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| 1. | Subject | PATHOLOGY | | | |
| 2. | Code | DA – 122 | | | |
| 3. | Study program: | Three-year professional studies for graduate obstetricians | | | |
| 4. | Conducted by | Department of Pathology UKIM Medical faculty Skopje | | | |
| 5. | Degree of education (first or second cycle) | First cycle | | | |
| 6. | Academic year/semester | First/II | 7. | Credits | 2 |
| 8. | Professor | Department Chief Prof. Dr. Slavica Kostadinova – Kunovska | | | |
| 9. | Prerequisite | None | | | |
| 10. | Goals | Gaining basic knowledge of general pathology Gaining knowledge about the influence of the external and internal environment on the pathological changes of the tissues and organs, which is a basis for all diseases | | | |
| 11. | Content summary: | <p>Theoretical lessons:</p> <ul style="list-style-type: none"> -Basic disease development mechanisms -Cell damage and death: hypoxic injury, damage of the cell caused by free radicals, chemical damage, microbiological damage and viral damage. Morphology of reversed and irreversible damage. Cell adaptation to growth and differentiation. -Hemodynamic disorders: edema, hyperemia, congestion, hemorrhage, thrombosis, embolism, sudden cardiac arrest and shock/ -Acute and chronic inflammation: etiological factors, cellular, vascular and humoral inflammation changes. Morphological inflammation patterns. Systemic effects of an inflammation, organism's defense of sources that cause inflammation, results from an acute and chronic inflammation. -Newborn respiratory distress syndrome and Sudden infant death syndrome -Cellular and humoral immunity and genetic disorders: Down syndrome, Klinefelter and Turner syndrome, cystic fibrosis, hemophilia, neurofibromatosis. -Tumor pathology: definition, nomenclature, differences between malignant and benign tumors, invasion and metastasis, carcinogenesis. Clinical characteristics of tumors determining the stage of the malignant disease. -Tumors in uterus and ovaries -Pathology and pregnancy: molar pregnancy, placenta pathology, ectopic pregnancy and toxemia. <p>Practical lessons:</p> <ul style="list-style-type: none"> -Introduction to basic diagnostic methods and morphological changes of biopsied and surgery specimen: dissecting microscope, routine tissue processing, microscoping of representative cases. Taking, fixation and transport of tissues and bodily fluids for cytological, histochemical, immunohistochemical, immunofluorescence, electrone-microscopic and cytogenetic analysis. -Ex tempore biopsy -Observation of fetal autopsy and gaining knowledge of clinical and forensic autopsy and thanatology (determining the signs of death), as well as observation of dissection of gynecological surgery specimen and placenta dissection. | | | |
| 12. | Teaching methods: | Interactive lessons, practical lessons, seminars | | | |
| 13. | Total classes: | 110 | | | |
| 14. | Organization | 45 theoretical lessons, practical lessons | | | |
| 15. | Types of teaching activities | 15.1 | Lessons: | 30 | |
| | | | theoretical | | |

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| | | | classes | |
| | | 15.2 | Practical lessons (laboratory, clinical) | 15 |
| 16. | Other types of activities | 16.1 | Projects | / |
| | | 16.2 | Self-supporting practice | / |
| | | 16.3 | Learning at home | / |
| 17. | Knowledge assesment | Points | | |
| | 17.1 | Final exam | Written part* *The exam is in a written form and contains: 28 questions with 4 choices – every question gives 1 point 6 fill-in-the-gaps questions – every question gives 1 point 2 essay questions – every question gives 3 points The exam is passed with at least 60% (24 points) from a total of 40 points. | Min. – Max. 24 - 40 |
| | 17.2 | Active Participation | Theoretical lessons* Practical lessons** *Attending the theoretical lessons: -51-60% - 1 point -61-70% - 2 points -71-80% - 3 points -81-90% - 4 points -91-100% - 5 points **Attending the practical lessons: every lessons gives 0.33 points (15 practical lessons): -Attendance – 0.1 points -Active participation – 0.2 points | Min.-max. 2 - 5 4 - 5 |
| 17.4 | Active participation | | Min. – max. 6 - 10 | |
| 18. | Grading criterion (points/grades) | Up to 59 points | 5 (five) F | |
| | | From 60 to 68 points | 6 (six) E | |
| | | From 69 to 76 points | 7 (seven) D | |
| | | From 77 to 84 points | 8 (eight) C | |
| | | From 85 to 92 points | 9 (nine) B | |
| | | From 93 to 100 points | 10 (ten) A | |
| 19. | Requirements for obtaining a signature and attending the final examination | <p>To obtain a signature, the student must actively participate in all the activities (theoretical lessons, practical lessons, seminars)</p> <p>The student can attend the pathology final exam after passing the anatomy and histology exams.</p> <p>The final grade for the subject is formed according to the table for grading, and is based on the sum of the points from all the activities and the final exam.</p> | | |

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| 20. | Language | Macedonian | |
| 21. | Method of evaluating the quality of the lessons | Anonymous student evaluation of the subject, the professors and the collaborators who hold the lessons. | |
| 22. | Literature | | |
| | 22.1 | Mandatory literature | |
| | | 1. | Department of pathology, Authorized lectures, Medical Faculty Skopje, 2010 |
| | | 2. | Department of pathology, Authorized lectures, Medical faculty Skopje, 2020 |
| | 22.2 | Additional literature | |
| | | 1. | Kumar V., Abul A., Nelson F., Richard M., Basic Pathology according to Robbins, 7th revised edition, Tabernakul, 2010 |
| | | 2. | Department of Pathology – group of authors, Chosen chapters of Pathology 1, Medical Faculty Skopje, 2010 |