Anticoagulant Treatment: pharmacology, indications, management, side effects	3	7
Thrombotic complications in clinical entities	5	10
Research Methodology II & Biostatistics, Study and presentation of recent clinical and basic research articles	2	7

G' semester		
Courses	hours per week	ECTS
Molecular biology and immunology of transfusion	2	6
Blood and transfusable blood products: preparation, indications, side effects	3	7
Cell therapies-Alternatives to blood transfusion	3	4
Legal, administrative and financial framework of Blood donation & Transfusion. The Greek, European and International data	2	6
Bleeding management algorithms -Laboratory exercise	5	7

D' semester		ECTS
Master's thesis		30
TOTAL		120

1^o semester

Principles of Immunology, Biochemistry, Molecular Biology and Genetics of Hemostasis

Molecules and genes involved in the hemostasis mechanism:

Principles of acquired and innate immunity, antibody production, immunogenic cells, nucleic acids structure and function, replication, transcription, translation, translational modification, structure and regulation of gene expression, mutations, polymorphisms, protein synthesis, enzymes, cloning, transgenic animals, gene therapy, principles genetics, chromosome structure, Mendel's laws, genetic balance, gene penetrance. Hybridization techniques, immunoblotting, electrophoresis, polymerase chain reaction, sequencing of primary DNA structure, microarrays and study of polymorphisms (RFLP, DDGE, SSCP, VNTR, ASH)

Objectives: Students at the end of the course: Basic Principles of Immunology, Biochemistry, Molecular Biology and Genetics of Hemostasis should:

be able to describe the principles of natural and acquired immunity, the production and function of antibodies, the structure and function of all biological molecules (Proteins, Nucleic acids, Lipids, Polysaccharides), to explain the basic principles of the central dogma of molecular biology, of protein synthesis and the laws of heredity with an emphasis on the genetics of hemostasis.

They should also be able to distinguish and explain basic laboratory techniques (detection and quantification of biological molecules, hybridization, electrophoresis, polymerase chain reaction, immunoblotting, polymorphism studies, microarrays).

Methodology of research and practical applications on bleeding diathesis :

Megakaryosis, Haemostatic mechanism, coagulation factors fibrinogen. Vascular disorders, Thrombocytopenias (congenital and acquired), platelet functional disorders, Hemophilia A, B, Willebrand disease, Rare bleeding disorders, acquired bleeding disorders, Fibrinolytic system disorders, Disseminated Intravascular Coagulation: Pathophysiology, molecular basis, epidemiology, clinical picture, therapeutic treatment Replacement therapies: clotting factors (fictogenic and recombinant) bypass therapies, inhibitor therapy, innovative replacement therapies.

Objectives: Students after completing the course should be able to describe and explain the basic principles of the hemostatic mechanism, the pathophysiology of inherited and acquired bleeding disorders. They should also identify, explain and classify the respective treatment approaches.

Laboratory investigation of hemorrhagic disorders-Laboratory exercise :

Hemostasis laboratory organization, standardization of pre-analytical conditions, automation, conventional coagulation tests, global tests, platelet functionality tests, study of inhibitors, carrier and prenatal diagnosis, diagnosis algorithms, monitoring and treatment decision making.

Objectives: Students at the end of the course should be able to describe and explain the principles of the methods referred to in the investigation of bleeding disorders, the management of massive bleeding and the monitoring of therapy, recognize and select diagnostic algorithms.

Evidence based Decision Making in the clinical management of bleeding

International guidelines, case studies

Elaboration of a paper and presentation of a review article from the recent international literature

Objectives: Students at the end of the course should be able to explain and describe international guidelines for bleeding disorders, evaluate, compare and combine relevant international bibliographic data and support them in a corresponding oral presentation.

