HELLENIC REPUBLIC
National and Kapodistrian University of Athens

INTERNAL ACADEMIC REGULATIONS

Inter-Institutional – Interdepartmental

Postgraduate Program

"Resuscitation"

of the

Department of Midwifery and the Department of Biomedical Sciences

of the University of West Attica,

and the School of Medicine

of the National and Kapodistrian University of Athens

Official Decision Number of the General Assembly: 37833/15.04.2025

Article 1 – General Provisions

1.1. The Department of Midwifery and the Department of Biomedical Sciences of the School of Health and Welfare Sciences of the University of West Attica (UNIWA), in collaboration with the Medical School of the National and Kapodistrian University of Athens (NKUA), jointly organize and operate, from the academic year 2025–2026, the Inter-Institutional – Interdepartmental Postgraduate Study Programme (I.I.P.S.P.) entitled **"Resuscitation"**, in accordance with the applicable legal provisions and the Postgraduate Studies Regulation of the University of West Attica.

1.2. The provisions of this Postgraduate Studies Regulation, as set out below, specify and supplement the legislative framework governing postgraduate studies. They provide a unified set of rules governing the operation of the specific Inter-Institutional – Interdepartmental Postgraduate Study Programme, addressing matters that are either regulated by existing legislation, delegated through statutory authorization, or managed upon recommendation by the Programme's Academic Committee.

Article 2 – Objectives and Structure of the I.I.P.S.P.

2.1 Objectives of the Inter-Institutional – Interdepartmental Postgraduate Study Programme (I.I.P.S.P.) "Resuscitation"

The objective of the "Resuscitation" I.I.P.S.P. is to educate and provide advanced specialization to young healthcare professionals in the broad and rapidly evolving field of resuscitation. The programme introduces students to research methodologies for the generation and application of new scientific knowledge, with the aim of both preventing and effectively responding to critical health conditions, both in-hospital and out-of-hospital settings.

Additionally, the programme aims to provide comprehensive training in resuscitation techniques and decision-making processes related to emergency interventions, as well as the care and management of patients who have been successfully resuscitated in emergency departments, general wards, or intensive care units.

2.2 Learning Outcomes and Qualifications Acquired upon Successful Completion of the Programme

Graduates of the programme will have achieved:

- Training through both theoretical and practical education in resuscitation techniques across all age groups.
- Familiarity with the principles, theories, methodologies, and practices of the scientific domains addressed by the programme; the ability to critically understand, interpret, and connect these domains with related fields.
- Acquisition of sufficient knowledge and experience in research methodologies.
- Development of the ability to seek out, critically assess, and utilize both Greek and international scientific literature.

2.3 Upon Completion of the Programme, Graduates Will Be Able To:

a) Staff units specializing in resuscitation at both primary and secondary levels of care, offering high-quality in-hospital and out-of-hospital services.

b) Work effectively in Intensive Care Units (ICUs).

c) Competently serve in Emergency Departments.

d) Be well-prepared for doctoral-level studies.

e) Teach the scientific field of resuscitation.

The broad interdisciplinary knowledge provided by the I.I.P.S.P. enables graduates to pursue doctoral-level studies, particularly in cutting-edge applied research, at both national and international academic institutions.
Moreover, the I.I.P.S.P. fosters closer collaboration among the participating departments, enhances their international visibility, and strengthens their connections with organizations and institutions at the national, regional, and international levels. It contributes to the enrichment of both the educational and research processes through the dynamic utilization of key scientific synergies and valuable academic resources.

Article 3
Governing Bodies of the IIPP
The following bodies are responsible for the organisation and overall operation of the Interinstitutional – Interdepartmental Postgraduate Programme (IIPP):
(a) The Senate of the University of West Attica (UWA)
(b) The Postgraduate Studies Committee of the UWA
(c) The Programme Committee (PC) of the IIPP
(d) The Coordinating Committee (CC)
(e) The Director of the IIPP
(a) The Senate of the University of West Attica
The Senate has the following responsibilities:

1. Approves the establishment of the Postgraduate Programme (PPG) or any modification of its founding decision.
2. Approves the extension of the duration of the Programme's operation.
3. Appoints the Programme Committee (PC).
4. Decides on the termination of Postgraduate Programmes offered by UWA.

(b) The Postgraduate Studies Committee
By decision of the Senate, and following a proposal by the Deans of the UWA Faculties, the Postgraduate Studies Committee is formed. The Committee consists of:

- One (1) faculty member from each UWA Faculty
- One (1) member from the categories of Special Teaching Staff (STS), Laboratory Teaching Staff (LTS), and Special Technical Laboratory Staff (STLS)
- The Vice-Rector for Academic Affairs as Chairperson

Committee members must have experience in organising and participating in second-cycle study programmes. The term of office is two (2) academic years.
The responsibilities of the Committee include:

1. Submitting a recommendation to the Senate for the establishment or modification of PPGs, based on an evaluation of Department Assembly proposals, feasibility and sustainability reports, and cost assessments. It may reject proposals lacking sufficient justification or complete documentation.
2. Drafting and submitting a PPG regulation proposal to the Senate.
3. Preparing a standard regulation model for PPGs.
4. Monitoring compliance with existing PPG regulations.
5. Overseeing the implementation of legislation, internal rules, and decisions of the UWA governing bodies by PPGs.
6. Monitoring procedures related to tuition fee exemption.
7. Exercising any other powers defined by the Internal Regulations of each PPG.

By Senate decision, upon the Postgraduate Committee's recommendation, the PPG regulation is approved and becomes a distinct chapter in UWA's internal operating regulations.

(c) Programme Committee (PC)

The PC is established by decision of the UWA Senate following proposals by the Assemblies of the collaborating Departments:

- Department of Midwifery and
- Department of Biomedical Sciences of the School of Health and Welfare Sciences (UWA), and
- the Medical School of the National and Kapodistrian University of Athens (NKUA).

It is composed of faculty members (DEPs). The number and composition are defined in the Cooperation Protocol of the IIPP.

The PC of the IIPP "Resuscitation" consists of five (5) members:

- Two (2) from the Department of Midwifery (UWA)
- One (1) from the Department of Biomedical Sciences (UWA)
- Two (2) from the Medical School (NKUA)

The PC also forms the Coordinating Committee (CC) using the same members.

The PC is responsible for organising, administering, and managing the IIPP and exercises powers equivalent to a Department Assembly, with the following responsibilities:

a) Proposes to the Senate via the Postgraduate Studies Committee the need for the establishment/modification/extension of the IIPP.

b) Appoints the Director of the IIPP.

c) Forms admission committees and approves enrolments of postgraduate candidates.

d) Assigns teaching duties and may appoint PhD candidates of the collaborating departments as teaching assistants under faculty supervision.

e) Forms examination boards for thesis evaluations and appoints supervisors.

f) Confirms successful programme completion and awards the Postgraduate Diploma.

g) Approves the IIPP's annual report, following the CC's proposal.

h) Assigns postgraduate students teaching assistance duties in undergraduate programmes.

i) Exercises any other legal power.

Emeritus Professors may participate in the PC if they provide teaching services to the IIPP.

(d) Coordinating Committee (CC)

Formed by decision of the PC for a two-year term, the CC consists of the IIPP Director and four (4) faculty members from the collaborating Departments whose expertise aligns with the IIPP subject area and who undertake teaching duties. The CC is responsible for overseeing and coordinating the programme, especially:

a) Prepares the annual budget and its amendments (if applicable) and submits them for approval to the Research Committee of the Special Account for Research Funds (SARF), excluding quarterly revisions as per article 239(3b).

b) Drafts the IIPP's financial report and submits it to the Department Assembly.

c) Approves expenditures and may delegate this power to the Director.

d) Approves the award of scholarships, compensatory or not, according to the founding decision and regulations.

e) Proposes the teaching workload allocation to the PC.

f) Proposes visiting professors to cover teaching needs.

g) Drafts and submits a proposal to the PC for curriculum modifications.

h) Recommends to the PC course redistribution across semesters and programme quality enhancement.

(e) Director of the IIPP
Selected from faculty members, preferably of Professor or Associate Professor rank, for a renewable two-year term. For the IIPP "Resuscitation," the Director is a faculty member with a demonstrated close alignment with the field.
The Director has the following responsibilities:
a) Chairs the PC, sets the agenda, and convenes meetings.
b) Proposes matters regarding the organisation and operation of the IIPP to the PC.
c) Recommends to the PC and other relevant IIPP and HEI bodies measures for effective operation.
d) Acts as the Scientific Coordinator of the IIPP.
e) Oversees implementation of PC decisions and postgraduate programme regulations, as well as budget execution.
f) Exercises any other responsibility defined by the IIPP's founding decision.
The Director and PC members are **not entitled to compensation or remuneration** for the duties associated with these responsibilities.

Article 4

Determination of Minimum and Maximum Number of Admitted Students, Admission Criteria and Selection Process

4.1 The minimum number of postgraduate students admitted per academic cycle is set at **twenty (20)**. This indicative minimum ensures a critical mass of participants, enabling the smooth viability and operation of the IIPP, as well as optimal utilisation of the programme's infrastructure and available resources.

4.2 The maximum number of admitted students per academic cycle is set at **one hundred (100)**. This limit is deemed manageable in order to maintain high-quality academic services, considering the student-to-teacher ratio, effective classroom and infrastructure usage, available resources, and the graduates' employment prospects.

4.3 In addition to the regular admissions, **one (1)** member annually from the categories of Special Teaching Staff (STS), Laboratory Teaching Staff (LTS), or Special Technical Laboratory Staff (STLS) may be admitted, provided that their work at the Institution is relevant to the academic field of the IIPP.

4.4 Student selection is conducted in accordance with applicable legislation, the Postgraduate Studies Regulation of the University of West Attica (UWA), and the provisions of the present IIPP Regulation.

4.5 Every **March and/or September**, following a decision by the Programme Committee, a **Call for Expressions of Interest** is issued and posted on the websites of the cooperating Departments and Institutions, inviting applications for admission. Applications along with the

required documents must be submitted to the IIPP Secretariat within the deadline specified in the call, which may be extended by decision of the Programme Committee.

4.6 The Programme Committee appoints a **Candidate Evaluation Committee (CEC)** composed of at least **three (3)** faculty members involved in teaching within the IIPP. The IIPP Secretariat receives the applications and supporting documents from prospective students, compiles a list of applicants, and forwards it to the CEC. Applications must be complete and submitted within the set deadlines; **late applications will not be accepted**.

4.7 Required documentation includes:

- Application form
- Curriculum vitae
- Copy (both sides) of ID card or passport
- Degree certificate or graduation confirmation
- Detailed undergraduate transcript
- Certificate of English language proficiency (B2 level or higher). Applicants holding a degree from an English-speaking institution are exempt. If no B2-level certificate is submitted, applicants will be examined by the Programme Committee.
- Letters of recommendation
- Scientific publications, if any
- Evidence of professional or research activity, if any
- Certificate of Greek language proficiency (for foreign applicants) or verified sufficient knowledge of Greek by the Admissions Committee
- Recognition of foreign academic qualifications.
  For degrees obtained from non-Greek institutions without official DOATAP recognition, the following procedure applies:
    - The Programme Committee appoints a sub-committee to determine whether the institution or degree type is recognised.
    - The awarding institution must be listed in DOATAP's updated directory.
    - If the institution is not listed, the procedure under **Art. 304 §5 of Law 4957/2022** is followed. Otherwise, the student is **dismissed without refund** of any paid fees.
    - A study location certificate issued directly by the foreign university is also required. If any part of the studies took place in Greece outside a public Higher Education Institution, the degree is **not recognised**.

4.8 The **admission process** consists of **two stages**:

- **Stage 1**: Evaluation of application completeness and validity of submitted documents. Only eligible candidates proceed to Stage 2.
- **Stage 2**: Candidates are interviewed by the CEC to assess their ability to meet the demands of the IIPP, motivation, interest, and scientific suitability.

Selection is based on the following weighted criteria:

Code	Criterion	Weight (%)
K1	Undergraduate degree grade	20%
K2	Certified English language proficiency	15%
K3	Additional degree (Bachelor's, Master's or PhD)	10%
K4	Scientific publications or conference participation	5%
K5	Relevant research or professional activity	5%
K6	Letters of recommendation	5%
K7	Interview before three-member evaluation committee	40%

Final Score Formula:
Score = K1 × 0.20 + K2 × 0.15 + K3 × 0.10 + K4 × 0.05 + K5 × 0.05 + K6 × 0.05 + K7 × 0.40

4.9 Additional elements considered include the undergraduate thesis grade (if available), degree relevance to the IIPP's field, grades in relevant undergraduate courses, and knowledge of other foreign languages.

4.10 Based on the cumulative score, the Admissions Committee prepares a **ranking list**, which is submitted to the Programme Committee for approval.
Applicants may file a **specific appeal** within **five (5) working days** of the provisional results announcement. Appeals are reviewed conclusively by the CEC. After resolving any appeals, the **final list of admitted students** is published.
Admitted students must enrol within **fifteen (15) days** from the acceptance decision.
In the event of a tie (rounded to the nearest whole number on a 100-point scale), **all tied applicants are admitted**, provided the number does not exceed **10% of the maximum admissions limit**.

4.11 If any admitted student fails to register, **alternate candidates** from the ranked list will be invited in order. If further withdrawals occur, the Secretariat will contact the next candidate(s) on the final ranking list.

Article 5
Categories of Applicants for Admission to the Inter-Institutional Postgraduate Program (IIPP)

Graduates of university-level programs in Medicine, Nursing, Biomedical Sciences, Midwifery, and all departments within the field of Health Sciences or related disciplines from domestic institutions or from recognized equivalent foreign institutions, as well as graduates of former Technological Educational Institutes (TEIs), are eligible for admission to the IIPP. Final-year students may also apply, provided that they submit official documentation confirming the completion of their studies prior to the approval date of the final list of admitted students. In such cases, the degree certificate or diploma must be submitted before the commencement date of the program.

