

Doctoral School: **Biology Doctoral School**  
Doctoral Program: Neuroscience and Human Biology

Subject code: **BIO/7/29**  
Subject title: **Auxology L**  
Teacher and Neptun code: **Dr. Zsákai Annamária (D5223E)**  
Credits: 4  
Class hours: 2 hours/week, lecture

### Aims of the course

The presentation provides an overview of human growth patterns and the external and internal factors influencing it.

### Course contents

History of auxology. Special features of human developmental pattern.  
Growth and development: the growth and development of human tissues and organs.  
The periods of human growth and development, the biological and chronological periods of human ontogenesis.  
The endogenous and exogenous factors influencing human growth and development. Neural and endocrine control.  
The influence of psychosocial factors and nutrition on children's physical development.  
Dental development, bone development and the sexual maturation.  
The relationship between the factors of body development, the estimation of body development and final stature.  
Puberty: the endocrinology of puberty. The adolescent growth spurt: stature, body proportions and body composition changes.  
The development of reproductive organs, the development of secondary sexual characteristics. Sexual dimorphism in puberty, the late and early puberty.  
The relationship between physical, motoric and mental development.  
The sources of harm on body development. The results of urbanisation and overweight nutritional status. The results of social differences on growth.  
Secular changes in human growth and development. The medical and social importance of secular changes. Epidemiological studies.

### Requirements

Oral exam

### Literature

lecture slides available in pdf