2nd semester

Methodology and practical applications of thrombosis research

Regulatory mechanisms of hemostasis, pathophysiology of arterial, venous thrombosis, thrombophilia (congenital acquired) cell model of coagulation, NETs, microvesicles, Clinical diagnosis, treatment

Objectives: Students at the end of the course should be able to describe and explain the pathophysiology of arterial and venous thrombosis, classify the different thrombophilia agents and recognize the corresponding diagnostic algorithms.

Anticoagulant Treatment: pharmacology, indications, management, side effects

Antiplatelets, coumarins, heparins, synthetic pentasaccharides, new oral anticoagulants, novel anticoagulants: composition, pharmacokinetics, pharmacodynamics indications, regulation, side effects, laboratory monitoring

Objectives: Students at the end of the course should be able to describe the mode of action of antithrombotic drugs (synthesis, action, pharmacokinetics, pharmacodynamics), explain and compare their different indications, side effects and laboratory monitoring.

Thrombotic complications in clinical entities

Malignancy (hematological and solid tumors), pregnancy, puerperium, neonate, elderly, sepsis, liver dysfunction, antiphospholipid syndrome, TTP, paroxysmal nocturnal hemoglobinuria, cerebrovascular disease, myocardial infarction, peripheral arterial disease

Objectives: Students at the end of the course should be able to describe, recognize, explain and compare thrombotic complications in different clinical entities (Malignancy (hematological and solid tumors), pregnancy, puerperium, neonate, elderly, sepsis, liver dysfunction, antiphospholipid syndrome, TTP, paroxysmal nocturnal hemoglobinuria, strokes, myocardial infarction, peripheral arterial disease). They should also be able to describe and evaluate international guidelines for the diagnosis, laboratory control and treatment of thrombosis.

Research Methodology II & Biostatistics ,Study and presentation of recent clinical and basic research articles

International guidelines for the diagnosis, laboratory control and treatment of thrombosis. Types of epidemiological research parametric and non-parametric tests, Parametric correlation coefficient (Pearson), Non-parametric correlation coefficient (Spearman), Multiple linear regression, examples. Elaboration of clinical study article work from recent international literature

Objectives: Students at the end of the course should be able to describe, recognize and explain the different types of epidemiological research and the appropriate tests of statistical analysis.

3rd semester

Molecular biology and immunology of transfusion

Molecular basis of a) erythrocyte antigens (ABO Rhesus and others), rare erythrocyte antigens b) platelet antigens c) leukocyte antigens. Complement system, delayed hemolytic reaction, alloimmune thrombocytopenic purpura, hemolytic disease of the newborn, HLA system

Direct, indirect Coombs, crossover, molecular testing for transfusion-transmitted infectious diseases

Objectives: Students at the end of the course should be able to recognize and explain the molecular biology and immunology of transfusion

(a) erythrocyte b) platelet c) leukocyte antigens, d) HLA system. Direct, indirect Coombs, crossover, molecular testing for transfusion-transmitted infectious diseases)

Blood and transfusable bloodproducts: preparation, indications, side effects

Packed red blood cells, platelets, fresh frozen plasma, fixed derivatives. Preparation methods, leukapheresis, inactivation (physical, chemical, biological techniques), irradiation, preservation, storage. Pre-transfusion testing, indications, immediate distal reactions (TACO, TRALI, TRIM hemosiderosis), storage injury of red blood cells.

Learning Outcome: At the end of the course, students should be able to identify blood derivatives and products, explain and describe their preparation, preservation and storage methods as well as their administration indications. They should also be able to distinguish and describe pretransfusion screening procedures and immediate and late transfusion reactions.

Cell therapies-Alternatives to blood transfusion

Autologous predisposition, isogemic hemodilution, intraoperative salvage, hemoglobin complexes, development of erythrocytes from primitive hematopoietic cells. Basic principles of autologous and heterologous transplantation, collection of primitive hematopoietic cells, CAR-T cell therapies development applications.

Objectives: Students at the end of the course should be able to describe, recognize and explain the principles of the individualized approach to a patient who may need a transfusion. They should also describe the basic principles of cell therapies.