Final-year students of foreign institutions not yet included in the National Registry of Recognized Foreign Institutions maintained by DOATAP may also apply. If the foreign institution is not listed on the official website of DOATAP, the department shall apply the

relevant procedure in accordance with applicable legislation. Otherwise, the applicant will be disqualified from the program without any entitlement to a refund of fees already paid.

Members of the categories E.E.P. (Special Teaching Staff), E.DI.P. (Special Technical Laboratory Staff), and E.T.E.P. (Special Administrative and Technical Staff) may, upon application, enroll as supernumerary students, limited to one per academic year, and shall be exempt from tuition fees.

For international students (in cases where the language of instruction is Greek), the required certification of Greek language proficiency—whether by internal examinations, interview, or other formal means—is determined as follows:

The relevant Secretariat of the Department shall verify whether the awarding foreign institution is included in the National Registry of Recognized Foreign Institutions and whether the specific type of degree is included in the National Registry of Recognized Degree Types, as published on the DOATAP website.

Article 6
Duration of Studies – Part-time Attendance – Suspension of Studies

6.1 The duration of studies leading to the award of the Postgraduate Diploma (PG Diploma) of the Program is set at four (4) academic semesters, each consisting of thirteen (13) weeks of teaching, which includes the time allotted for the preparation and submission of the Master's Thesis (M.Th.). The allowed timeframe for completing all obligations to obtain the postgraduate diploma ranges from a minimum of four (4) semesters to a maximum of six (6) academic semesters. The duration of the courses per semester is at least thirteen (13) weeks, corresponding to 30 ECTS credits. The compulsory courses have a minimum of 39 contact hours. The period allotted for the preparation of the Thesis (M.Th.) cannot be less than six (6) months and not exceed eighteen (18) months.

6.2 An extension may be granted upon a motivated application by the student and approval by the Program Committee of the IIPP. This extension shall not exceed the standard duration of the program. Therefore, the maximum permitted time for completion of studies is set at six (6) academic semesters.

6.3 Students who have not exceeded the maximum allowed duration of studies, upon a justified request submitted to the Program Committee of the IIPP, may suspend their studies for a period not exceeding two (2) consecutive semesters. Suspension of studies is granted for serious reasons (military service, illness, maternity leave, absence abroad, etc.).
The application must be justified and accompanied by all relevant supporting documents issued by competent public authorities or organizations proving the reasons for suspension. Student status is suspended for the duration of the suspension and participation in any educational activity is prohibited. Suspension semesters are not counted toward the maximum allowed duration of regular studies.
At least two weeks before the suspension period ends, the student is obliged to re-register in the program in order to continue their studies with all rights and obligations of an active student. Students may submit a request to terminate the suspension and return to the

program only if they have applied for suspension for two consecutive semesters. The request to terminate the suspension must be submitted no later than two weeks before the start of the second suspension semester.
The duration of the suspension or extension of study time is reviewed and approved on a case-by-case basis by the Program Committee of the IIPP.

Article 7
Curriculum

Indicative Curriculum: The total number of credit units (ECTS) is 120, and the minimum duration of studies is 4 semesters.

Πρόγραμμα μαθημάτων – Curriculum						
Κωδικός Code	**Εξάμηνο Semester**	**Μάθημα**	**Course**	**Τύπος Μαθήματος Course Type**	**Συνολικές ώρες διδασκαλίας Total teaching hours**	**Πιστωτικές μονάδες ECTS**
	1	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΦΥΣΙΟΛΟΓΙΑΣ	Special Topics in Physiology	*Υ: Υποχρεωτικό C: Compulsory*	*[Αριθμός χωρίς δεκαδικά] [Whole number, no decimals]*	5
	1	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΠΑΘΟΦΥΣΙΟΛΟΓΙΑΣ	Special Topics in Pathophysiology	*Υ:Υποχρεωτικό C: Compulsory*	52	5
	1	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΦΑΡΜΑΚΟΛΟΓΙΑΣ	Special Topics in Pharmacology	*Υ:Υποχρεωτικό C: Compulsory*	52	5
	1	ΒΙΟΣΤΑΤΙΣΤΙΚΗ	Biostatistics	*Υ:Υποχρεωτικό C: Compulsory*	52	5
	1	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΑΝΑΙΣΘΗΣΙΟΛΟΓΙΑΣ	Special Topics in Anesthesiology	*Υ:Υποχρεωτικό C: Compulsory*	52	5
	1	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΚΑΡΔΙΟΛΟΓΙΑΣ	Special Topics in Cardiology	*Υ:Υποχρεωτικό C: Compulsory*	52	5
	Σύνολο (εξάμηνο) Total (semester)				**260**	**30**
	2	ΕΠΕΙΓΟΥΣΑ ΦΡΟΝΤΙΔΑ	**Emergency Care**	*Υ:Υποχρεωτικό C: Compulsory*	52	6
	2	ΑΝΑΖΩΟΓΟΝΗΣΗ ΕΝΗΛΙΚΩΝ- ΠΑΙΔΙΩΝ-ΝΕΟΓΝΩΝ	**Resuscitation of Adults, Children, and Newborns**	*Υ:Υποχρεωτικό C: Compulsory*	221	20
	2	ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΕΝΤΑΤΙΚΗΣ ΘΕΡΑΠΕΙΑΣ	**Special Topics in Intensive Care**	*Υ:Υποχρεωτικό C: Compulsory*	29	4
	Σύνολο (εξάμηνο) Total (semester)				**302**	**30**
	3	ΜΕΘΟΔΟΛΟΓΙΑ ΕΡΕΥΝΑΣ	**Research Methodology**	*Υ:Υποχρεωτικό C: Compulsory*	39	7

	3	ΒΑΣΙΚΗ ΕΡΕΥΝΑ ΣΤΗΝ ΑΝΑΖΩΟΓΟΝΗΣΗ	**Basic Research in Resuscitation**	*Υ:Υποχρεωτικό C: Compulsory*	130	10
	3	ΒΙΩΜΑΤΙΚΑ ΕΡΓΑΣΤΗΡΙΑ ΕΠΙΚΟΙΝΩΝΙΑΣ	**Experiential Communication Workshops**	*Υ:Υποχρεωτικό C: Compulsory*	39	4
	3	ΜΕΤΑΦΡΑΣΤΙΚΗ ΕΡΕΥΝΑ	**Translational Research**	*Υ:Υποχρεωτικό C: Compulsory*	26	3
	3	ΔΙΔΑΚΤΙΚΗ ΚΑΙ ΑΞΙΟΛΟΓΗΣΗ ΣΤΗΝ ΑΝΑΖΩΟΓΟΝΗΣΗ	**Teaching and Assessment in Resuscitation**	*Υ:Υποχρεωτικό C: Compulsory*	52	6
	Σύνολο (εξάμηνο) Total (semester)				**286**	**30**
	4	ΕΚΠΟΝΗΣΗ ΚΑΙ ΤΗΝ ΣΥΓΓΡΑΦΗ ΔΙΠΛΩΜΑΤΙΚΗΣ ΕΡΓΑΣΙΑΣ	**Preparation and Writing of a Thesis**	*Υ:Υποχρεωτικό C: Compulsory*	**260**	**30**
	Σύνολο (εξάμηνο) Total (semester)				**260**	**30**
	ΣΥΝΟΛΟ (Πρόγραμμα) TOTAL (Programme)				**1.108**	**120**

Περιγραφή Μαθημάτων / Syllabus

1ο εξάμηνο	**1st semester**
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΦΥΣΙΟΛΟΓΙΑΣ 1. ΒΑΣΙΚΗ &ΚΥΤΤΑΡΙΚΗ ΦΥΣΙΟΛΟΓΙΑ: Εισαγωγή, Κυτταρική δομή & σύσταση, Διαδικασίες μεταφοράς, Κυτταρική μετανάστευση, Ιοντικοί δίαυλοι 3. ΑΝΟΣΙΑΚΟ ΣΥΣΤΗΜΑ: Μη ειδική ανοσία, ειδική ανοσία 4. ΑΥΤΟΝΟΜΟ ΝΕΥΡΙΚΟ ΣΥΣΤΗΜΑ Οργάνωση & δομή, Νευροδιαβιβαστές, Μυελός των επινεφριδίων, Δράσεις σε όργανα & συστήματα 5. ΑΝΑΠΝΕΥΣΤΙΚΟ ΣΥΣΤΗΜΑ: Δομή, Λειτουργία, Όγκοι & χωρητικότητες, Αντιστάσεις. Επιφανειακή τάση. Επιφανειοδραστικός παράγων. Καμπύλη πίεσης –όγκου, Αναπνευστικό έργο, Ανταλλαγή αερίων στον πνεύμονα, Πνευμονική ροή αίματος, Αναπνευστικά αέρια στο αίμα, Έλεγχος & ρύθμιση της αναπνοής, Αναπνοή σε ειδικές συνθήκες 6. ΚΑΡΔΙΑΓΓΕΙΑΚΟ ΣΥΣΤΗΜΑ: Δομή καρδιάς, Δομή αγγείων & φλεβών, Αιματική ροή, Καρδιακός κύκλος, Καρδιακή διέγερση, ΗΚΓ, Σχέση πίεσης - όγκου στην καρδιά, Καρδιακό έργο, Ρύθμιση όγκου παλμού, Φλεβική επιστροφή, Αρτηριακή πίεση, Αιμάτωση - οξυγόνωση μυοκαρδίου, Ρύθμιση κυκλοφορίας, Εμβρυϊκή & Νεογνική κυκλοφορία 7. ΕΝΔΟΚΡΙΝΕΣ ΣΥΣΤΗΜΑ: Ορμόνες - κατηγορίες – βιοσύνθεση, Δράσεις ορμονών - ρύθμιση ορμονών, Μετάδοση σήματος στο κύτταρο, Υποθάλαμος – Υπόφυση,	**SPECIAL TOPICS IN PHYSIOLOGY** 1. Basic & Cellular Physiology: Introduction, Cellular structure & composition, Transport processes, Cellular migration, Ion channels. 2. Immune System: Non-specific immunity, Specific immunity. 3. Autonomic Nervous System: Organization & structure, Neurotransmitters, Adrenal medulla, Actions on organs & systems. 4. Respiratory System: Structure, Function, Lung volumes & capacities, Resistance. Surface tension. Surfactant. Pressure-volume curve, Work of breathing, Gas exchange in the lungs, Pulmonary blood flow, Respiratory gases in the blood, Control & regulation of breathing, Breathing in special conditions. 5. Cardiovascular System: Heart structure, Structure of blood vessels & veins, Blood flow, Cardiac cycle, Cardiac excitation, ECG, Pressure-volume relationship in the heart, Cardiac work, Pulse volume regulation, Venous return, Arterial pressure, Myocardial perfusion & oxygenation, Circulatory regulation, Fetal & neonatal circulation. 6. Endocrine System: Hormones - categories - biosynthesis, Hormonal actions - regulation of hormones, Signal transduction to the cell, Hypothalamus – Pituitary, Hypothalamic hormones, Pituitary hormones, Thyroid hormones, Adrenal cortex hormones.

