# UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



Study program: Integrated Academic Studies in Medicine

**Course title: Anthropometry** 

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Course status: elective

ECTS Credits: 3
Condition: Anatomy

#### Course aim

- to understand human physical variation.
- to desribe systematic measurement of the physical properties of the human body
- to evaluate different methods of body composition assessment with a focus on measurements used in the public health.

#### **Expected outcome of the course:**

After the course student will be able to locate measurement sites, to perform anthropometric measurement, to assess body composition and somatotype and to interprete the results.

## **Course description**

#### Theoretical education

- 1. Overview of anthropometry
- 2. Human physical variation
- 3. Importance and practical use of anthropometry
- 4. Body compositon levels
- 5. Methods for body composition assessment
- 6. Quantifying measurement errors
- 7. Somatotyping
- 8. Craniometry
- 9. Relationship between anthropometric variables and physical and physiological health

### Practical education

- 1. Basic anatomy landmarking
- 2. Equipment and calibration
- 3. Measurement of body height and body weight
- 4. Assessment of nutritional status
- 5. Growth charts
- 6. Measurement of body circumferences
- 7. Measurement of skinfold thicknesses
- 8. Measurement of lengths and diameters of different body parts
- 9. Introduction to various instruments for assessing body composition
- 10. Craniometry
- 11. Calculation of somatotype

### Literature

#### Compulsory

- 1. Eston R, Reilly T. Kinanthropometry and Exercise Physiology Laboratory Manual: Tests, Procedures and Data: Volume One: Anthropometry: 1. Human Kinetics 2008.
- 2. World Health Organization. Physical Status: the use and interpretation of anthropometry. Report of a WHO Expert Committee, Geneva 1995. (https://apps.who.int/iris/bitstream/handle/10665/37003/WHO TRS 854.pdf?sequence=1)
- 3. National Health And Nutrition Examination Survey III Body Measurements (Anthropometry). Westat, Inc. 1650 Research Boulevard Rockville, MD 20850 (301) 251-1500. <a href="https://wwwn.cdc.gov/nchs/data/nhanes3/manuals/anthro.pdf">https://wwwn.cdc.gov/nchs/data/nhanes3/manuals/anthro.pdf</a>
- 4. Technical Committee ISO/TC 159, Ergonomics, Subcommittee SC 3, Anthropometry and biomechanics.ISO 7250-1:2017(en). Basic human body measurements for technological design https://www.iso.org/obp/ui/#iso:std:iso:7250:-1:ed-2:v1:en

Number of active classes	Theoretical classes: 30	Practical classes: 15

## **Teaching methods:**

Lectures and practical classes  Student activity assessment (maximally 100 points)				
Lectures		Test		
Practices	30	Practical exam	70	
Colloquium				
Essay				