

molekularnem nivoju.	
<u>Uporaba</u> Pridobljeno teoretično in praktično znanje je potrebno ne samo za uspešen študij drugih predmetov na magistrski stopnji ampak tudi za uspešno teoretično in praktično raziskovalno delo na področju biokemije.	<u>Application</u> Acquired theoretical and practical knowledge is necessary not only for successful study of other subjects at the MSc level but also for a successful theoretical and practical research in the field of biochemistry and chemistry.
<u>Refleksija</u> Študent bo pridobil občutek, kako s pomočjo osnov termodinamike lahko opišemo relativno zapletene biokemijske procese. S pridobljenim znanjem bo lahko kritično ovrednotil rezultate laboratorijskih vaj in ga uporabil v praksi.	<u>Analysis</u> Students will find out how to use thermodynamics in description of relatively complex biochemical processes. With the knowledge gained they will be able to critically evaluate the results of laboratory work and use it in biochemical and chemical practice.
<u>Prenosljive spretnosti</u> Študent se nauči nekaterih teoretičnih in eksperimentalnih pristopov, ki so osnova pri načrtovanju, spremljanju in vodenju eksperimentov v biokemiji.	<u>Skill-transference Ability</u> Students will learn some of the theoretical and experimental approaches, which set the basis for planning and conducting experiments in biochemistry and chemistry.

Metode poučevanja in učenja:

Predavanja, seminarji: z uporabo različnih učnih pripomočkov (kreda in table, Power Point, prosojnice).
Vaje: skripta, teoretična navodila in praktične laboratorijske vaje.

Learning and Teaching Methods:

Lectures, seminars, laboratory exercises.

Načini ocenjevanja:

Pisni izpit po uspešno zaključenih laboratorijskih vajah.

Teža (v %) /
Weight (in %)

Assessment:

Written examination after successful completion of laboratory exercises.

Referenčni nosilca / Lecturer's references:

- Lah, J., Bermanak, I., Dolžar, M., Vesnaver, G. What drives the binding of minor groove-directed ligands to DNA hairpins. *Nucleic Acids Res.*, **2008**, *36*, 897-904.
- Lah, J., Šimić, M., Vesnaver, G., Marianovsky, I., Glaser, G., Engelberg-Kulka, H., Loris, R. Energetics of structural transitions of the addiction antitoxin MazE. Is a programmed bacterial cell death dependent on the intrinsically flexible nature of the antitoxins?. *J. Biol. Chem.*, **2005**, *280*, 17397-17407.
- Lah, J., Bešter-Rogač, M., Perger, T. M., Vesnaver, G. Energetics in correlation with structural features: the case of micellization. *J. Phys. Chem, B* **2006**, *110*, 23279-23291.