Υποθαλαμικές ορμόνες, Υποφυσιακές ορμόνες, Ορμόνες θυρεοειδούς, Ορμόνες φλοιού επινεφριδίων 8. ΟΥΡΟΠΟΙΗΤΙΚΟ ΣΥΣΤΗΜΑ – ΝΕΦΡΟΙ: Λειτουργική ανατομική περιγραφή, Νεφρική αιμάτωση, Νεφρώνας, Σπειραματική διήθηση - Επαναρρόφηση – Απέκκριση, Μηχανισμοί ρύθμισης νεφρικής λειτουργίας, Ομοιοστασία H2O - Ομοιοστασία Na+, Ομοιοστασία K+, Ομοιοστασία Ca2+ & Mg2+, Σχηματισμός 8. Συμπύκνωση ούρων, Απέκκριση ούρων	7. Urinary System - Kidneys: Functional anatomical description, Renal blood supply, Nephron, Glomerular filtration - Reabsorption - Excretion, Mechanisms of renal function regulation, Homeostasis of H2O, Homeostasis of Na+, Homeostasis of K+, Homeostasis of Ca2+ & Mg2+, Urine concentration, Urine excretion.
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΠΑΘΟΦΥΣΙΟΛΟΓΙΑΣ 1. Γενικές αρχές-Βασικές Έννοιες: Εκμάθηση των συνήθων παθολογικών αλλοιώσεων κυττάρων και ιστών (πχ υπόστροφες αλλοιώσεις, διαταραχές του πολλαπλασιασμού, ατροφία, μορφές ατροφίας, νέκρωση και θάνατος, είδη νέκρωσης, εκφύλιση και είδη αυτής). Ειδικές παθολογικές καταστάσεις ιστών όπως εναποθέσεις ανόργανων ή οργανικών ουσιών, ασβέστωση, ανθράκωση, σιλίκωση, λιθίαση, χρωστικές εναποθέσεις, αιμοσιδήρωση και αιμοχρωμάτωση, ίκτερος, είδη ικτέρου. Αποκατάσταση ιστοπαθολογικών αλλοιώσεων, αναγέννηση των ιστών. Εκμάθηση των βασικών χαρακτηριστικών της υπερπλασίας, υπερτροφίας και μεταπλασίας των ιστών. Γενετική Νόσος-Παθοφυσιολογία εκλεκτικών γενετικών διαταραχών. 2. Εκμάθηση Παθοφυσιολογικών μηχανισμών κατά συστήματα: Διαταραχές ανοσοποιητικών μηχανισμών-Εκλεκτική Παθοφυσιολογία σε νόσους του ανοσοποιητικού συστήματος (πχ πρωτογενείς νόσοι ανοσοκαταστολής, νόσοι ενζυματικών ατελειών, AIDS, κλπ). Αιματολογικές νόσοι (γενετικές, μοριακές, βιοχημικές και φυσιολογικές παράμετροι αιματολογικής λειτουργίας και αρχές της παθοφυσιολογίας των αιματολογικών διαταραχών) Εκλεκτική παθοφυσιολογία αιματολογικών νόσων (διαταραχές ερυθρών, λευκών και αιμοπεταλίων-πχ σιδηροπενική και μεγαλοβλαστική αναιμία, θαλασσαιμίες, δρεπανοκυτταρική αναιμία, λευκοπενία, ακκοκιοκυτταραιμία, θρομβοπενία και απλαστικές καταστάσεις, υπερπηκτικές διαταραχές. 3. Λοιμώδη νοσήματα-Φλεγμονή: Αίτια φλεγμονής, είδη φλεγμονωδών αντιδράσεων, ιστοπαθολογία φλεγμονής, σημασία αλλά και επιπτώσεις της φλεγμονής. Παθοφυσιολογία εκλεκτικών λοιμωδών νόσων (πχ λοιμώδης ενδοκαρδίτιδα, μηνιγγίτιδα, πνευμονία, διάρροια, σήψη κτλ). Φλεγμονώδεις ρευματολογικές νόσοι (οξείες και χρόνιες) Εκλεκτική παθοφυσιολογία του συστηματικού ερυθηματώδους λύκου, των αγγείτιδων, κτλ. Νεοπλασίες (μοριακή, βιοχημική και παθοφυσιολογική βάση της νεοπλασίας)-Ταξινόμηση-Παθοφυσιολογία εκλεκτικών νόσων, πχ καρκίνος παχέος εντέρου, μαστού, αιματολογικοί καρκίνοι, συστηματικές νεοπλασίες). 4. Νόσοι του νευρικού συστήματος: (παθοφυσιολογία των νόσων του ανωτέρου και κατωτέρου κινητικού νευρώνος, της παρεγκεφαλίδος καθώς και σωματοαισθητικαί νόσοι αλλά και νόσοι της όρασης και της ακοής-Εκλεκτική παθοφυσιολογία της νόσου του Parkinson, των επιληψιών, της μυασθένειας Gravis, των ανοιών τύπου Alzheimer κτλ) 5. Πνευμονικές νόσοι: (Εκλεκτική Παθοφυσιολογία της χρονίας βρογχίτιδος και του πνευμονικού παρεγχύματος (ΧΑΠ), του άσθματος, της ίνωσης, του πνευμονικού και καρδιακού οιδήματος και της εμβολής).	**SPECIAL TOPICS IN PATHOPHYSIOLOGY** 1. General Principles - Basic Concepts: Learning about common pathological changes in cells and tissues (e.g., reversible changes, disturbances in proliferation, atrophy, forms of atrophy, necrosis and death, types of necrosis, degeneration and its types). Special pathological conditions of tissues such as deposition of inorganic or organic substances, calcification, anthracosis, silicosis, lithiasis, pigment deposits, hemosiderosis and hemochromatosis, jaundice, types of jaundice. Restoration of histopathological changes, tissue regeneration. Learning the basic characteristics of hyperplasia, hypertrophy, and metaplasia of tissues. Genetic Diseases - Pathophysiology of selective genetic disorders. 2. Learning Pathophysiological Mechanisms by System: Disorders of immune mechanisms - Selective pathophysiology of diseases of the immune system (e.g., primary immune suppression diseases, enzyme deficiency diseases, AIDS, etc.). Hematological diseases (genetic, molecular, biochemical, and physiological parameters of hematological function and principles of the pathophysiology of hematological disorders). Selective pathophysiology of hematological diseases (disorders of red blood cells, white blood cells, and platelets - e.g., iron-deficiency and megaloblastic anemia, thalassemia, sickle cell anemia, leukopenia, agranulocytosis, thrombocytopenia, aplastic conditions, hypercoagulable disorders). 3. Infectious Diseases - Inflammation: Causes of inflammation, types of inflammatory reactions, histopathology of inflammation, significance and effects of inflammation. Pathophysiology of selected infectious diseases (e.g., infectious endocarditis, meningitis, pneumonia, diarrhea, sepsis, etc.). Inflammatory rheumatological diseases (acute and chronic). Selective pathophysiology of systemic lupus erythematosus, vasculitis, etc. Neoplasms (molecular, biochemical, and pathophysiological basis of neoplasia) - Classification - Pathophysiology of selected diseases, e.g., colorectal cancer, breast cancer, hematological cancers, systemic neoplasms. 4. Diseases of the Nervous System: (Pathophysiology of diseases of the upper and lower motor neurons, cerebellum, somatosensory diseases, as well as diseases of vision and hearing - Selective pathophysiology of Parkinson's disease, epilepsy, myasthenia gravis, Alzheimer's-type dementias, etc.) 5. Pulmonary Diseases: (Selective pathophysiology of chronic bronchitis and pulmonary parenchyma (COPD), asthma, fibrosis, pulmonary and cardiac edema, and embolism). 6. Cardiovascular Diseases: (Selective pathophysiological mechanisms of arrhythmia generation and establishment, left, right, and total heart failure, aortic stenosis and insufficiency, mitral and tricuspid valve stenosis and insufficiency, and congenital heart diseases. Coronary artery disease, pericardial disease, and pathophysiological mechanisms of vascular disease, especially atherosclerosis, mechanisms of idiopathic and secondary hypertension, and mechanisms of shock

6. Καρδιαγγειακές νόσοι: (Εκλεκτικοί παθοφυσιολογικοί μηχανισμοί της γένεσης και εγκατάστασης των αρρυθμιών, της αριστεράς, δεξιάς και ολικής καρδιακής ανεπάρκειας, της αορτικής στένωσης και ανεπάρκειας, της στένωσης και ανεπάρκειας της μιτροειδούς και τριγλώχινος και των συγγενών καρδιοπαθειών. Στεφανιαία νόσος, περικαρδιακή νόσος και παθοφυσιολογικοί μηχανισμοί της αγγειακής νόσου και δη της αθηροσκλήρυνσης, μηχανισμοί γένεσης ιδιοπαθούς και δευτεροπαθούς υπέρτασης και μηχανισμοί γένεσης του shock. Παθοφυσιολογικοί ορμονικοί παράμετροι στην καρδιακή νόσο) 7. Νόσοι του μυελού των επινεφριδίων: (Παθοφυσιολογία της περιφερικής κατεχολαμινικής έκκρισης, φαιοχρωμοκυττώματα. Νόσοι του φλοιού των επινεφριδίων Ιστολογία, κυτταρική βιολογία, βιοχημεία και ορμονική παραγωγή και έκκριση του φλοιού των επινεφριδίων. Εκλεκτική παθοφυσιολογία συνδρόμου Cushing, επινεφριδιακής ανεπαρκείας (Addison's), τυχαιωμάτων (incidentalomas), πρωτοπαθούς και δευτεροπαθούς υπεραλδοστερονισμού και υποαλδοστερονισμού). 8. Νεφρικές νόσοι: (Εκλεκτική Παθοφυσιολογία της οξείας και χρόνιας σπειραματονεφρίτιδας, της οξείας και χρόνιας νεφρικής ανεπάρκειας, του νεφρωσικού συνδρόμου, της λιθίασης και του νεφρικού καρκίνου). 9. Νόσοι του γαστρεντερικού συστήματος και του ήπατος: (παθοφυσιολογία στα νοσήματα του οισοφάγου, στομάχου, χοληδόχου, λεπτού και παχέος εντέρου – ιστολογία, κυτταρική βιολογία, κυκλοφορία και δυσλειτουργία του ηπατοκυττάρου, πυλαία υπέρταση. Εκλεκτική παθοφυσιολογία της οισοφαγικής αχαλασίας, ελκους του στομάχου και δωδεκαδακτύλου, γαστροπάρεσης, νόσων της χοληδόχου κύστεως, νόσων και φλεγμονών του λεπτού εντέρου, ευερέθιστον έντερον, εκκολπωματίτις. Εκλεκτική παθοφυσιολογία ηπατικών νόσων, όπως οξείας και χρονίας ηπατίτιδας, κίρρωσης και συστηματικών επιπλοκών αυτής και ηπατικού καρκίνου. 10. Εξωκρινές Πάγκρεας: (Παθοφυσιολογικοί μηχανισμοί της οξείας και χρόνιας παγκρεατίτιδας, της ανεπάρκειας και του καρκίνου του παγκρέατος. Ενδοκρινές πάγκρεας Ιστολογία και κυτταρική βιολογία του ενδοκρινούς παγκρέατος. Ορμονική ρύθμιση και ορμονική διαταραχή επί νόσων της ενδοκρινούς μοίρας. Παθοφυσιολογία του σακχαρώδους διαβήτου, καθώς και άλλων νοσολογικών οντοτήτων, όπως ινσουλινώματος, γλυκαγονώματος και σωματινοστατινώματος). Παθοφυσιολογικοί μηχανισμοί στις νόσους των παραθυρεοειδών αδένων και της ομοιοσυστασίας του ασβεστίου: (ιστολογία των παραθυρεοειδών αδένων, ρύθμιση της ορμονικής έκκρισης και διαταραχές επί νόσου. Παθοφυσιολογία του πρωτοπαθούς και δευτεροπαθούς υπερπαραθυρεοειδισμού, οικογενούς υποκαλσιουρικής υπερασβεστιαιμίας, κακοήθους υπερασβεστιαιμίας, μυελοειδούς καρκίνου του θυρεοειδούς, οστεομαλακίας. Παθοφυσιολογία των μηχανισμών έναρξης και εγκατάστασης της οστεοπόρωσης) 11. Νόσοι του υποθαλάμου και της υπόφυσης: (Ιστολογία και κυτταρική βιολογία, ορμονικές δράσεις και κλινικές εκδηλώσεις επί διαταραχών του υποθαλάμου και της υπόφυσης. Επεξήγηση των ιδιαιτεροτήτων της υποφυσιακής εμβρυολογίας προς καλύτερη κατανόηση του επικτήτου και γενετικού στοιχείου των νόσων.	generation. Pathophysiological hormonal parameters in heart disease). 7. Diseases of the Adrenal Medulla: (Pathophysiology of peripheral catecholamine secretion, pheochromocytomas. Diseases of the adrenal cortex: Histology, cellular biology, biochemistry, and hormonal production and secretion of the adrenal cortex. Selective pathophysiology of Cushing's syndrome, adrenal insufficiency (Addison's), incidentalomas, primary and secondary hyperaldosteronism, and hypoaldosteronism). 8. Renal Diseases:(Selective pathophysiology of acute and chronic glomerulonephritis, acute and chronic renal failure, nephrotic syndrome, nephrolithiasis, and renal cancer). 9. Diseases of the Gastrointestinal System and Liver: (Pathophysiology of diseases of the esophagus, stomach, gallbladder, small and large intestines - histology, cellular biology, circulation, and dysfunction of hepatocytes, portal hypertension. Selective pathophysiology of esophageal achalasia, gastric and duodenal ulcers, gastroparesis, diseases of the gallbladder, diseases and inflammations of the small intestine, irritable bowel syndrome, diverticulitis. Selective pathophysiology of liver diseases, such as acute and chronic hepatitis, cirrhosis and its systemic complications, and liver cancer). 10. Exocrine Pancreas: (Pathophysiological mechanisms of acute and chronic pancreatitis, pancreatic insufficiency, and pancreatic cancer. Endocrine pancreas: Histology and cellular biology of the endocrine pancreas. Hormonal regulation and hormonal disorders in diseases of the endocrine pancreas. Pathophysiology of diabetes mellitus, as well as other disease entities such as insulinoma, glucagonoma, and somatostatinoma). Pathophysiological mechanisms in diseases of the parathyroid glands and calcium homeostasis: (Histology of the parathyroid glands, regulation of hormonal secretion, and disorders in disease. Pathophysiology of primary and secondary hyperparathyroidism, familial hypocalciuric hypercalcemia, malignant hypercalcemia, medullary thyroid cancer, osteomalacia. Pathophysiology of the mechanisms of onset and establishment of osteoporosis). 11. Diseases of the Hypothalamus and Pituitary Gland: (Histology and cellular biology, hormonal actions, and clinical manifestations of disorders of the hypothalamus and pituitary. Explanation of the peculiarities of pituitary embryology for better understanding of the acquired and genetic aspects of diseases. Selective pathophysiology of types of pituitary adenomas, hypopituitarism, obesity, diabetes insipidus, and syndrome of inappropriate antidiuretic hormone (SIADH)). Diseases of the thyroid gland (Histology, cellular biology, normal and pathological secretion of the thyroid. Selective pathophysiology of hyperthyroidism, types of hyperthyroidism (especially Graves' disease), hypothyroidism, thyroiditis (especially Hashimoto's), goiter, nodules, and neoplasms).