Legal, administrative and financial framework of Blood donation & Transfusion. The Greek, European and International data

National Blood Donation Center (competent authority): structure and responsibilities, structure of blood donation services in Greece, European and International data National blood donor registry, blood donor recruitment, rare group registry, unit marking, circulation of blood and derivatives across the country, national stock management, hospital blood donation committees, certification and accreditation of Blood Donation services, hemovigilance, IT systems, quality assurance, economic and technical data.

Objectives: At the end of the course, students should be able to explain and describe the basic principles and regulations that govern the Legal, Administrative and Financial framework of Blood Donation in Greece and abroad

Bleeding management algorithms -Laboratory exercise

Trauma, surgery, solid organ transplants: bleeding management algorithms and techniques to minimize blood and blood product requirements based on global laboratory tests. Internship in a collaborating research or clinical laboratory

Objectives: Students at the end of the course should be able to describe, compare and classify bleeding management algorithms, combining data from global hemostasis tests and transfusion limitation strategies.

4th semester

Master's thesis

Objectives: When preparing the thesis, students must be able to search for international bibliographic data, evaluate it, organize it and compose a written scientific report on a topic assigned to them, which can be based on their own experimental data. They should also have the ability to create and present this work at a specific time in an open scientific event.

e- LEARNING

Modern distance education The organization of the educational process of the MSC can also be carried out using distance education methods. The organization of courses and other educational activities using contemporary distance education methods refers to courses and educational activities that by their nature can be supported using distance education and do not include practical, laboratory or clinical practice of the students, which requires the participation of students in physical presence. The Digital Governance Unit of N.K.U.A. is responsible for the support of the distance education process, as well as for issues related to the protection of personal data, Asynchronous distance education: The educational process may be carried out using asynchronous distance learning methods, which do not exceed twenty-five percent (25%) of the credits of the MSC, Educational material including notes, presentations, exercises, indicative solutions thereof, as well as videotaped lectures, may be posted per course on an electronic platform available to the students, as long as the current legislation on personal data protection is followed. Educational materials of all kinds are provided exclusively for the educational use of students and are protected by Law 2121/1993 (A' 25), as long as the relevant conditions are met.

EXAMINATIONS AND EVALUATION OF GRADUATE STUDENTS

The educational work of each academic year is structured in three study semesters, the winter and the spring, each of which includes at least thirteen (13) weeks of teaching and three (3) weeks of exams. The courses of the winter and spring semesters are reviewed repeatedly during the September term. In the event of an obstacle to the conduct of a course, its reimbursement is foreseen. The date and time of replenishment are determined by the secretariat of the MSC Attending the courses/workshops etc. is mandatory. A postgraduate student is considered to have attended a course (and therefore has the right to sit for the exam) only if he/she has attended at least 80% of the course hours. Otherwise, the postgraduate student is obliged to attend the course again in the following academic year. In the event that the percentage of student absences exceeds 20% of all courses, the issue of discontinuation of the course arises. The matter in question is examined by the S.E. and their proposal is addressed to the Assembly of the Medical School. The

evaluation of postgraduate students and their performance in the courses they are required to attend within the framework of the MSC takes place at the end of each semester with written or oral exams or with assignments throughout the semester or rely on intermediate progress exams, written assignments, laboratory or clinical exercises or apply a combination of all of the above. The evaluation method is defined by the educational staff of each course. When conducting written or oral examinations as evaluation methods, the integrity of the process must be ensured. Grading is done on a scale of 1-10. The results of the exams are announced by the notes, presentations, exercises, indicative solutions thereof, as well as videotaped lectures, notes, presentations, exercises, indicative solutions thereof, as well as videotaped lectures, educational staff and sent to the Secretariat of the MSC and the School of Medicine within four (4) weeks from the examination. In the event that the above limit is repeatedly exceeded by a teacher, the Director of the MSC informs the Assembly of the Medical School-

