# SYLLABUS

**1. Course title:**

Application of thermal analysis in pharmacy

**2. Code:**

**3. Cycle of study:**

1

**4. ECTS credits:**

3

**5. Type of course:**

○ Mandatory ◉ Elective

**6. Prerequisites:**

NONE

**7. Class restrictions:**

**8. Duration / semester:**

1 3

**9. Weekly contact hours:**

| | |
|---|---|
| 9.1. Lectures: | 2 |
| 9.2. Seminars: | 0 |
| 9.3. Laboratory/Practice classes: | 0 |

**10. Faculty:**

Faculty of pharmacy

**11. Department/study program:**

Pharmacy (Integrated study I and II cycle)

**12. Lecturer:**

dr.sc. Amra Odobašić, full professor

**13. Lecturer's e-mail:**

amra.odobasic@untz.ba

**14. Web site:**

www.frmf.untz.ba

**15. Course aims:**

The aim of the course is that students thoroughly familiar with the principles and application of thermal analysis in pharmacy. Application of Thermal Analysis in pharmacy is important because the complementary other analytical methods, and to provide information that can not be given by using other methods .

**16. Learning outcomes:**

Master basic knowledge for the successful application of DSC, DTA, DAE, TGA, TMA DDSc in analysis of drugs.

**17. Course content:**

Basics DSC, DTA, DAE, TGA, TMA, DDSC
Instrumental performance. Thermal analysis in examining the physical and chemical properties
Application of Thermal Analysis.
DSC to determine the purity and characterization of solids
theory of DTA
Application DDSC. The components of the specific heat. microcalorimetry
Simultaneous analysis techniques and products

**18. Learning methods:**

Lectures, seminars, consultations

**19. Assessment methods:**

Test I Test II, the final exam. Test Test I and II will be conducted during lectures and final exam will be carried out after the end of the semester.

**20. Assessment components:**

Final grade is based: attendance and participation in class (lectures and exercises), passed tests and final exam.

<5 F 55.00
55.00 to 64.99 E 6
65.00 to 74.99 7 D
75.00 to 84.99 8 C
85.00 to 94.99 9 B
From 95.00 to 100 A 10

**21. Required reading list:**

11. D.Gron: Thermal analysis of drugs and drugs products, Encyclopedia of pharmaceutical technology vol.15. Mercel – Dekker, New York, 1997,1-79.
2. J.L.Ford, P.Timminis: Pharmaceutical Analysis, Techniques and Applications, Ellis Horwood Ltd., J

**22. Web sources:**

**23. Applicable starting from the academic year:**

2012/13

**24. Adopted in the Faculty/Academy session:**