Εκλεκτική παθοφυσιολογία των τύπων των υποφυσιακών αδενωμάτων, του υποφυσισμού, της παχυσαρκίας, του αποίου διαβήτου και του συνδρόμου της αντιδιουρητικής ορμόνης (SIADH)). Νόσοι του θυρεοειδούς αδένα (Ιστολογία, κυτταρική βιολογία, φυσιολογική και παθολογική έκκριση του θυρεοειδούς. Εκλεκτική παθοφυσιολογία του υπερθυρεοειδισμού, τύπων υπερθυρεοειδισμού (ιδιαίτερα νόσο Graves), υποθυρεοειδισμού, θυρεοειδίτιδων (ιδιαίτερα Hashimoto), βρογχοκήλης, όζων και νεοπλασμάτων)	
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΦΑΡΜΑΚΟΛΟΓΙΑΣ 1. Φαρμακοκινητική-Απορρόφηση, Βιοδιαθεσιμότητα, Κατανομή, Μεταβολισμό και Απέκκριση των φαρμάκων καθώς και τον υπολογισμό του χρόνου ημιζωής του φαρμάκου, της δόσης εφόδου, του θεραπευτικού δείκτη. 2. Φαρμακοδυναμική: τους μηχανισμούς δράσεις των φαρμάκων Μεταβολισμό Φαρμάκων και Φαρμακογενωμική. 3. Ενδείξεις και αντενδείξεις φαρμάκων του συμπαθητικού και παρασυμπαθητικού αυτόνομου νευρικού συστήματος, και του κεντρικού νευρικού συστήματος. 4. Την αναγνώριση, διάκριση και τον λειτουργικό χαρακτηρισμό των αγωνιστών και ανταγωνιστών των υποδοχέων που χρησιμοποιούνται στη θεραπευτική και αλληλεπιδράσεις Φαρμάκων, Ανεπιθύμητες ενέργειες, τοξικές δράσεις και Αντίδοτα 5. Κυτταρική και γονιδιακή θεραπεία - Μεθοδολογία στην Φαρμακολογία - Κλινικές δοκιμές 6. Ειδικές δράσεις των φαρμάκων στα διάφορα συστήματα καρδιαγγειακό, αναπνευστικό, νεφρικό και ενδοκρινικό σύστημα 7. Μηχανισμούς δράσης, ανεπιθύμητες ενέργειες και αλληλεπιδράσεις των φαρμάκων αυτών. 8. Νέες θεραπευτικές προσεγγίσεις, βιολογική/γονιδιακή θεραπεία.	**SPECIAL TOPICS IN PHARMACOLOGY** 1. Pharmacokinetics - Absorption, Bioavailability, Distribution, Metabolism, and Excretion of Drugs, as well as the calculation of the drug's half-life, loading dose, and therapeutic index. 2. Pharmacodynamics: The mechanisms of action of drugs, Drug Metabolism, and Pharmacogenomics. 3. Indications and Contraindications of Drugs for the Sympathetic and Parasympathetic Autonomic Nervous System, and the Central Nervous System. 4. Recognition, distinction, and functional characterization of agonists and antagonists of receptors used in therapy, Drug Interactions, Side Effects, Toxic Actions, and Antidotes. 5. Cellular and Gene Therapy - Methodology in Pharmacology - Clinical Trials. 6. Special Actions of Drugs on Various Systems: Cardiovascular, Respiratory, Renal, and Endocrine Systems. 7. Mechanisms of action, side effects, and interactions of these drugs. 8. New therapeutic approaches, biological/genetic therapy.
ΒΙΟΣΤΑΤΙΣΤΙΚΗ 1. Περιγραφική στατιστική. Μεταβλητή, είδη μεταβλητών, στατιστικοί πίνακες, γραφικές μέθοδοι, αριθμητικά περιγραφικά μέτρα κεντρικής τάσης (επικρατούσα τιμή, διάμεσος, μέση τιμή) και μεταβλητότητας (εύρος, διασπορά, τυπική απόκλιση), μέτρα ασυμμετρίας και κυρτότητας, συντελεστής μεταβλητότητας, κατανομή Gauss, μετασχηματισμοί, φυσιολογικές τιμές, αξιολόγηση εργαστηριακών ευρημάτων (ευαισθησία, ειδικότητα, θετική και αρνητική προγνωστική αξία), καμπύλη ROC (Receiver Operator Curve). 2. Εκτίμηση παραμέτρων. Τρόποι εκτίμησης παραμέτρων, εκτίμηση σε σημείο, διάστημα εμπιστοσύνης, τυπικό σφάλμα, εκτίμηση (i) της μέσης τιμής, της διασποράς και ενός ποσοστό σε έναν πληθυσμό και (ii) της διαφοράς των μέσων τιμών και των ποσοστών και του λόγου των διασπορών σε δύο πληθυσμούς. 3. Έλεγχος υποθέσεων. Η έννοια του στατιστικού ελέγχου, μηδενική και εναλλακτική υπόθεση, σφάλμα τύπου I και II, ισχύς ενός ελέγχου, τιμή p ενός ελέγχου, η έννοια της στατιστικής σημαντικότητας, έλεγχος υποθέσεων (i) για τη μέση τιμή, τη διασπορά και το ποσοστό σε ένα πληθυσμό και (ii) για τη διαφορά των μέσων τιμών και των ποσοστών και του λόγου των διασπορών σε δύο πληθυσμούς, παρατηρήσεις κατά ζεύγη.	**BIOSTATISTICS** 1. Descriptive Statistics Variable, types of variables, statistical tables, graphical methods, numerical descriptive measures of central tendency (mode, median, mean) and variability (range, variance, standard deviation), measures of skewness and kurtosis, coefficient of variation, Gaussian distribution, transformations, normal values, evaluation of laboratory findings (sensitivity, specificity, positive and negative predictive value), ROC curve (Receiver Operating Characteristic). 2. Parameter Estimation Methods of parameter estimation, point estimation, confidence interval, standard error, estimation (i) of the mean, variance, and proportion in a population, and (ii) of the difference in means and proportions and the ratio of variances in two populations. 3. Hypothesis Testing The concept of statistical testing, null and alternative hypothesis, type I and II errors, power of a test, p-value of a test, the concept of statistical significance, hypothesis testing (i) for the mean, variance, and proportion in a population, and (ii) for the difference in means, proportions, and the ratio of variances in two populations, paired observations. 4. Analysis of Variance Analysis of variance for independent samples, analysis of variance table, multiple comparisons. 5. Analysis of Qualitative Data

4. Ανάλυση διασποράς. Ανάλυση διασποράς για ανεξάρτητα δείγματα, πίνακας ανάλυσης διασποράς, πολλαπλές συγκρίσεις. 5. Ανάλυση ποιοτικών δεδομένων. Πίνακες συνάφειας, δοκιμασία χ2 ως κριτήριο συσχέτισης και καλής προσαρμογής ποιοτικών χαρακτηριστικών, απλό μοντέλο λογιστικής παλινδρόμησης, σχετικός κίνδυνος (RR), λόγος σχετικών πιθανοτήτων (OR). 6. Στατιστική συσχέτιση και εξάρτηση. Συντελεστής συσχέτισης r του Pearson, μέθοδος ελαχίστων τετραγώνων, πρόβλεψη, απλό μοντέλο γραμμικής παλινδρόμησης, συντελεστής προσδιορισμού. 7. Μη παραμετρικοί έλεγχοι. Πλεονεκτήματα και μειονεκτήματα των μη παραμετρικών ελέγχων, έλεγχος Kolmogorov-Smirnov για ένα δείγμα, έλεγχοι Wilcoxon signed rank, Mann-Whitney U, Kruskal-Wallis, συντελεστής συσχέτισης ρ του Spearman. 8. Ανάλυση επιβίωσης. Γενικά, λογοκριμένα δεδομένα, πίνακες επιβίωσης, συνάρτηση επιβίωσης, συνάρτηση κινδύνου, καμπύλες επιβίωσης, μέθοδος Kaplan-Meier, συγκρίσεις μεταξύ καμπυλών επιβίωσης, απλό μοντέλο παλινδρόμησης κατά Cox.	Contingency tables, chi-square test as a criterion for association and goodness of fit for qualitative characteristics, simple logistic regression model, relative risk (RR), odds ratio (OR). 6. Statistical Correlation and Dependence Pearson's correlation coefficient r, least squares method, prediction, simple linear regression model, coefficient of determination. 7. Non-parametric Tests Advantages and disadvantages of non-parametric tests, Kolmogorov-Smirnov test for one sample, Wilcoxon signed rank test, Mann-Whitney U test, Kruskal-Wallis test, Spearman's correlation coefficient ρ. 8. Survival Analysis General concepts, censored data, survival tables, survival function, hazard function, survival curves, Kaplan-Meier method, comparisons between survival curves, simple Cox regression model.
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΑΝΑΙΣΘΗΣΙΟΛΟΓΙΑΣ 1. Διαχείριση ανώτερου αεραγωγού 3. Στοιχεία εφαρμοσμένης φυσιολογίας του αναπνευστικού συστήματος. 4. Στοιχεία εφαρμοσμένης φυσιολογίας του κυκλοφορικού συστήματος. 5. Προεγχειρητική - Προαναισθητική αξιολόγηση και προετοιμασία. 6. Κλινική φαρμακολογία του Αυτόνομου Νευρικού Συστήματος. 7. Ενδοφλέβια αναισθητικά - Τοπικά αναισθητικά. 8. Εισπνεόμενα αναισθητικά - Μυοχαλαρωτικά. 9. Είδη αναισθησίας - Παρακολούθηση ζωτικών λειτουργιών (monitoring). 10. Συμβάματα και επιπλοκές κατά την περιαναισθητική περίοδο. 11. Υγρά και ηλεκτρολύτες - Οξεοβασική ισορροπία. 12. Περιεγχειρητική χορήγηση αίματος και παραγώγων. 13. Φυσιολογία αερισμού ενός πνεύμονα 14. Προεγχειρητική αξιολόγηση & ετοιμασία χειρουργικών ασθενών υψηλού κινδύνου 15. Αντιμετώπιση οξέος μετεγχειρητικού πόνου & Μαιευτική Αναλγησία	**SPECIAL TOPICS IN ANESTHESIOLOGY** 1. Management of the Upper Airway 3. Applied Physiology of the Respiratory System 4. Applied Physiology of the Circulatory System 5. Preoperative - Pre-anesthesia Evaluation and Preparation 6. Clinical Pharmacology of the Autonomic Nervous System 7. Intravenous Anesthetics - Local Anesthetics 8. Inhalational Anesthetics - Muscle Relaxants 9. Types of Anesthesia - Monitoring of Vital Signs 10. Symptoms and Complications During the Peri-anesthetic Period 11. Fluids and Electrolytes - Acid-Base Balance 12. Perioperative Blood and Blood Product Administration 13. Physiology of Single-Lung Ventilation 14. Preoperative Assessment & Preparation of High-Risk Surgical Patients 15. Management of Acute Postoperative Pain & Obstetric Analgesia
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΚΑΡΔΙΟΛΟΓΙΑΣ 1. Συγκοπή 2. ΗΚΓ – Διάφορες παθολογίες 3. Καρδιακή ανεπάρκεια 4. Χρόνια ΣΝ 5. STEMI & NSTEMI 6. Περικαρδίτιδα, Μυοκαρδίτιδα, Μυοκαρδιοπάθειες, Ενδοκαρδίτιδα 7. Διαταραχές καρδιακού ρυθμού και συσκευές 8. Βαλβιδοπάθειες 9. Πνευμονική εμβολή 10. Συγγενείς καρδιοπάθειες 11. Παθήσεις περιφερικών αγγείων – αορτής 12. ΑΥ-Παράγοντες κινδύνου 13. Καρδιαγγειακά φάρμακα 14. ΠΝ αρτηριακή υπέρταση 15. Βασικές γνώσεις εργαστηριακών εξετάσεων, όπως: α) Αιματολογικός και βιοχημικός έλεγχος	**SPECIAL TOPICS IN CARDIOLOGY** 1. Syncope 2. ECG – Various Pathologies 3. Heart Failure 4. Chronic Ischemic Heart Disease (CHD) 5. STEMI & NSTEMI 6. Pericarditis, Myocarditis, Cardiomyopathies, Endocarditis 7. Cardiac Rhythm Disorders and Devices 8. Valve Diseases 9. Pulmonary Embolism 10. Congenital Heart Diseases 11. Peripheral Artery Diseases – Aorta 12. Hypertension – Risk Factors 13. Cardiovascular Drugs 14. Hypertension in Pulmonary Disease 15. Basic Knowledge of Laboratory Tests, such as: a) Hematological and Biochemical Testing b) Chest X-ray