The percentage of participation of laboratory exercises, assignments and seminars in the final grade of each course is determined for each course separately, after a recommendation by the educational staff of each course and is written in the Study Guide of the MSC. In order to deal with extraordinary needs or circumstances resulting from force majeure, alternative assessment methods may be applied, such as the conduct of written or oral examinations using electronic means, provided that the integrity of the assessment process is ensured. Alternative methods may be applied for the evaluation of students with disabilities and special educational needs after a decision of the S.E. and a recommendation of the Department's PWD committee and taking into account the relevant instructions of the Accessibility Unit for Students with Disabilities. The evaluation of the students of the second cycle study programs organized by distance education methods may be carried out with distance exams, provided that the integrity of the evaluation process is ensured. In cases of illness or recovery from a serious illness, the educational staff is recommended to facilitate, in whatever way he/she considers appropriate, the student (e.g. remote oral examination). During the oral exams, the teacher ensures that he/she will not attend alone with the student being examined. Courses in which one did not receive a passable grade, must repeat them. However, the workshop or exercise that is graded independently, is secured and not repeated, as long as their attendance was deemed successful. Grade correction is allowed, if an obvious detour or cumulative error has occurred, after a document from the competent teacher and a decision of the Medical School Assembly. If the student fails more than three (3) times in the same course, the procedure defined by the current legislation is followed. The writings are kept mandatorily and under the care of the person in charge of the course for two (2) years. After the expiry of this time, the writings cease to be valid and, under the responsibility of the Assembly, relevant minutes are drawn up and destroyed - unless relevant criminal, disciplinary or any other administrative procedure is pending. To calculate the grade of the degree, the importance of each course in the study program is taken into account, which is expressed by the number of credits (ECTS). The number of credits (ECTS) of course is also the weighting factor of this course. To calculate the grade of the degree, the grade of each course is multiplied by the corresponding number of credit units (of the course) and the total sum of the individual products is divided by the total number of credit units required to obtain the degree. This calculation is expressed by the following mathematical formula.

$$\text{Βαθμός πτυχίου/διπλώματος} = \left(\sum_{k=1}^N \text{BM}_k \cdot \text{ΠΜ}_k \right)$$

For obtaining D.M.S. every postgraduate student must attend and be successfully examined in all the compulsory courses and prepare a postgraduate thesis, thus

accumulating one hundred and twenty (120) ECTS.

PREPARATION OF POSTGRADUATE THESIS

The assignment of a postgraduate diploma thesis (MSc thesis) is made after attending all the courses of the study program and passing the examination in them. The must be unique, original, have a research character and be prepared in accordance with the writing instructions uploaded on the website of each MSC. Following an application by the candidate in which the proposed title of the thesis is indicated, the name of the supervisor and a summary of the proposed thesis are attached, the SE appoints its supervisor and sets up the three-member examination committee that includes the supervisor for the approval of the work. The writing language of the master's thesis can be English or Greek and is defined together with the definition of the topic. The title of the thesis can be finalized following the student's application and the supervisor's consent to the MSC's Steering Committee. The application must also include a brief justification of the change. In order for the work to be approved, the student must present the three-member examination committee and be ready to answer any questions from the audience.

By decision of the SE, the supervision of diplomatic theses can also be assigned to other research or teaching members of the School of Medicine, who have not undertaken teaching work at MSC Postgraduate theses, once approved by the examination committee, must be uploaded to the "PERGAMOS" Digital Repository, in accordance with the decisions of the N.K.U.A. Senate. Since the thesis contains original unpublished results, may, at the request of the supervisor, which is countersigned by the graduate student, only the abstracts be published on the website, and the full text be published later.

