

SYLLABUS

1. Course title:

Windows Programming

2. Code:

RI204

3. Cycle of study:

1

4. ECTS credits:

6

5. Type of course: Mandatory Elective**6. Prerequisites:**

[RI101] Introduction to Programming

7. Class restrictions:**8. Duration / semester:**

1

7

9. Weekly contact hours:

9.1. Lectures:

3

9.2. Seminars:

1

9.3. Laboratory/Practice classes:

1

10. Faculty:

Faculty of Electrical Engineering

11. Department/study program:

Electrical Engineering and Computer Science

12. Lecturer:

Dr.Sc. Edin Pjanić, assistant prof.

13. Lecturer's e-mail:

edin.pjanic@untz.ba

14. Web site:

--

15. Course aims:

Main course objectives are to teach students the basic inner workings of the Windows OS and development of MS Windows programs with GUI, at the level of Win32 API, as well as utilizing GUI libraries in application development.

16. Learning outcomes:

Upon completion of the course the student should be able to:

- understand the basic inner workings of the Windows OS,
- understand the functioning of event based systems,
- independently develop MS Windows programs with GUI, at the level of Win32 API,
- use GUI libraries.

17. Course content:

Microsoft Windows OS basics, windows and messages. Basic structure of MS Windows programs. Graphics Device Interface, GDI. Colors and graphics primitives: line, rectangle, ellipse, polygone. Graphics objects: pens and brushes. Bitmap graphics and buffering. IO interface, keyboard, mouse, timer. User defined, common and standard controls: button, static, listbox, edit, progress bar. Resources: icon, cursor, text, menu, accelerators. Modal and modeless dialog boxes. Multithreading programing.

18. Learning methods:

Lectures are accompanied by presentations and other materials which are uploaded on the course web site. Discussions with teaching assistant, laboratory excersizes, homeworks and a small group final project.

19. Assessment methods:

The final grade is based on the continuous assessments that are performed during the semester (homeworks, quizzes) and the final project. The final project is related to the entire content of the course and beyond. The project is presented in the term of the final exam.

20. Assessment components:

Grading scale:

Homeworks, quizzes: 60%

Final project: 40%

The final grade is based on the continuous assessments that are performed during the semester (homeworks, quizzes) and the final project.

21. Required reading list:

C.Petzold, "Programming Windows", 5th Ed, Microsoft Press, 1998

B.E.Rector, J.M.Newcomer, "Win32 Programming", Addison Wesley, 1997

22. Web sources:**23. Applicable starting from the academic year:**

2016/2017

24. Adopted in the Faculty/Academy session:

04.04.2016