β) Ακτινογραφία θώρακος γ) Υπερηχοκαρδιογράφημα δ) Δοκιμασία κόπωσης ε) Σπινθηρογράφημα μυοκαρδίου στ) Στεφανιογραφικός έλεγχος	c) Echocardiogram d) Exercise Test e) Myocardial Scintigraphy f) Coronary Angiography
2ο εξάμηνο	**2nd semester**
ΕΠΕΙΓΟΥΣΑ ΦΡΟΝΤΙΔΑ 1. Διαλογή (Triage) - Δείκτες επιβάρυνσης ασθενών – Αρχική αξιολόγηση κατά ABCDE 2. Αναγνώριση διαταραχών οξεοβασικής ισορροπίας 3. Διαχείριση αεραγωγού και αερισμός. Διαχείριση του δύσκολου αεραγωγού 4. Επείγουσες καταστάσεις από το αναπνευστικό σύστημα 5. Επείγουσες καταστάσεις από το καρδιαγγειακό σύστημα 6. Καταπληξία 7. Επείγουσες καταστάσεις από το κεντρικό νευρικό σύστημα 8. Επείγουσες καταστάσεις για το γαστρεντερικό & ουροποιητικό 9. Επείγουσες καταστάσεις τη μαιευτική γυναικολογία 10. Επείγοντα από τους ενδοκρινείς και αιματολογικά επείγοντα 11. Βασικές αρχές αντιμετώπισης πολυτραυματία 12. Αντιμετώπιση πολυτραυματία με ΚΕΚ, κακώσεις θώρακα, εγκαύματα 13. Τοξικολογικά Σύνδρομα στην Επείγουσα Ιατρική 14. Ψυχιατρικά Επείγοντα 15. Επείγοντα από το περιβάλλον 16. Νεογνικά Επείγοντα 17. Παιδιατρικά Επείγοντα 18 Γηριατρικά Επείγοντα 19. Ανταπόκριση σε τρομακρατικές επιθέσεις & Αντιμετώπιση μαζικών καταστροφών 20. Μη τεχνικές δεξιότητες στην επείγουσα Ιατρική 21. Ο κύκλος της κλινικής σκέψης	**EMERGENCY CARE** **1. Triage – Patient Burden Indicators – Initial Evaluation using ABCDE Approach** **2. Recognition of Acid-Base Imbalances** **3. Airway Management and Ventilation. Management of the Difficult Airway** **4. Emergency Situations in the Respiratory System** **5. Emergency Situations in the Cardiovascular System** **6. Shock** **7. Emergency Situations in the Central Nervous System** **8. Emergency Situations in Gastrointestinal & Urinary Systems** **9. Obstetric and Gynecological Emergencies** **10. Endocrine Emergencies and Hematological Emergencies** **11. Basic Principles of Polytrauma Management** **12. Polytrauma Management with Critical Care, Chest Injuries, Burns** **13. Toxicological Syndromes in Emergency Medicine** **14. Psychiatric Emergencies** **15. Environmental Emergencies** **16. Neonatal Emergencies** **17. Pediatric Emergencies** **18. Geriatric Emergencies** **19. Response to Terrorist Attacks & Mass Casualty Management** **20. Non-Technical Skills in Emergency Medicine** **21. The Cycle of Clinical Thinking**
ΑΝΑΖΩΟΓΟΝΗΣΗ ΕΝΗΛΙΚΩΝ- ΠΑΙΔΙΩΝ-ΝΕΟΓΝΩΝ 1. Επιδημιολογία της καρδιακής ανακοπής στην Ευρώπη, Αμερική και Ασία 2. Η δημιουργία συστημάτων που βελτιώνουν την πρόγνωση της αναζωογόνησης και την πρόληψη της ανακοπής 3. Βασική Υποστήριξη της ζωής 4. Εξειδικευμένη Υποστήριξη της ζωής 5. Η αναζωογόνηση σε ειδικές καταστάσεις: • Ανακοπή και τραύμα • Ανακοπή και σηπτική καταπληξία • Ηλεκτρολυτικές διαταραχές και ανακοπή • Υποθερμία και υπερθερμία • Καρδιακή ανακοπή μετά από έκθεση σε τοξικές ουσίες • Καρδιακή ανακοπή μετά από καρδιοχειρουργική επέμβαση • Καρδιακή ανακοπή στο αιμοδυναμικό εργαστήριο και μετά από οξέα στεφανιαία σύνδρομα • Πνευμονική εμβολή και ανακοπή • Αναζωογόνηση σε μονάδες αιμοκάθαρσης • Καρδιακή ανακοπή σε νευρολογικά νοσήματα • Καρδιακή ανακοπή στην άθληση • ΧΑΠ/ άσθμα και ανακοπή • Παχυσαρκία και ανακοπή • Ανακοπή στην έγκυο • ECMO • Μηχανικές θωρακικές συμπιέσεις	**RESUSCITATION OF ADULTS, CHILDREN, AND NEWBORNS** **1. Epidemiology of Cardiac Arrest in Europe, America, and Asia** **2. Development of Systems to Improve Prognosis in Resuscitation and Prevent Cardiac Arrest** **3. Basic Life Support** **4. Advanced Life Support** **5. Resuscitation in Special Situations:** • **Cardiac Arrest and Trauma** • **Cardiac Arrest and Septic Shock** • **Electrolyte Disorders and Cardiac Arrest** • **Hypothermia and Hyperthermia** • **Cardiac Arrest Following Exposure to Toxic Substances** • **Cardiac Arrest After Cardiac Surgery** • **Cardiac Arrest in the Hemodynamic Lab and Following Acute Coronary Syndromes** • **Pulmonary Embolism and Cardiac Arrest** • **Resuscitation in Dialysis Units** • **Cardiac Arrest in Neurological Diseases** • **Cardiac Arrest in Athletes** • **COPD/Asthma and Cardiac Arrest** • **Obesity and Cardiac Arrest** • **Cardiac Arrest in Pregnancy** • **ECMO (Extracorporeal Membrane Oxygenation)** • **Mechanical Chest Compressions** **6. Post-Resuscitation Care** **7. Neonatal Resuscitation**

6. Φροντίδα μετά την αναζωογόνηση 7. Αναζωογόνηση νεογνών 8. Αναζωογόνηση παιδιών 9. Η Ηθική στην αναζωογόνηση και οι αποφάσεις για το τέλος της ζωής	**8. Pediatric Resuscitation** **9. Ethics in Resuscitation and End-of-Life Decisions**
ΕΙΔΙΚΑ ΘΕΜΑΤΑ ΕΝΤΑΤΙΚΗΣ ΘΕΡΑΠΕΙΑΣ 1. Αναπνευστική Ανεπάρκεια (Παθοφυσιολογία, Τύποι αναπνευστικής ανεπάρκειας) 2. Διαταραχές Οξεο-βασικής ισορροπίας 3.. Αρχές Μηχανισμού Αερισμού (Αναπνευστήρες) 4. Βασικές αρχές καρδιακής λειτουργίας. Κυκλοφορική Ανεπάρκεια (Παθοφυσιολογία, -Τύποι κυκλοφορικής καταπληξίας, Αιμοδυναμική Παρακολούθηση-Monitoring) 5. Καρδιογενές και μη Καρδιογενές Πνευμονικό Οίδημα 6. Σήψη, Συστηματική Φλεγμονώδης αντίδραση 7. Νοσοκομειακή Πνευμονία 8. Αγγειακά εγκεφαλικά επεισόδια-Σοβαρή Κρανιοεγκεφαλική κάκωση 9. Θρομβοεμβολή –Πνευμονική Εμβολή 10. Θρέψη 11. Η εντατική θεραπεία στον παιδιατρικό ασθενή, ιδιαιτερότητες 12. Η εντατική θεραπεία στο νεογνό, ιδιαιτερότητες 13. Οι ιδιαιτερότητες του πρόωρου νεογνού στην ΜΕΝ	**SPECIAL TOPICS IN INTENSIVE CARE** **1. Respiratory Failure (Pathophysiology, Types of Respiratory Failure)** **2. Disorders of Acid-Base Balance** **3. Principles of Ventilation Mechanism (Ventilators)** **4. Basic Principles of Cardiac Function. Circulatory Failure (Pathophysiology, Types of Circulatory Shock, Hemodynamic Monitoring)** **5. Cardiogenic and Non-Cardiogenic Pulmonary Edema** **6. Sepsis, Systemic Inflammatory Response Syndrome (SIRS)** **7. Hospital-Acquired Pneumonia** **8. Cerebrovascular Accidents (Strokes) – Severe Traumatic Brain Injury** **9. Thromboembolism – Pulmonary Embolism** **10. Nutrition** **11. Intensive Care in Pediatric Patients, Specificities** **12. Intensive Care in Neonates, Specificities** **13. Specificities of Premature Newborns in the NICU (Neonatal Intensive Care Unit)**
3ο εξάμηνο	**3nd semester**
ΜΕΘΟΔΟΛΟΓΙΑ ΕΡΕΥΝΑΣ 1. Οντολογία, επιστημολογία και μεθοδολογία: Η φιλοσοφία της έρευνας. Η Ποιοτική και η ποσοτική μέθοδος 2. Η επιστημονική έρευνα. Βασική και εφαρμοσμένη έρευνα. Φάσεις και χαρακτηριστικά της ερευνητικής διαδικασίας. Σχεδιασμός της ερευνητικής διαδικασίας. Ο ρόλος της στατιστικής στην επιστημονική έρευνα. 3. Διατύπωση ερευνητικής υπόθεσης. Στατιστικά μοντέλα. 4. Μεθοδολογία αναζήτησης της βιβλιογραφίας. 5. Ζητήματα ηθικής και δεοντολογίας στην έρευνα. 6. Βασικές μέθοδοι έρευνας (παρατήρησης σε σχέση με πειραματικές μελέτες, περιγραφικές σε σχέση με αναλυτικές μελέτες, τυχαιοποιημένες σε σχέση με μη τυχαιοποιημένες μελέτες, συγχρονικές σε σχέση με αναδρομικές σε σχέση με προοπτικές μελέτες, κλινικές δοκιμές). 7. Μέτρα κινδύνου. Συγχυτικοί παράγοντες. Κριτήρια αξιολόγησης αιτιολογικών σχέσεων. 8. Καθορισμός πληθυσμού έρευνας, τυχαίο δείγμα. Μέθοδοι δειγματοληψίας (τυχαία, συστηματική, κατά στρώματα, κατά ομάδες κλπ.). Καθορισμός μεγέθους δείγματος. 9. Τρόπος συλλογής στατιστικών δεδομένων. Δειγματοληπτικά και μη-δειγματοληπτικά σφάλματα. Έλεγχος αξιοπιστίας και επαναληψιμότητας μετρήσεων (αξιοπιστία εσωτερικής συνέπειας, μεταξύ διαφορετικών βαθμολογητών, επαναληπτικών μετρήσεων, παράλληλων τύπων, δύο ημίσεων). 10. Μεταβλητές. Είδη μεταβλητών. Ανάλυση και επεξεργασία δεδομένων: αντικείμενο και μεθοδολογίες. 11. Είδη επιστημονικών άρθρων (ανασκόπηση, γράμματα κλπ.). Δομή μιας ερευνητικής εργασίας (τίτλος, περίληψη, υλικό και μέθοδοι, αποτελέσματα, συζήτηση, συμπεράσματα, βιβλιογραφία).	**RESEARCH METHODOLOGY** **1. Ontology, Epistemology, and Methodology: The Philosophy of Research. Qualitative and Quantitative Methods** **2. Scientific Research. Basic and Applied Research. Phases and Characteristics of the Research Process. Research Design. The Role of Statistics in Scientific Research** **3. Formulation of a Research Hypothesis. Statistical Models** **4. Methodology of Literature Search** **5. Ethical and Deontological Issues in Research** **6. Basic Research Methods (Observation vs. Experimental Studies, Descriptive vs. Analytical Studies, Randomized vs. Non-Randomized Studies, Cross-Sectional vs. Retrospective vs. Prospective Studies, Clinical Trials)** **7. Risk Measures. Confounding Factors. Criteria for Evaluating Causal Relationships** **8. Defining the Research Population, Random Sampling. Sampling Methods (Random, Systematic, Stratified, Cluster Sampling, etc.). Determining Sample Size** **9. Methods of Collecting Statistical Data. Sampling and Non-Sampling Errors. Reliability and Reproducibility of Measurements (Internal Consistency, Inter-Rater Reliability, Repeated Measurements, Parallel Forms, Two-Half Method)** **10. Variables. Types of Variables. Data Analysis and Processing: Object and Methodologies** **11. Types of Scientific Articles (Review Articles, Letters, etc.). Structure of a Research Paper (Title, Abstract, Materials and Methods, Results, Discussion, Conclusions, References)** **12. Choosing a Scientific Journal (Sources, Information, Author Guidelines, Peer Review System, Journal Evaluation)** **13. Writing and Submitting the Paper for Peer Review. Handling External Reviews of the Paper. Resubmission** **14. Structure and Content of Oral Presentations (Introduction, Main Body, Conclusions). Techniques for Presenting Slides (Text, Tables, Graphs). Principles and Guidelines for a Successful Speech**

