University of Niš Faculty of Medicine

Study program: INTEGRATED ACADEMIC STUDIES OF MEDICINE



ACCREDITATION 2018

Naziv predmeta: Basic histological techniques in biomedicine	
Course Head: Prof. dr Vladimir Petrović	
Course status:	elective
Semester: VII	Study year: IV
ECTS credits: 4	Course code: M-IV 27.b

Course aim:

Additional knowledge of the methodologies necessary to get an insight into the microscopic characteristics of cells and tissues in the domain of biomedical sciences

Course outcomes: (knowledge, skills, attitudes)

The acquired knowledge would enable students (of medicine, dentistry, health care, wishing to do the lab work, as well as those PhD students and specialist-candidates in particular fields of morphology) to more completely master the fields of biomedicine utilizing the methods of micro-morphologic technique.

Number of classes of active teaching: 60

Lectures: 30 Practice: 30

Course contents

<u>Theory</u>

Basic principles of work of different microscopic technical devices, sampling methods, methods of preparation of biological materials to be visualized using the techniques of microscopy (from the routine techniques for basic morphological orientation, to the techniques of special morphological examinations), and their significance (applicability) in different research and diagnostic proceedings.

Practice

Material sampling and preparation for microscopic visualization of morphofunctional properties of cells and tissues in diagnosis (histopathological, microbiological, hematological, gynecological, and forensic) and for research purposes.

Recommended literature:

- 1. Mc Manus JFA, Mowry RV. Staining Methods Histologic and Histochemical. 7th ed Harper& Row, New York, NY,1984.
- 2. Luna LG. Manual of Histologic Sataining methods of the Armed Forces Institute of Pathology. 3rd ed. McGrow-Hill. New York- London, 1968.
- 3. Suvarna SK, Layton C, Bancroft JD. Bancroft's Theory and Practice of Histologic Techniques. 7th ed. Churchill Livingstone. Elsevier, 2013.
- 4. Volkova OV, Elecki JK. Histologija s histološkom tehnikom. Medicina i fizkultura. Sofia, 1991.
- 5. Švob M. Histološke i histohemijske tehnike. Svjetlost. Sarajevo, 1974.
- 6. Lalošević D. Mikroskopska laboratorijska tehnika u medicini. WUS, Novi Sad, 2005.

Teaching methods:

- Small group work
- Consultations
- Seminar papers

Courses mandatory for a student to pass before being allowed to take the final exam:

None

Grade: (maximum 100 points)

Pre-exam obligations

Activity at classes:

Regular attendance of lectures: 0 - 15 points Regular attendance of practice: 0 - 15 points

Seminar papers:

Seminar paper preparation: 0 – 10 points

Practical exam:

Histological preparations: 0 – 20 points

Final exam

■ Written: test 0 – 40 points