# UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



Study program: Integrated Academic Studies in Dental Medicine

Course title: Gnathology

**Teacher:** Dubravka M. Marković, Branislava S. Petronijevic Šarčev, Bojana R. Milekić, Aleksandra Z. Maletin, Milica S. Jeremić Knežević, Daniela J. Đurović Koprivica, Jovana B. Laban Terzija

Course status: compulsory

**ECTS Credits: 5** 

**Condition:** Dental Anatomy

Course aim

Introduction to basic gnathological terms, role of gnathology in dentistry and adoption of basic gnathological principles.

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

Morphology of craniofacial, physiology and craniofacial systems, transmitting the basic parameters of the patients in the environment. Diagnosis and therapy of craniomandibular dysfunctions.

Working with the articulator and facial bow, modeling according to Peter Thomas

## **Course description**

Theoretical education

- Introduction to gnathology
- Craniomandibular connection anatomical specificities
- Craniomandibular connection functional specificities
- Muscles of the OFS, functional specificity of masticatory muscle
- Physiological regulation of jaw movements
- Central regulation of jaw movements
- Anatomical determinants of jaw movements; back (hinged) guidance
- Low jaw movement
- Reference positions of the lower jaw
- Characteristic of physiologically optimal occlusion
- Characteristics of nonphysiological occlusion
- Articulators
- Simulation of eccentric motion of the lower jaw in adjustable articulators
- Functional analysis orofacial complex; importance, methods, scope of analysis
- Evaluation of occlusion complex status
- Analysis of inter jaw relationships
- Symptoms and signs nonphysiological occlusion
- Occlusal therapy
- Irreversible occlusal therapy
- Irreversible occlusal therapy selective grinding
- Etiology, pathology and therapy of tooth abrasion.
- Irreversible occlusal therapy restoration of occlusion using fillings, fixed and mobile replacement. Therapy of patients with malocclusion

#### Practical education

- Craniomandibular joint connection, movement of the lower jaw;
- Articulators types, parts, work with the mid-range articulator
- Portable facial bow, demonstrations
- The mid-point of the lower jaw, finding and registering
- Semi adjustable articulators-positional registry, registration of the position. Analysis of the occlusion on models and in the articulator
- Analysis of tooth contact relationships in the prepared patient models
- Modeling of the occlusal relief according to P. K. Thomas in the upper lateral teeth
- Modeling of the occlusal relief according to P. K. Thomas in the lower lateral teeth
- Functional analysis of the orofacial complex;
- Evaluation of occlusal state complex

- Occlusal trauma
- Irreversible occlusal therapy, creation of Michigan splint

# Literature

Compulsory

1. Dawson PE. Functional Occlusion From TMJ to Smile Design, 2015.

Number of active classes Theoretical: 30 Practice: 45

# **Teaching methods**

Theoretical and practical

Student activity assessment (maximally 100 points)

Statement activity assessment (maximum) 100 points)			
Pre-exam activities	Points	Final exam	points
Lectures	15	Written	
Practices	10	Oral	50
Colloquium	10		
Essay	15		