12. Επιλογή επιστημονικού περιοδικού (πηγές, πληροφορίες, οδηγίες προς συγγραφείς, σύστημα κριτών, αξιολόγηση των περιοδικών). 13. Συγγραφή και υποβολή του κειμένου για κρίση. Αντιμετώπιση εξωτερικών κρίσεων του κειμένου. Επανυποβολή. 14. Δομή και περιεχόμενο της προφορικής παρουσίασης (εισαγωγή, κύριο μέρος, συμπεράσματα). Τεχνικές παρουσίασης διαφανειών (κείμενο, πίνακες, γραφήματα). Αρχές και κανόνες για μία επιτυχημένη ομιλία.	
ΒΑΣΙΚΗ ΕΡΕΥΝΑ ΣΤΗΝ ΑΝΑΖΩΟΓΟΝΗΣΗ Εργαστήριο 1. Χοίρειο πρότυπο κοιλιακής μαρμαρυγής Εργαστήριο 2. Χοίρειο πρότυπο ασφυκτικής καρδιακής ανακοπής Εργαστήριο 3. Χοίρειο πρότυπο νεογνικής ασφυξίας Εργαστήριο 4. Χοίρειο πρότυπο αιμορραγικής καταπληξίας Εργαστήριο 5. Φαρμακοκινητική μελέτη σε χοίρειο πρότυπο με ανάνηψη	**BASIC RESEARCH IN RESUSCITATION** **Laboratory 1. Porcine Model of Ventricular Fibrillation** **Laboratory 2. Porcine Model of Asphyxial Cardiac Arrest** **Laboratory 3. Porcine Model of Neonatal Asphyxia** **Laboratory 4. Porcine Model of Hemorrhagic Shock** **Laboratory 5. Pharmacokinetic Study in a Porcine Model with Resuscitation**
ΒΙΩΜΑΤΙΚΑ ΕΡΓΑΣΤΗΡΙΑ ΕΠΙΚΟΙΝΩΝΙΑΣ Α. Βιωματικά εργαστήρια επικοινωνίας με ασθενείς σε κρίσιμη κατάσταση και με το περιβάλλον τους. Β. Βιωματικά εργαστήρια επικοινωνίας με άλλους επαγγελματίες υγείας σε καταστάσεις στρες σε επείγουσες καταστάσεις και στην αναζωογόνηση. Η δυναμική της ομάδας Γ. Βιωματικά εργαστήρια ανάπτυξης του προσωπικού στυλ ηγεσίας σας (Διαχείριση ανθρώπινων πόρων μέσω της αλλαγής, η τεχνική της αποτελεσματικής ανατροφοδότησης, διαπραγμάτευση και επιρροή, Αντιμετώπιση συγκρούσεων, Δημιουργία επαγγελματικών σχέσεων, συναισθηματική νοημοσύνη)	**EXPERIENTIAL COMMUNICATION WORKSHOPS** **A. Experiential Workshops on Communication with Patients in Critical Conditions and with Their Families.** **B. Experiential Workshops on Communication with Other Healthcare Professionals in Stressful Situations, Emergency Situations, and Resuscitation. Team Dynamics.** **C. Experiential Workshops for Developing Your Personal Leadership Style (Managing Human Resources Through Change, Techniques for Effective Feedback, Negotiation and Influence, Conflict Management, Building Professional Relationships, Emotional Intelligence).**
ΜΕΤΑΦΡΑΣΤΙΚΗ ΕΡΕΥΝΑ 1. Ορισμός και όρια της μεταφραστικής Ιατρικής 2. Οι τεχνολογίες -omics και η ανάπτυξη βιοδεικτών 3. Μεταφραστική φαρμακογενωμική στη θεραπευτική 4. Ζωικά πρότυπα: Αξία και μεταφραστική ισχύ 5. Επιλογή του κατάλληλου ζωικού προτύπου για τη μελέτη των ασθενειών 6. Χρήση υπαρχόντων φαρμάκων για νέες θεραπευτικές ενδείξεις 7. Ειδικές προκλήσεις στη μεταφραστική έρευνα στην ψυχιατρική 8. Μεταφραστική έρευνα στη γεροντολογία και δημιουργία μοντέλων γήρανσης 9. Ιατρική της ακριβείας 10. Φαρμακευτική τοξικολογία 11. Στατιστικά προβλήματα στην μεταφραστική έρευνα 12. Συνθέτοντας το παζλ: Η μεταφραστική έρευνα στην Ιατρική	**TRANSLATIONAL RESEARCH** **Definition and Boundaries of Translational Medicine** **-Omics Technologies and the Development of Biomarkers** **Translational Pharmacogenomics in Therapy** **Animal Models: Value and Translational Power** **Choosing the Right Animal Model for Disease Studies** **Use of Existing Drugs for New Therapeutic Indications** **Special Challenges in Translational Research in Psychiatry** **Translational Research in Gerontology and Creation of Aging Models** **Precision Medicine** **Pharmaceutical Toxicology** **Statistical Problems in Translational Research** **Assembling the Puzzle: Translational Research in Medicine**
ΔΙΔΑΚΤΙΚΗ ΚΑΙ ΑΞΙΟΛΟΓΗΣΗ ΣΤΗΝ ΑΝΑΖΩΟΓΟΝΗΣΗ 1. Η επιστήμη και οι πηγές της – Η θέση της αναζωογόνησης ανάμεσα στις Επιστήμες: Διδακτικές προεκτάσεις 2. Η διεπιστημονικότητα στην αναζωογόνηση 3. Οι θεωρίες μάθησης: Δυνατότητες και περιορισμοί 4. Η διδακτική έρευνα στην αναζωογόνηση. Η ποιοτική και η ποσοτική έρευνα 5. Η χρήση των νέων τεχνολογιών και η «δυναμικοί» χώροι στην εκπαίδευση στην αναζωογόνηση	**TEACHING AND ASSESSMENT IN RESUSCITATION** **Science and Its Sources – The Role of Resuscitation Among the Sciences: Educational Implications** **Interdisciplinarity in Resuscitation** **Learning Theories: Possibilities and Limitations** **Didactic Research in Resuscitation: Qualitative and Quantitative Research** **The Use of New Technologies and "Dynamic" Spaces in Resuscitation Education** **Formative, Summative, and Peer Evaluation** **Reliability of Assessment in Resuscitation**

6. Η διαμορφωτική, η συμεπρασματική, και η αξιολόγηση από όμοιους 7. Η αξιοπιστία της αξιολόγησης στην Αναζωογόνηση 8. Η εγκυρότητα της αξιολόγησης ως τρόπος σταθεροποίησης της μάθησης 9. Η εξατομίκευση, πληρότητα και σκοπιμότητα των μεθόδων αξιολόγησης στην αναζωογόνηση 10. Η κριτική ανάλυση των διαφορών μορφών αξιολόγησης (OSCE, OSATS @ PAME μεταξύ άλλων) 11. Η αξιολόγηση σε επίπεδο προτύπου και επίπεδο 12. Χάρτης εννοιών ως εργαλείο έρευνας και διδασκαλίας 13. Ο αναστοχασμός και η αξία του στη βελτίωση της μεταγνωσιακής διεργασίας της διδακτικής διαδικασίας 14. Συγγραφή Αναστοχαστικού ημερολογίου στη διδασκαλία της αναζωογόνησης	**Validity of Assessment as a Way to Stabilize Learning** **Personalization, Completeness, and Relevance of Assessment Methods in Resuscitation** **Critical Analysis of Different Assessment Forms (OSCE, OSATS, PAME, among others)** **Assessment at the Standards and Levels** **Concept Map as a Research and Teaching Tool** **Reflection and Its Value in Improving Metacognitive Processes in Teaching** **Writing a Reflective Journal in Resuscitation Teaching**
4ο εξάμηνο	**4nd semester**
ΕΚΠΟΝΗΣΗ ΚΑΙ ΤΗΝ ΣΥΓΓΡΑΦΗ ΔΙΠΛΩΜΑΤΙΚΗΣ ΕΡΓΑΣΙΑΣ Η διαδικασία εκπόνησης της πτυχιακής χωρίζεται σε δύο ή τρία μέρη: 1. Συλλογή των απαιτούμενων πληροφοριών με μελέτη της διαθέσιμης βιβλιογραφίας. 2. Πειραματικό μέρος, αν αυτό απαιτείται από το θέμα της πτυχιακής. 3. Συγγραφή ενός κειμένου που θα συμπυκνώσει με εμπεριστατωμένο τρόπο την άποψη που διαμορφώνεται από την μελέτη της βιβλιογραφίας, ή/και τα δεδομένα που προέκυψαν από την πειραματική διαδικασία. Ως ελάχιστος αριθμός λέξεων ορίζονται οι 20.000 χωρίς να περιλαμβάνεται η βιβλιογραφία, τα σχήματα, οι πίνακες κλπ. Εξειδικευμένα θέματα πιθανόν να μπορούν να καλύπτονται με μικρότερο μέγεθος κειμένου. Κάθε διπλωματική εργασία επιβλέπεται από δύο διδάσκοντες εκ των οποίων ο ένας είναι ο εισηγητής. Οι φοιτητές κρίνονται ικανοί να παρουσιάσουν την διπλωματική τους εργασία εφόσον βαθμολογηθούν επιτυχώς από τρεις διαφορετικές προόδους. Το κείμενο της διπλωματικής εργασίας βαθμολογείται χωριστά από το την παρουσίαση μέσω σταθμισμένων κριτηρίων.	**PREPARATION AND WRITING OF A THESIS** **The process of writing the thesis is divided into two or three parts:** **Collection of Required Information through Literature Review:** **In this stage, the student must study the available literature on the topic of the thesis. A thorough review of the literature forms the foundation for creating a solid theoretical base.** **Experimental Part (if required by the topic):** **If the thesis topic requires experimental investigation, the student is expected to collect data through experiments. This part includes designing, conducting, and analyzing the results.** **Writing the Thesis:** **In the final phase, the student must write the thesis, which should integrate the results from the literature review and any experimental observations (if applicable). The minimum word count for the thesis is 20,000 words, not including the bibliography, figures, tables, etc. Specialized topics may require a smaller word count.** **The thesis is supervised by two professors, one of whom is the supervisor. Students must complete three different progress evaluations, which will be assessed to determine their readiness to present the thesis. The thesis itself and the presentation are graded separately based on weighted criteria.**

Article 8
Postgraduate Master's Thesis (MSc Thesis)

The postgraduate student is required to prepare and successfully defend their Master's thesis (MSc Thesis) within the designated semester of study as specified in the present Internal Regulation of the Interdepartmental Postgraduate Program of Studies (IPPS). The postgraduate student has the right to apply for undertaking the MSc Thesis only after having successfully completed the program's coursework, unless otherwise decided by the competent authority in each case. The thesis topic must fall within the academic scope of the IPPS. Specific thesis topics are defined by the Postgraduate Thesis Guide of the IPPS.

The purpose of the thesis is to demonstrate the postgraduate student's ability to deepen their knowledge, assimilate new information, articulate it correctly, participate in research protocols, and process research data. The completion of the MSc Thesis aims to show the student's autonomous mastery of knowledge and skills in scientific analysis, synthesis, evaluation, and appraisal, as well as the potential application of these skills to advance

research on a specific subject. Additionally, the thesis serves to demonstrate the student's capacity to contribute to scientific dialogue and actively engage in the research process.

Article 9
Plagiarism

The postgraduate student is obligated to appropriately acknowledge the use of works and opinions of others. Furthermore, postgraduate students who have used Artificial Intelligence (AI) services or assistance in preparing assignments within the framework of the IPPS and/or their MSc Thesis must include in the preface of their work a "Declaration regarding the use of generative Artificial Intelligence (AI) and AI-assisted technologies during the writing process," specifying the tools used and the reasons for their use.

Plagiarism is considered a serious academic offense. It is defined as copying another person's work or using another's work—published or unpublished—without proper citation. Copying any documented material, even from the candidate's own previous studies, without appropriate referencing, may lead to a decision by the Program Committee to expel the student. In such cases, the Program Committee may proceed with expulsion after giving the student the opportunity to present their case verbally or in writing. Any academic misconduct or violation of academic integrity is referred to the Department Assembly for resolution. Violations also include copying or plagiarism and, more generally, any infringement of intellectual property rights by postgraduate students in the preparation of coursework or thesis.

Article 10
Organization of the IPPS Using Synchronous and Asynchronous Distance Learning Methods

Distance Education is a dynamic and rapidly evolving scientific field encompassing a variety of components and methodological approaches. The implementation of distance learning techniques presents a challenge to instructors engaging in this process for the first time.

Given current circumstances, there is an urgent need to redesign the learning environment. The University of West Attica's action plan includes support for the educational process through digital tools and technologies (both asynchronous and synchronous electronic tools and platforms), while also emphasizing training faculty members in methods, techniques, and best practices for teaching with digital technologies. (https://www.uniwa.gr/e-learning/)

All course materials offered by the University of West Attica for distance education through asynchronous and synchronous digital classrooms and tools (Open eClass, Moodle, MS Teams, and alternatives), including but not limited to texts, slides, charts, graphics, photos, videos,

diagrams, visualizations, simulations, and all types of files, constitute intellectual property and are governed by national and international copyright laws, except for explicitly recognized third-party rights.

Therefore, any recording, filming, audio recording, reproduction, republication, copying, transmission, publishing, translation, or modification of course materials taught remotely, in whole or in part, is strictly prohibited without the explicit prior written consent of the instructor.

Violations of this prohibition will trigger immediate enforcement of all legal sanctions, including criminal prosecution and compensation claims, in accordance with intellectual property legislation.

Exceptions include simple attendance and downloading of course materials strictly for personal use by students for study, exercise completion, assignments, and research.

If an instructor intends to record a live online lecture or other synchronous educational activity (practical exercises, laboratory groups), students must be informed before the recording begins so they can consent or have the option to disable their cameras or microphones or leave the session.

Some courses of the IPPS “Resuscitation” will be delivered through synchronous distance education. Synchronous distance learning will not exceed 55% of the total credit units of the IPPS. Modern times require the use of digital tools and enhancement of digital skills, especially in an IPPS directly related to these demands. Beyond cognitive benefits, distance education contributes to reducing the energy needed for student transportation to the University and the energy expended by the institution in operating its facilities.

Microsoft Teams will be used for synchronous distance education, supported primarily by the Moodle platform and secondarily by eClass. The necessary educational material will be available to students throughout the program via Microsoft Teams and Moodle. Postgraduate students will also have access to Office365 through the University of West Attica. The University’s experience with synchronous and asynchronous education tools provides an excellent simulation of the classroom and the overall educational process.

The blended learning approach of combining in-person education with synchronous and asynchronous distance learning provided by the IPPS “Resuscitation” will create an excellent environment fostering student-centered learning. Students are expected to study and acquire knowledge both in person and remotely, with collaboration among peers and instructors playing a crucial role. Hence, the instructor’s role evolves into that of an advisor, aiming to support and guide students in their study approaches. All instructors at the University of West Attica receive training and support from the Teaching and Learning Support Office regarding distance learning methodologies, ensuring their proficiency with the system.

All IPPS “Resuscitation” students will be provided with MS OFFICE 365, including 30GB cloud storage via Microsoft. The University of West Attica maintains two asynchronous distance learning platforms (Moodle, eClass). The IPPS will utilize both asynchronous systems and the

synchronous MS Teams platform. A dedicated team of faculty members supports the operation and development of electronic education systems in the collaborating departments.

The IPPS curriculum is designed recognizing that modern enterprises face continuous new challenges in planning and implementing their activities. The curriculum encourages active participation and promotes interdisciplinary approaches. The evolving profile of modern enterprises places the human factor at the forefront, acting as a sensor of diverse perspectives on the external environment.

Courses in the IPPS will combine traditional and innovative teaching methods. Role-playing, experiential learning, business ecosystem simulations, on-site company training (via visits), and lectures by business executives and domestic and foreign university faculty are integral to the educational techniques applied. Innovation in courses often results from the synergy between instructors and research laboratories in the collaborating departments.

The IPPS will also implement best practices such as continuous student engagement beyond syllabus obligations and adaptation of teaching to current developments.

Student feedback will be regularly collected, with students frequently completing short feedback questionnaires during classes to promptly identify functional difficulties and contribute to continuous improvement of the course and instructor.

Throughout their studies, many students develop collaborative relationships with instructors, maintaining communication for most of their studies and enabling discussions beyond the immediate scope of the course, such as thesis topic selection or career advice.

