



ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

HELLENIC REPUBLIC

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ΕΘΝΙΚΗ ΑΡΧΗ ΑΝΩΤΑΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ

HELLENIC AUTHORITY FOR HIGHER EDUCATION

## University of West Attica

School of Health and Care Sciences

Department of Biomedical Sciences and Midwifery

### Undergraduate Studies

**“Applications of Biomedical Technology in Infertility - Male and Female Factor”**

Course Outline

WOMAN'S CLINICAL AND LABORATORY INVESTIGATION



ATHENS 2023



## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	School of Health and Care Sciences		
<b>ACADEMIC UNIT</b>	Biomedical Sciences and Midwifery		
<b>LEVEL OF STUDIES</b>	Undergraduate Studies		
<b>COURSE CODE</b>	M2. 3	<b>SEMESTER</b>	Second
<b>COURSE TITLE</b>	Woman's Clinical and Laboratory Investigation		
<b>INDEPENDENT TEACHING ACTIVITIES</b> <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
Lectures, laboratory training	2	8	
<i>Add rows if necessary. The organization of teaching and the teaching methods used are described in detail at (d).</i>			
<b>COURSE TYPE</b> <i>General background, special background, specialized general knowledge, skills development</i>	Specialization		
<b>PREREQUISITE COURSES:</b>			
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	Greek, English		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	YES		
<b>COURSE WEBSITE (URL)</b>	<a href="https://eclass.uniwa.gr/">https://eclass.uniwa.gr/</a>		

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b></p> <p><i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p>The purpose of the course is to acquaint the students with the basic laboratory and clinical methods of identifying and locating pathological conditions that concern female fertility and prevent spontaneous conception.</p> <p>The students after the end of the course:</p> <ol style="list-style-type: none"> <li>1. They will have developed skills in taking a correct medical history.</li> <li>2. They will have understood the methodology of laboratory control of female fertility</li> <li>3. They will have understood the methodology of the analysis of control examinations.</li> <li>4. They will have the ability to participate in the scientific team for decision-making regarding the selection of the appropriate method/technique to treat infertility</li> </ol>

<b>General Competences</b>	
<i>Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?</i>	
<p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i></p> <p><i>Adapting to new situations</i></p> <p><i>Decision-making</i></p> <p><i>Working independently Team work</i></p> <p><i>Working in an international environment Working in an interdisciplinary environment Production of new research ideas</i></p>	<p><i>Project planning and management Respect for difference and multiculturalism</i></p> <p><i>Respect for the natural environment</i></p> <p><i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i></p> <p><i>Criticism and self-criticism</i></p> <p><i>Production of free, creative and inductive thinking</i></p> <p>.....</p> <p><i>Others...</i></p> <p>.....</p>
<ul style="list-style-type: none"> <li>• Search, analysis and synthesis of data and information, using the necessary technologies</li> <li>• Teamwork</li> <li>• Work in an interdisciplinary environment</li> <li>• Work in an international environment</li> <li>• Generating new research ideas</li> <li>• Decision making</li> <li>• Promotion of free, creative and inductive thinking</li> </ul>	

**(3) SYLLABUS**

<ul style="list-style-type: none"> <li>• Medical History taking - Gynecological examination</li> <li>• Methods of determining fertile days and ovulation (Knaus-Oqino calendar method, basal body temperature measurement, ovulation test kit, cervical mucus test, etc.)</li> <li>• Health's screening and status (cardiovascular screening, blood and biochemical tests, thyroid hormone testing, diet/exercise and fertility etc.)</li> <li>• Fallopian tube diagnostic tests (serum test for chlamydia, hysterosalpingography, laparoscopic test with fallopian tube dye)</li> <li>• Ovarian factor diagnostic tests (ovulation check, serum progesterone measurement, hormone test lab values, ovulation confirmation by u/s)</li> <li>• Ultrasound investigation of morphological or functional lesions of the female reproductive system (endometrial adhesions, polyps, fibroids, uterine malformations, congenital anomalies, etc.)</li> <li>• Sexual health &amp; severe inflammations of the female reproductive system (e.g. pelvic inflammatory disease) - Endometriosis</li> <li>• Induction and enhancement of ovulation-enhancement of luteal phase</li> <li>• Ovarian stimulation protocols – natural cycle</li> <li>• Serious complications/risks of assisted reproductive techniques - avoid ovarian hyperstimulation</li> <li>• Immune factor - repeated (every six months) miscarriages</li> </ul>
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- Low ovarian reserve – egg borrowing
- Aged 40 and pregnancy – ovarian tissue cryopreservation

#### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face to face, laboratory training	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b> <i>Use of ICT in teaching, laboratory education, communication with students</i>	<ul style="list-style-type: none"> <li>➤ Learning processes support through electronic platforms: e class, Microsoft Teams, Skype Business</li> <li>➤ Teaching by videos</li> </ul>	
<b>TEACHING METHODS</b> <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i>  <i>The student's study hours for each learning activity are given as well as the hours of non- directed study according to the principles of the ECTS</i>	<b>Activity</b>	<b>Semester Workload</b>
	Lectures by audiovisual media	54
	Laboratory training in small groups of students 20-25	14
	Interactive teaching	29
	Literature study and analysis	28
	Study presentation	28
	Writing of thesis	47
	Independed study	42
<b>Course total</b>	<b>200</b>	
<b>STUDENT PERFORMANCE EVALUATION</b> <i>Description of the evaluation procedure</i> <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open- ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other</i> <i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	1. Written final exam (60%) including: <ul style="list-style-type: none"> <li>• Multiple Choice Questions</li> <li>• Short Answer Questions,</li> <li>• Problem Solving</li> </ul> 2. Presentation of Individual or Group Work (40%)	

#### (5) ATTACHED BIBLIOGRAPHY

##### Suggested Bibliography:

1. Ματαλλιωτάκης Ιωάννης Μ., Πανίδης Δημήτριος Κ., Κουμαντάκης Ευγένιος Ε: «Ενδοκρινολογία αναπαραγωγής-Διάγνωση και θεραπεία της υπογονιμότητας» ΕΚΔΟΣΕΙΣ ΠΑΣΧΑΛΙΔΗΣ, 2001
2. Χρυσικόπουλος Αθ.: «Υπογονιμότητα - Στείρωση - Προβλήματα Αναπαραγωγής» ΕΚΔΟΣΕΙΣ ΠΑΣΧΑΛΙΔΗΣ, 2002
3. P. BRAUCE: «ABC της Υπογονιμότητας» ΕΚΔΟΣΕΙΣ ΠΑΡΙΣΙΑΝΟΥ, 2012
4. Hoffman Barbara, Schorge John, Schaffer Joseph, Halvorson Lisa, Bradshaw Karen, Cunningham Gary F. Williams: «Γυναικολογία» BROKEN HILL PUBLISHERS LTD, 2021
5. Smith P. Roger, Netter H. Frank: «Netter's Μαιευτική και Γυναικολογία», 2η έκδοση. BROKEN HILL PUBLISHERS LTD, 2019

6. CHARLES R.B. BECKMANN: «ΜΑΙΕΥΤΙΚΗ ΚΑΙ ΓΥΝΑΙΚΟΛΟΓΙΑ» ΕΚΔΟΣΕΙΣ ΚΩΝΣΤΑΝΤΑΡΑΣ, 2018
7. BENSON, BLUTH: «ΥΠΕΡΗΧΟΓΡΑΦΗΜΑ ΣΤΗ ΜΑΙΕΥΤΙΚΗ & ΓΥΝΑΙΚΟΛΟΓΙΑ. Πρακτική Προσέγγιση σε Κλινικά Προβλήματα» ΕΚΔΟΣΕΙΣ ΚΩΝΣΤΑΝΤΑΡΑΣ, 2012
8. Gordon Alan G., Lewis Victor B., Cherney Alan H. de: «Ενδοσκόπηση στη γυναικολογία». ΕΚΔΟΣΕΙΣ ΠΑΡΙΣΙΑΝΟΥ, 2001
9. Πάντος Γεώργιος Α., Γκριμπίζης Γρηγόριος Δαλκαλίτσης Ν.: «Ενδοσκοπήσεις στη γυναικολογία». ΕΚΔΟΣΕΙΣ ΚΑΥΚΑΣ ΕΠΕ, 2005
10. Παπαδημητρίου Χρήστος Α.: «Γυναικολογία». ΕΚΔΟΣΕΙΣ ΚΑΥΚΑΣ ΕΠΕ, 2006
11. DECHERNEY H ALLAN, NATHAN LAUREN: «ΣΥΓΧΡΟΝΗ ΔΙΑΓΝΩΣΗ & ΘΕΡΑΠΕΙΑ ΣΤΗ ΜΑΙΕΥΤΙΚΗ ΓΥΝΑΙΚΟΛΟΓΙΑ» ΕΚΔΟΣΕΙΣ ΔΗΜΗΤΡΙΟΣ Α. ΣΙΩΚΗΣ & ΣΙΑ ΕΕ, 2005