OBLIGATIONS AND RIGHTS OF GRADUATE STUDENTS

Postgraduate students have all the rights and benefits provided for students of the first cycle of studies, until the end of any granted extension of study, except for the right to receive free textbooks. The Foundation ensures that students with disabilities and/or special educational needs have access to the proposed writings and teaching (<https://access.uoa.gr/>). The N.K.U.A. Liaison Office provides advisory support to students in matters of study and professional rehabilitation (<https://www.career.uoa.gr/ypiresies/>). Postgraduate students are invited to participate and attend seminars of research groups, bibliographic information discussions, laboratory visits, conferences/workshops with a subject related to that of the MSC, lectures or other scientific events of the MSC .S. etc. The Assembly of the Medical School, after the proposal of the S.E., may decide to delete postgraduate students if they: • exceed the maximum absence limit, • have failed the examination of a course or courses and have not successfully completed the program, in accordance with what is defined in this regulation, • exceed the maximum duration of study at the MSC, as defined in this Regulation, • have violated the written provisions regarding the treatment of disciplinary offenses by the competent disciplinary bodies, • do not pay the prescribed tuition fee, • submit a deletion request themselves. In the event that a graduate student is removed from the MSC, he/she may request the granting of a certificate for the courses in which he/she has been successfully examined. Students can participate in international student exchange programs, such as the ERASMUS + or CIVIS program, according to current legislation. In this case the maximum number of ECTS they can recognize is thirty (30). This possibility is provided

after the first semester of their studies. Students should apply to the S.E. and follow the terms of the program. The MSC it can also be attended by students from international student exchange programs, such as the ERASMUS+ program, according to existing partnerships. The postgraduate students of N.K.U.A. can enroll in MSC of the same or other A.E.I. of the country or abroad in the context of educational or research cooperation programs in accordance with the applicable legislation. It is possible to study in parallel in an undergraduate study program and in a postgraduate study program or in two (2) Postgraduate Studies Programs of the same or another Department, the same or another A.E.I. At the end of each semester, an evaluation of each course and each teacher is carried out by the postgraduate students (see article 19). Postgraduate students can request the issuance of a diploma supplement in Greek and English. For their participation in the MSC "Thrombosis - Bleeding - Transfusion Medicine" postgraduate students pay tuition fees amounting to one thousand euros (€1,000.00) per semester. The fee is paid at the beginning of each semester.

TUITION EXEMPTION

MSC students who meet the financial or social criteria and the conditions for excellence during the first cycle of studies, according to the current legislation, are exempt from tuition fees. This exemption is granted for participation in a single MSC. In any case, the exempted students do not exceed 30% of the total number of students admitted to the MSC per academic year. The application for exemption from tuition fees is submitted after the completion of the selection process for the students of the MSC. The financial situation of a candidate is in any case a reason for not being selected for a MSC. Those who receive a scholarship from another source are not entitled to an exemption, nor are citizens of non-EU countries. The examination of the criteria for exemption from tuition fees is carried out by the Assembly of the Medical School and a reasoned decision is issued to accept or reject the application. Since the current legislation sets an age criterion, it is recommended, for reasons of good administration and equal treatment, that the date of birth of the students is considered to be December 31 of the year of birth. The members of the categories, who are accepted as supernumeraries in accordance with provision 9.5c of this regulation, are exempt from paying tuition fees. In case they are studying at the same time in MSC of the Foundation, members of the same family up to the second degree of consanguinity by blood, it is possible to provide a reduction in the tuition fees paid by 50%. The MSC "Thrombosis-Bleeding-Transfusion Medicine" grants one-semester excellence scholarships. Scholarship award process: The MSC "Thrombosis-Bleeding-Transfusion Medicine" grants a limited number of scholarships which depends on the available funding and is decided by the Steering Committee. Scholarships are awarded at the beginning of the 4th semester. They are granted, after the recommendation of the Steering Committee and the approval of the Assembly of the Medical School, to Postgraduate Students who have succeeded in all courses of the 1st, 2nd and 3rd semesters and have the highest grade point average.