Synchronous and Asynchronous Distance Education

The educational organization of the IPPS “Resuscitation” will be implemented via blended learning: 20% conventional in-person classroom teaching, 55% synchronous distance education, and 25% asynchronous distance education of the total ECTS credits. The choice of teaching method(s) is at the discretion of the Program Committee.

Courses, seminars, and educational activities suitable for remote delivery without practical, laboratory, or clinical components requiring physical presence will be organized using synchronous distance education methods.

The Digital Governance Unit of the University of West Attica is responsible for supporting distance education and handling personal data protection issues.

The University maintains an accessible electronic platform (including for persons with disabilities) offering asynchronous distance education services. Educational materials per course may include notes, presentations, exercises, sample solutions, and recorded lectures, provided compliance with applicable personal data protection legislation is ensured. All educational materials are exclusively for student educational use and protected by law 2121/1993 (A’ 25), provided conditions are met.

Given the partial organization of the IPPS “Resuscitation” curriculum through synchronous distance education methods, a related report analyzes the distance education methods, digital educational materials, digital student assessment methods, technical infrastructure supporting distance education, and digital skills of the teaching staff.

Article 11
Student Evaluation – Examinations

The educational work of each academic year is structured into two semesters, the winter and the spring, each comprising at least thirteen (13) weeks of teaching and three (3) weeks of examinations. Courses from both the winter and spring semesters are also re-examined during the September period. The compulsory courses of the Postgraduate Program do not have fewer than thirty-nine (39) teaching hours (Article 64 Law 4957/22).

In the event that a course cannot be held as scheduled, a make-up session is arranged. The date and time of the make-up are posted on the website of the Postgraduate Program.

Attendance at courses, laboratories, etc., is mandatory. A postgraduate student is considered to have attended a course (and therefore has the right to participate in the exams) only if they have attended at least 80% of the course hours. Otherwise, the postgraduate student is required to retake the course during the next academic year. If a student's absence rate exceeds 20% across all courses, the issue of their removal from the program is raised. This matter is examined by the Postgraduate Program Committee. It is emphasized that no absences are allowed in laboratories, clinical training/seminars. In case of absences in a laboratory or clinical training, the student may attend it again the following year in the semester the course is offered. If the student fails to attend it the next year as well, the Postgraduate Program Committee convenes to consider possible removal of the student.

The evaluation of postgraduate students and their performance in the courses they are required to attend within the Postgraduate Program takes place at the end of each semester through written or oral examinations, or by completing assignments throughout the semester, or may rely on mid-term progress exams, written assignments, laboratory or clinical exercises, or a combination of all the above. The evaluation method is determined by the instructor of each course. During written or oral exams, the integrity of the evaluation process is mandatorily ensured. Grading is done on a scale from 1 to 10. Examination results are announced by the instructor and sent to the Postgraduate Program Secretariat no later than four (4) weeks after the examination date. In case of repeated breaches of this deadline by an instructor, the Director of the Postgraduate Program informs the Postgraduate Program Committee accordingly.

The percentage contribution of laboratory exercises, assignments, and seminars to the final grade of each course is determined individually for each course upon recommendation by the course instructor and is recorded in the Postgraduate Program Study Guide.

To address emergencies or force majeure circumstances, alternative evaluation methods may be applied, such as conducting written or oral exams via electronic means, provided the integrity of the evaluation process is ensured.

Alternative evaluation methods may also be applied for students with disabilities and special educational needs after a decision by the Postgraduate Program Committee and a recommendation from the Responsible Officer for Students with Disabilities of the hosting Department, taking into account the guidelines of the Accessibility Unit for Students with Disabilities.

The evaluation of students in second-cycle study programs organized through distance learning methods may be conducted via remote examinations, under the condition that the integrity of the evaluation process is ensured.

In cases of illness or recovery from serious illness, it is recommended that the instructor facilitate the student by any means deemed appropriate (e.g., oral remote examination). During oral examinations, the instructor ensures that they are not alone with the examinee.

Courses in which a student has not achieved a passing grade must be retaken. However, a laboratory or exercise that is graded separately is retained and does not need to be repeated if attendance was successfully completed.

Grade correction is permitted only in cases of obvious clerical errors or cumulative mistakes, upon written request by the responsible instructor and decision by the Postgraduate Program Committee.

If a student fails the same course more than three (3) times, the procedure outlined in the Internal Regulation of the University of West Attica (UniWA) and the Operating Regulation of its Postgraduate Programs is followed.

Written exams are kept mandatorily and carefully by the course instructor for two (2) years. After this period, the exams lose validity and, under the responsibility of the Postgraduate Program Committee, a related protocol is drawn up and the exams are destroyed—except in cases where there is an ongoing criminal, disciplinary, or any other administrative procedure.

For the calculation of the degree grade, the weight of each course in the curriculum is taken into account, expressed by the number of credit units (ECTS). The number of credit units of a course also serves as the weighting factor for that course. To calculate the degree grade, the grade of each course is multiplied by the corresponding number of credit units, and the total sum of these products is divided by the total number of credit units required for the degree.

To obtain the Postgraduate Degree, each student must attend and successfully pass all compulsory courses of the Postgraduate Program and complete a postgraduate thesis, thus accumulating one hundred twenty (120) ECTS credits.

Article 12
Rights and Obligations of Postgraduate Students – Deregistration

12.1 Postgraduate students have all the rights and benefits granted to undergraduate students except for the right to free textbooks. Postgraduate students may use the existing material and technical infrastructure of the University of West Attica, which includes teaching spaces equipped with modern teaching aids and computers, the Library, and the Department's facilities.

Postgraduate students who do not have other medical and hospital care coverage are entitled to full medical and hospital care under the National Health System (E.S.Y.), with related expenses covered by the National Organization for the Provision of Health Services (E.O.P.Y.Y.) in accordance with Article 33 of Law 4368/2016 (Government Gazette A' 83), as amended and currently in force.

Postgraduate students are entitled to free meals based on their individual and family financial status and their locality.

Postgraduate students may seek external funding for their studies from various institutions or organizations in the public and private sectors and research institutes.

Postgraduate students may receive financial support from funded research programs in which they participate.

The relevant details are determined by decision of the Program Study Committee (E.P.S.), upon recommendation of the Director of the Postgraduate Program (D.D.P.M.S.).

The University of West Attica is obliged to ensure accessibility for students with disabilities and/or special needs to the recommended textbooks and teaching.

12.2 Postgraduate students are required to renew their enrollment at the beginning of each academic semester within deadlines set by the competent bodies.

Postgraduate students have the following obligations:

- To attend regularly all courses of the current study program.
- To submit required assignments within the deadlines set.
- To participate in the scheduled examinations.
- To declare responsibly that their thesis is not a product of plagiarism either in whole or in parts.
- To pay the prescribed tuition fees as defined in this Internal Regulation of the D.D.P.M.S.
- To respect and comply with this Regulation, the decisions of the bodies of the D.D.P.M.S., the Department, and the University of West Attica, as well as academic ethics.

Postgraduate students are encouraged to participate in seminars, discussions, conferences/workshops related to the subject matter of the D.D.P.M.S., lectures, or other scientific events organized by the D.D.P.M.S.

Postgraduate students may be involved in auxiliary teaching duties in undergraduate programs upon decision by the competent body of the D.D.P.M.S.

Postgraduate students are required to obtain an academic ID through the Ministry of Education and Religious Affairs' Electronic Service for Academic Identity Acquisition.

12.3 Deregistration of a postgraduate student is made following a recommendation from the E.P.S. of the D.D.P.M.S. and a relevant decision. The decision is communicated within fifteen (15) days to the student concerned, who has the right to file an appeal within fifteen (15) days of the decision date. The appeal is finally decided by the above bodies.

The E.P.S., after recommendation by the Academic Committee (S.E.), may decide on the deregistration of postgraduate students for the following reasons:
a. Failure to fulfill their obligations as described in the Internal Regulation of the D.D.P.M.S.
b. Non-payment of the prescribed tuition fees (in any case, students who have not fulfilled their financial obligations are not entitled to receive a certificate of study completion or the postgraduate diploma).
c. Disciplinary offenses, such as violations of academic ethics and, in general, any breach of applicable law and the Internal Regulation of the University of West Attica.
d. A request for deregistration by the postgraduate student themselves.
e. Repeated failure in examinations as stipulated by the Internal Regulation.
f. Committing plagiarism or offenses falling under copyright law (Law 2121/1993).
g. For any other reason deemed necessary.

In case of definitive cessation of studies or deregistration for any reason, tuition fees already paid are non-refundable.

Article 13
Tuition Fees

The tuition fees for the D.D.P.M.S. "Rejuvenation" program amount to €4,000.

It is possible to differentiate the tuition fees between foreign students coming from other European Union member states and foreign students from third countries (Law 5094/2024). Any such differentiation for third-country foreign students will be decided by the E.P.S., upon recommendation by the Academic Committee (S.E.), and will be clearly stated in the call for applications for each cycle of studies.

Payments are made in four (4) installments as follows: first installment €1,000 upon enrollment, second installment €1,000 at the start of the second semester, third installment €1,000 at the start of the third semester, and fourth installment €1,000 at the start of the fourth semester.

Postgraduate students of the D.D.P.M.S. are obliged to pay these fees. The total amount of tuition fees for the entire program is specified in the Government Gazette founding the D.D.P.M.S.

In cases of cessation of studies, the total amount paid is non-refundable.

Payments are made to the Special Account for Research Funds (E.L.K.E.) of the University of West Attica, which is responsible for their management.

Postgraduate students must have settled all their financial obligations before receiving a certificate of study completion and the Postgraduate Diploma.

Exemptions from tuition fees are possible according to applicable law and as described in Article 14 of the Standard Study Regulation of the Postgraduate Programs of the University of West Attica (Government Gazette B' 4861/02.08.2023) and this regulation.

Article 14
Scholarships
The Interdisciplinary Postgraduate Program (IPGP) may award scholarships, both remunerated and non-remunerated, to full-time postgraduate students, according to a decision by the Postgraduate Studies Committee (PSC). Scholarships are granted based on objective financial criteria, which may include, among others:

1. **Financial Criteria:**
   Registered postgraduate students may study free of charge at the IPGP if they meet the financial or social criteria according to the provisions of Article 86 of Law 4957/2022 and Ministerial Decision No. 108990/Z1/8-9-2022 (Government Gazette B' 4899/2022).
2. **Social Criteria:**
   a) Divorced with dependent members (children).
   b) Disability of the candidate.
   c) Single-parent family.
   d) Orphaned from both parents and under 25 years of age.
   e) Child of a large family.
   f) Members of the same family.

Procedure:
Following a recommendation by the Coordinating Committee of the IPGP, a call for scholarship applications is announced. Candidates must complete all mandatory fields of the application with the required supporting documents as applicable and submit them to the IPGP Secretariat within the deadlines specified in the call. The application serves as a Responsible Declaration under Law 1599/1986.
The competent body evaluates and ranks the applications based on the criteria set in the internal Operating Regulations of the IPGP and proposes a list of candidates to the PSC.
No scholarship is awarded if the postgraduate student already receives a scholarship from another source or if the student has been admitted to the IPGP without the obligation to pay tuition fees.

Article 15
Postgraduate Diploma (PGD)

The Postgraduate Diploma (PGD) is an official public document. Before the awarding of the diploma, the graduate may be issued a certificate confirming successful completion of the IPGP and a detailed transcript with the corresponding ECTS credits.

An official Diploma Supplement is attached to the PGD. This is an explanatory document that does not substitute the official diploma or the detailed transcript. The Diploma Supplement is attached to the PGD and provides information regarding the nature, level, general educational framework, content, and status of the studies successfully completed by the named individual on the original diploma. It contains no evaluative judgments or statements of equivalence or recognition abroad. The Diploma Supplement is issued automatically and free of charge, in both Greek and English, and must meet authenticity requirements for the issued diploma. The issue date of the Supplement does not necessarily coincide with the date of awarding the PGD but can never be earlier.

The final grade of the PGD results from the evaluation grades of the courses and the Master's Thesis (MT).

Specifically, in each semester, the student receives a grade for each examined course, and if successfully evaluated, is awarded the corresponding ECTS credits proportionally. The final PGD grade derives from the evaluation of:

a) the courses, and

b) the Master's Thesis.

The PGD grade is calculated to two decimal places using the formula:

G = (G1*C1 + G2*C2 + ... + Gn*Cn) / (C1 + C2 + ... + Cn)

where G1, G2,...Gn are the grades of all successfully passed courses and C1, C2,...Cn are the respective ECTS credits.

Passing grades are five (5) or higher. The grading scale for postgraduate student performance is from zero (0) to ten (10) as follows:

- Excellent: 8.50 to 10
- Very Good: 6.50 to 8.49
- Good: 5 to 6.49
- Fail: 0 to 4.99

Article 16
Teaching Staff of Postgraduate Programs

16.1 The teaching duties of the Postgraduate Program are assigned, by decision of the PSC, to the following categories of instructors:

1. Members of Teaching and Research Staff (TRS), Special Educational Staff (SES), Laboratory Teaching Staff (LTS), and Special Technical Laboratory Staff (STLS) of the Department or other Departments of the University or other Higher Education

Institutions (HEIs) or Higher Military Education Institutions (HMEIs), in addition to their legal obligations.
2. Emeritus Professors or retired TRS members of the Department or other Departments of the University or other HEIs.
3. Collaborating professors.
4. Contracted lecturers.
5. Visiting professors or visiting researchers.
6. Researchers and specialized scientific staff of research and technological bodies under Article 13A of Law 4310/2014 or other research centers and institutes domestically or abroad.
7. Recognized experts possessing specialized knowledge and relevant experience in the subject matter of the IPGP.

