Study Programme: BSc in Biology Teaching

Degree level: Bachelor degree

Course Title: Contemporary Educational Technology in Biology Teaching

Code course: OPB006

Professor: Tomka Miljanović, PhD.

Elective Course

Number of ECTS: 6

Prerequisites: -

Course Objective: Teaching students how to use contemporary didactical media in biology teaching, introduction to new educational software packages in Biology and their practical use, use of Internet in biology teaching.

Course Outcome: Ability of future biology teachers to fully and correctly use contemporary educational technology in Biology teaching.

Course Content:

Theoretical part:

Concept of educational technology in biology teaching. Simulation and games in biology teaching. Preparation of simulation games: systematic analysis of problem, elaboration of analytical model, definition of criteria for evaluation of achieved outcome, and game design. Models and modeling in biology teaching. Methods of modeling. Microteaching, brief courses, and methodological workshop in biology teaching. Contemporary audio-visual techniques in visualizing of abstract biological contents and presentation of biology phenomena. Use of computers in biology teaching. Computer-designed teaching strategies. Multifold taxonomy of teaching strategies within biology teaching. Use of computers in supervising and evaluating of knowledge of pupils. *Practical part:*

Practical part of the course follows theoretical topics listed above.

Reading List:

- 1. Mandić, D. P., Mandić, P. D. (1996): Education information technology, Faculty of Teaching, Belgrade. (in Serbian)
- 2. Mandić, D. (2003): Didactic-informatical Innovation in Education, Mediagraf, Belgrade. (in Serbian)
- 3. Mandić, D., Ristić, M. (2005): Practicum in informatics and educational technology, Mediagraf, Belgrade. (in Serbian)
- 4. Vilotijević, M. (1999): Didactics: the organization of teaching, Institute for textbook publishing and Faculty of Teaching, Belgrade. (in Serbian)

| Total hours: | - | | | | | |
|------------------------------------|--------------------------|----------|----------------|--|--------------------------|--------|
| Lectures: 2 | Practicals: 2 | Other: - | Other: - | | Student research work: - | |
| Methods of instr | uction: Interactive teac | hing | | | | |
| | | Α | ssessment | | | |
| Requirements | | points | Final exam | | | points |
| Active participation in lectures | | 10 | Practical exam | | | 20 |
| Active participation in practicals | | 20 | Oral exam | | | 50 |
| Test(s) or | | - | | | | |
| Seminar | | - | | | | |