INFRASTRUCTURE & FINANCING OF MSC

For the proper functioning of the MSC lecture and seminar rooms, auditoriums equipped with audio-visual media and laboratories of the N.K.U.A. School of Medicine are available. The payment of tuition fees is carried out by the student himself or by a third natural or legal person on behalf of the student, as long as this is provided for in

the decision establishing the MSC The management of the resources of the MSC of A.E.I. is carried out by the Special Research Funds Account (ELKE) of the N.K.U.A. The resources of MSC are distributed as follows: a) an amount corresponding to thirty percent (30%) of the total income derived from tuition fees is withheld by ELKE. This amount includes the withholding percentage in favor of the E.L.K.E. for the financial management of MSC When the revenues of the MSC come from donations, sponsorships and all kinds of financial support, legacies or resources from research projects or programs, the withholding is carried out in favor of E.L.K.E. applicable to income from corresponding funding sources, b) the remaining amount of the total income of the MSC is available to cover the operational costs of the MSC

TEACHING ASSIGNMENT/TEACHERS AT MSC

The teaching work of the Postgraduate Studies Programs is assigned, following a decision of the Medical School Assembly, to the following categories of teachers: a) members of Teaching Research Staff (D.E.P.), Special Educational Staff (E.E.P.), Laboratory Teaching Staff (E.D.I.P.) and Special Technical Laboratory Staff (E.T.E. P.) of the School of Medicine or other Departments of N.K.U.A. or another Higher Educational Institution (A.E.I.) or Higher Military Educational Institution (A.S.E.I.), with additional employment beyond their legal obligations, b) emeritus professors or non-serving members of D.E.P. of the School of Medicine or other Departments of N.K.U.A. or other A.E.I., c) collaborating professors, d) authorized teachers, e) visiting professors or visiting researchers, f) researchers and specialist functional scientists of research and technological bodies of article 13A of Law 4310/2014 (A' 258) or of other research centers and institutes at home or abroad, g) scientists of recognized prestige, who have specialized knowledge and relevant experience in the subject matter of the MSC All categories of teachers can be paid exclusively from the resources of the MSC Payment of remuneration or other benefits from the state budget or public investment program is not permitted. By decision of the Medical School Assembly, the amount of each lecturer's fee is determined. Especially the lecturers who have the membership status of D.E.P. may be paid additionally for work they offer to the MSC, as long as they fulfill their minimum legal obligations, as defined in par. 2 of article 155 of Law 4957/2022. The last paragraph applies proportionally to the members of the E.E.P., E.D.I.P. and E.T.E.P., as long as they fulfill their minimum legal obligations. By decision of the Assembly of the School of Medicine, auxiliary teaching work may be assigned to PhD candidates of the School of Medicine, under the supervision of a professor of the MSC The assignment of the teaching work of the MSC is carried out by a decision of the Assembly of the Medical School, following a recommendation of the Coordination Committee of the MSC The decisions of the Assembly of the Medical School for the distribution of the teaching work must include the following elements: a) the full name of the teacher, b) his/her status (e.g. member of D.E.P., E.E.P., E.D.I.P., E.T.E.P. etc.), c) the type of teaching work assigned by teacher (course, seminar or workshop), d) the number of teaching hours per course, seminar or workshop. The distribution of the teaching work takes place before it begins academic year for both the winter and spring semesters. In the event that the distribution of the teaching work cannot be carried out simultaneously for both academic semesters, the decision will be made before the start of each academic semester. With a reasoned decision of the Assembly of the Medical School, the assignment of teaching work may be modified during the academic year. The lecturers, during the period of time they are on educational leave or suspension of duties, may provide teaching work to the MSC, if they judge that their program allows it, provided of course that based on the concurrent circumstances this is essentially and practically possible, a matter which must be

competently judged on a case-by-case basis.

