Study Programme: BSc in Biology

Degree level: First cycle (Bachelor)

Course Title: HUMAN BIOLOGY

Professor: Tatjana Pavlica

Required/Elective Course: required Number of ECTS: 5

Prerequisites:

Course Objective: Students will become acquainted with basic knowledge about human traits and their manifestation in individuals, families and populations. Methods of surveying the human organism and variability of modern populations.

Course Outcome: Upon completion of this course students will be able to describe and use the basic techniques for studying human populations.

Course Content:

Theoretical part: Place and role of Humane biology in modern biology. Unique constitution of humans and other living systems. General information on the human body. Structure and organization of the human body. Human traits, quantitative, qualitative and physiological. Their manifestation, inheritance, determination in individuals, families and populations. Periods of ontogenetic growth and development. Ratio and body proportions. Constitution. Dermatoglyphs. Planning, implementation and processing of data in human biological research.

Practical part: Methods of testing in Human biology. Determination of basic body dimensions. Basic statistical concepts of anthropometric research. Distribution of quantitative traits. Determination of body composition. Determination of bone mass and development of muscle tissue. Indirect methods for assessing body structure - volume dimensions. Indirect methods for assessing body structure - transferal dimension. Anthropometric characteristics and proportions - head. Anthropometric characteristics and proportions - face. Dermatoglyphs. Qualitative characteristics. Gemini. Family trees. Determination of sex and body height based on osteological material.

Reading List:

Mader S. : Human biology, seventh edition, Mc Graw Hill higher Education, 2002.

Božić-Krstić V., Savić M., Rakić R., Pavlica T. : Praktikum iz biologije, Univerzitet u Novom Sadu,

Medicinski fakultet, 2000.

Harrison G.A., Tanner J.M., Pilbeam D.R., Baker P.T.: Human Biology, An introduction to human evolution, variation, growth, and adaptability, Oxford University Press, 1988.

Tegako L.I,: Osnovi sovremennoi Antropologii, Minsk Universitetskoe, 1989.

Knußman P.: Vergleichende Biologie des Menschen: Lehrbuch d. Anthropologie u.Humangenetik, Fischer, Stuttgart, New York. 1980