16.2 Teaching duties are assigned by PSC decision upon recommendation by the Director of the IPGP. The PSC may also assign auxiliary teaching duties to doctoral candidates of collaborating Departments, related to the auxiliary teaching work of the IPGP, supervised by an IPGP instructor, following PSC recommendation.

16.3 Supervisors of theses must hold a doctoral degree. The competent IPGP body may also assign thesis supervision to TRS, SES, and LTS members of the Department who do not undertake teaching duties in the IPGP.

16.4 All categories of instructors may be remunerated solely from IPGP resources. Payment or benefits from the state budget or public investment programs are not permitted. The PSC decision on teaching assignment specifies the remuneration amount. Particularly, TRS members may receive additional pay for work done for the IPGP, provided they fulfill their minimum legal obligations per paragraph 2 of Article 155 of Law 4957/2022. This applies proportionally to SES, LTS, and STLS members who fulfill their legal obligations.
Instructors' duties include, among others, defining and describing the course, providing relevant bibliography, determining the examination method, and communicating with postgraduate students.

Article 17
Academic Advisor – Support for Students with Disabilities

The IPGP applies the institution of the Academic Advisor by PSC decision. The purpose is to provide personalized academic counseling to postgraduate students during their studies. The expected outcome is to facilitate students in completing their studies while leveraging their particular skills and interests within the educational and research framework. The Academic Advisor chooses the approach and counseling method for the assigned students each academic year.
The Department of Biomedical Sciences provides an elevator for accessibility to its facilities (classrooms and administration buildings) for wheelchair users, as well as ramps and inclined planes. Assistance from the Department is sought when necessary.

Article 18
Auxiliary Teaching Duties of Postgraduate Students
The PSC of the IPGP may approve postgraduate students' participation in providing auxiliary teaching duties in first or second cycle programs. The University may award remunerated scholarships to postgraduate students in exchange for support of the educational process and auxiliary teaching duties.
Auxiliary teaching duties include assisting Teaching and Research Staff in their teaching work, student internships, conducting tutorials, laboratory exercises, supervising exams, and grading assignments.

Article 19
Feasibility and Viability Study

A. Feasibility Study of the Interdepartmental Postgraduate Program (ΔΔΠΜΣ) "Resuscitation"

According to the current feasibility and viability report, the Postgraduate Program (ΠΜΣ) "Cardiopulmonary Resuscitation" started in 2007 in cooperation with the Department of Basic Medical Sciences of the Technological Educational Institute of Athens (Government Gazette 1518/17.8.2007) and was one of the first six postgraduate programs established at the National and Kapodistrian University of Athens (NKUA). Since 2015, following a decision by the Coordinating Committee, it has continued solely at NKUA (Government Gazette 1414/8.7.2015), while in 2018 the program was renamed "Resuscitation" (Government Gazette 3959/12.9.2018). Resuscitation is an emerging scientific field that does not belong to a single specialty or core professional health degree. It is a transversal science relevant to all health professionals. The program is submitted as a new one due to a complete redesign of its learning outcomes, and additionally to emphasize the interdisciplinary nature of the subject, the coordinating institution will be the University of West Attica while maintaining its historical continuity.

Resuscitation is of significant interest because many patients eventually die since their physiological disturbances are not recognized promptly and therefore not treated immediately and effectively. Research in resuscitation is extremely important, and what the scientific community once considered as cardiac arrest has now been shown to be a complex pathophysiological condition involving the patient's underlying morbidity.

Special emphasis is also placed on effective communication techniques within the interdisciplinary team, as it is now known that non-technical skills (or what are now called essential skills) have a decisive impact on patient survival.

Through the program, students aiming to conduct research and possibly continue their studies at the third cycle (doctoral) level will gain hands-on experience with the research process, test their abilities, and make informed and mature decisions about engaging in long-term projects such as doctoral dissertations. Historically, more than 70 dissertations have been completed by students who continued their studies, and the program has historically helped build the research profiles of approximately 10 faculty members across various specialties and basic degrees (such as nursing, midwifery, and medicine). The proposed Interdepartmental

Postgraduate Program (ΔΔΠΜΣ) is based on a strong legacy, and its transfer to the University of West Attica marks a return to its roots dating back to 2007.

Therefore, the key characteristics of the program — education in small groups, strict selection of candidates, full-time attendance, and the requirement to publish research results before graduation — are some of the hallmarks of its pedagogical model. The "Resuscitation" program has further developed its pedagogical model as follows: The entire process is based on designing activities that improve student learning. In other words, the learning experience and activities are at the core of the model. In this context, it is important to mention that the model includes three fundamental elements combined in the design of learning activities: learning resources, collaboration, and guidance from academic and administrative staff.

Collaboration: Collaborative learning means using teamwork through communication and discussion with the instructor and fellow students to solve problems, jointly develop assignments, etc. However, the model cannot rely solely on collaboration. Independent learning is also necessary and must be flexibly combined with other methodological approaches.

Guidance: This term refers to the various relationships formed and developed between students and instructors of the program. Guidance includes not only academic support regarding course content but also teaching and counseling related to study planning, problem-solving, assessment processes, and decision-making. Through this guidance policy, each student receives personalized support according to their needs. Specifically, the instructor is responsible for the teaching and learning process of each course. They provide all necessary information and resources for course delivery and are responsible for student evaluation and management of the learning content. Each course has a designated Responsible Instructor who coordinates content, design, learning activities, procedures, and evaluation. The Program Committee is responsible for the structure and content of each program (in cooperation with the Responsible Instructor). Finally, specialized administrative staff are always available to assist students regarding procedures related to their progress in the program.

Available Resources: This term includes both educational material designed to support and convey learning content and other types of open educational tools such as articles, media, multimedia, etc. Therefore, the pedagogical model is very flexible and can easily adapt to the specific characteristics and goals of each course during the first two semesters. This means the three core elements of the model (guidance, collaboration, and resources) do not appear equally frequently in all courses. Students in each course (offered via distance learning methodology) are required to submit written assignments and individual as well as group activities.

The goals of the Interdepartmental Postgraduate Program are structured along four axes:

1. **Viability:** A prerequisite for the existence and operation of the program. For this specific program, tuition fees are foreseen to cover operational needs. The program, due to its previous structures, fully meets its needs, having historically proven to be a priority in candidate selection.

2. **Outreach – Engagement with Society:** An expressed goal of all faculty members involved in the program. The aim is to organize activities such as seminars, workshops, conferences, etc., and to regularly participate in similar activities of other organizations aligned with the program's academic profile.
3. **Excellence in Education:** The program aims to pioneer and subsequently gain a leading position among postgraduate programs in this field. Tools to achieve this include strict candidate selection and a small number of students, regular renewal of research proposals, adherence to evaluation procedures, and alignment with ongoing developments in its pedagogical model.
4. **Excellence in Research:** The program aims to produce original research results through activities and interactions organized within its framework. An important step in this direction is connection with similar research activities of foreign institutions and seeking a stable presence at major scientific conferences in the field.

Regarding the goal of providing excellent postgraduate education, the curriculum is designed and will be regularly updated to offer knowledge and cultivate skills and abilities that ensure high-quality learning outcomes. Upon completion, students are expected to:

- Deepen expertise in specialized fields to understand, describe, and categorize theoretical knowledge, models of knowledge representation, methods, and tools for applying existing solutions and addressing challenges and open research questions;
- Analyze problems, synthesize solutions, and comparatively evaluate alternative approaches in specialized fields;
- Design and implement, initially under supervision and progressively with autonomy, research plans based on specific methods and protocols to test hypotheses and substantiate acceptance or rejection both theoretically and experimentally;
- Collaborate with peers in interdisciplinary application fields to develop new knowledge and innovation;
- Describe and present their work and results accurately and completely, individually or in groups, using oral, written, or other media;
- Demonstrate awareness of research ethics and the individual, social, economic, and environmental dimensions and consequences of their results, recognizing the open questions and challenges these entail;
- Develop research interests to continue studies in the doctoral cycle in specialized fields within the program's scope.

B. Viability Report of the Interdepartmental Postgraduate Program

The University of West Attica (UoWA) has the basic infrastructure and necessary equipment for operating postgraduate programs. The existing material and technical infrastructure meets the operational needs of the program (buildings, laboratories, lecture halls, laboratory and specialized equipment, libraries, high-speed network, software and hardware with capabilities for asynchronous distance learning). Additionally, the campuses of Athens and Aegaleo are accessible to people with mobility difficulties through elevators and ramps. Teaching for each lecture is conducted both in person and remotely using teleconferencing technology. For synchronous distance learning, a platform is used that allows students to listen to and see the

professor remotely, follow presentations, interact, and ask questions upon request. This software also enables special guest lectures from speakers abroad.

Lectures will take place in UoWA's lecture halls and classrooms equipped with projection systems, sound systems, and high-speed wired and wireless networks. These facilities support both in-person and remote attendance.

Furthermore, courses will be created on the UoWA's Eclass and/or Moodle platforms. The design, organization, and posting of lectures will be carried out by a team of program instructors.

Student registry management will be handled through the University's Integrated Electronic Secretariat Information System (Student Registry), where students, after receiving their unique code from the program's secretariat, will have electronic access to their grades and the ability to register for semester courses.

Article 20
Funding – Financial Management of the Interdisciplinary Postgraduate Program (IPGP)

The funding of the IPGP may originate from:
a) tuition fees,
b) donations, sponsorships, and any kind of financial support,
c) legacies,
d) resources from research projects or programs,
e) own resources of the Higher Education Institution (HEI), and
f) the state budget or the public investment program,
g) any other legal source.

Indicative budget for one cycle (4 semesters) for 100 students. According to Law 4957/2022, up to 30% of students are entitled to full tuition fee exemption, so tuition fees are calculated for 70 students and are broken down as follows:

TABLE 1 – INCOMES

FUNDING SOURCE	Amount (€)
1. Tuition fees from IPGP 1,000€ per semester * 100 students	280,000€
2. Donations, sponsorships, and any kind of financial support	€
3. Legacies	€
4. Resources from research projects or programs	€
5. Own resources of University of West Attica (UWA)	€
6. State budget or Public Investment Program	€
TOTAL	280,000€

Tuition fees are paid either by the student themselves or by a third party (natural or legal person) on behalf of the student.

The management of IPGP funds is performed by the Special Account for Research Funds (ELKE) of UWA.

The IPGP funds are distributed as follows:
a) an amount corresponding to thirty percent (30%) of the total income from tuition fees is withheld by ELKE. This amount includes the withholding percentage in favor of ELKE for the financial management of postgraduate programs. When IPGP income comes from donations, sponsorships, legacies, or resources from research projects or programs, withholding is done according to the rates applied for income from these respective funding sources,
b) the remaining amount of the total IPGP income is allocated for covering the operational expenses of the IPGP.

Sample TABLE 2 – EXPENSES

EXPENSES	Amount (€)
1. Fees for administrative and technical support	60,000
2. Fees for teaching staff	104,000
3. Travel expenses	4,000
4. Equipment and infrastructure expenses	8,000
5. Other operational expenses	20,000
SUBTOTAL (70% of tuition fees)	196,000
6. Operational expenses of UWA (30%) ELKE	84,000
TOTAL	280,000

Article 21
Awarding Degrees – Graduation Ceremonies

A student who successfully completes their postgraduate studies participates in a public graduation ceremony, taking an oath before the Rector or the Vice-Rector as the Rector's representative, and the Chair of the Department. The ceremony is held after the end of each examination period, on a day and time set by the Rector in collaboration with the Department Chairs. The oath is not a constitutive element for successful completion of studies but is a necessary condition for awarding the postgraduate diploma.
For reasons of force majeure (e.g., health reasons, living or working abroad, military obligations) and upon their request to the Department Secretariat, graduates may request to receive their diploma without participating in the ceremony or to attend a subsequent ceremony. Exemption from participation is approved by the Department Chair. Before the ceremony or exemption, graduates may be issued a certificate confirming successful completion of their studies.

A postgraduate diploma awarded may be revoked or annulled if it is proven that the legal and institutional requirements for its acquisition were not met at the time of issuance. Revocation or annulment is made by decision of the relevant Assembly and is communicated to the Rector of the Institution.

Article 22
IPGP Website

The IPGP has an official website in Greek and English, or any other language deemed appropriate by the convening Department. The official website is continuously updated, contains all information and announcements related to the Program, and serves as the official source of information for students.

Article 23
Evaluation of the IPGP

At the end of each semester, an evaluation of each course and instructor is conducted by postgraduate students using a special evaluation form/questionnaire. Courses are assessed regarding their content, teaching method, educational material, and relevance to the principles and philosophy of the postgraduate program. Instructors are evaluated on multiple levels, including their knowledge and ability to convey it, preparation, use of up-to-date literature, willingness to answer questions, timely grading and feedback on assignments and exams, and adherence to scheduled teaching hours.

The annual internal evaluation of the IPGP is conducted in collaboration with the Internal Quality Assurance Unit (MODIP) of the University of West Attica as part of the internal evaluation of the Department/School it belongs to, according to the institution's Quality Assurance System procedures.

External evaluation of the IPGP is conducted in cooperation with MODIP within the certification process prescribed by the National Authority for Higher Education (ΕΘΑΑΕ).

The Department of Public and Community Health, responsible for administrative support, is evaluated as part of the periodic evaluation/certification of the academic unit by the National Authority for Higher Education. This includes an overall assessment of the IPGP's work, the achievement of its founding goals, its sustainability, graduate employability, contribution to research, internal student evaluation, the rationale for extension of its operation, and other quality-related factors and its contribution to the national higher education strategy.

If the IPGP is found not to meet the requirements for continuation during evaluation, its operation will conclude with the graduation of already enrolled students, according to its founding decision and postgraduate/doctoral study regulations.

Article 24
Other Provisions

Any issues not regulated by current legislation, the IPGP Operating Regulations, or the Postgraduate Studies Regulations of the University of West Attica, shall be governed by decisions of the competent bodies of the IPGP.