AWARD OF POSTGRADUATE DIPLOMA The student completes the studies to obtain the Graduate Diploma (M.D.S.) by completing the minimum number of courses and credits required to receive the M.D.S., as well as the successful completion of the postgraduate thesis. The Assembly verifies the completion of the studies in order to grant the Diploma of Graduate Studies (D.M.S.). Upon completion of the above procedure, the postgraduate student is granted a certificate of completion of studies, his/her student status is lost and his/her participation in the collective administrative bodies of the University ceases. The D.M.S. certifies the successful completion of the studies and indicates a grade, with an accuracy of two decimal places, according to the following scale: Excellent (8.5 to 10), Very Good (6.5 to 8.5 not included) and Good (5 to 6, 5 not included). The type of D.M.S. by type of MSC is common to all Departments and Schools of N.K.U.A. and is included in the Graduate and Doctoral Studies Regulations of the Foundation. In the framework of the MSC a Postgraduate Diploma in "Thrombosis - Bleeding - Transfusion Medicine" is awarded.

GRADUATION -OATH TAKING

The swearing-in is not a constituent type of the successful completion of the studies, but it is a necessary condition for the granting of the title document of the diploma. The certification takes place within the framework of the Assembly of the Medical School and on the premises of the School, in the presence of the Director of the MSC, the President of the Medical School, the Dean of the School of Health Sciences or his/her Deputy him/her and, if possible, possibly a representative of the Rector. A request for a swearing-in ceremony for postgraduate students in the Great Hall of Ceremonies of the Central building is considered on a case-by-case basis by the Rector, based on an assessment of the current possibilities and the number of swearers to be declared by the Secretariat of the MSC in the Directorate of Education and Research. Postgraduate students, who have successfully completed the MSC, in exceptional cases (studies, residence or work abroad, health reasons, etc.), can apply to the Secretariat of the Medical School for an exemption from the reporting obligation. The exemption from the reporting obligation is approved by the President of the School of Medicine and the Vice-Chancellor for Academic Affairs and Student Affairs.

EVALUATION OF MSC

Evaluation by the National Authority for Higher Education

The MSC is evaluated in the context of the periodic evaluation/certification of the Department organized by the National Authority of Higher Education (ETH.A.A.E.). In this context, the overall evaluation of the work carried out by each MSC, the degree of fulfillment of the objectives set at its establishment, its sustainability, the absorption of graduates in the labor market, the degree of its contribution to the research, its internal evaluation by postgraduate students, the feasibility of extending its operation, as well as other data regarding the quality of the work produced and its contribution to the national strategy for higher education. If the MSC during its evaluation stage it is judged that it does not meet the conditions for continuing its operation, it operates until the graduation of the already registered students in accordance with the establishment decision and the regulation of postgraduate and doctoral study programs.

Internal evaluation

The internal evaluation of the MSC is carried out on an annual basis by the Quality Assurance Unit (QAU) of the Foundation. In the process of internal evaluation, all those involved in the implementation of the actions and actions of the MSC participate, and more specifically, the students, the members of the teaching staff, the administrative and technical support staff and the members of the Steering Committee of the MSC. The internal evaluation process is carried out in accordance with the applicable legislation, the Institution's Internal Quality Assurance System, the guidelines and standards of the ETHAAE. The internal evaluation of the MSC includes the evaluation of the teaching work, as well as of all its academic functions and actions. The following are evaluated in more detail: a) the content of the Study Program according to the most recent research in the specific subject of the MSC, so as to ensure the modern nature of the MSC, b) the workload of the courses, as well as the progress and completion of postgraduate studies by the students, c) the degree of satisfaction of the students' expectations from the Study Program, the services offered to support their studies and the learning environment, d) the courses of the Program on a six-monthly basis through questionnaires completed by the students of the MSC. The results of the evaluation are communicated to the SE and are reviewed in order to continuously improve the level of studies of the MSC. The results are used, shared and aimed at the sustainability of the Program, the high level of studies, the improvement of its benefits and the efficiency of its teachers.

TRANSITIONAL PROVISIONS

For all matters not defined in the current legislation, in the Regulations for Master's and Doctoral Theses of the Greek Orthodox Church of Greece. or in this Regulation, competent to decide are the bodies of the MSC