

Course name

Maxillofacial surgery

Department/chair

Department of Maxillofacial Surgery

Address of the department/chair

Dubrava University Hospital, Avenue Gojko Šušak 6, HR-10000 Zagreb, Croatia

Mandatory or elective course

Mandatory course

Year of study

6th year

Semester

Winter semester

ECTS

6,5 ECTS

Course leader

Prof. Predrag Knežević, MD, PhD; pknezev@kbd.hr

Other teachers on the course

Marko Tarle, MD, PhD, MSc; mtarle@kbd.hr

Number of hours

	Winter semester	Summer semester	Total (winter+summer)
Lectures	-	-	-
Seminars	30	-	30
Practicals	45	-	45
Total	75	-	75

1 hour = 45 minutes

Description and aim of the course

The objective of the course is to master the basic knowledge and skills in maxillofacial surgery theoretically and, in some cases, practically. The course will focus on the specifics of the region and its functional and esthetic significance. Students will be expected to clinically recognize individual fractures of the facial bones and gain insight into further diagnosis and treatment protocol. The goal is to master all theoretical knowledge of the inflammatory processes of the oral cavity, face, jaw, and neck and be able to differentiate them from other less common pathologic conditions in this region. The student will acquire a demonstrated oncologic knowledge of the problems associated with head and neck tumors. They will also become familiar with deformities and malformations of

the facial bones and treatment options, emphasizing the importance and necessity of a team approach to treatment. The course ensures that students learn and apply proper clinical examination of the mouth, face, and jaws, observe the pathologic condition, consider differential diagnostic options and features, and become familiar with treatment protocols.

Course enrolment requirements

There are no prerequisites for enrolment in the 6th year of the integrated undergraduate and graduate dental programme. The course must be taken by all students.

Learning outcomes at the level of the study program to which the subject contributes :

- Knowledge, skills and competencies related to professionalism, ethics and law
- Knowledge, skills and competencies related to communication and social skills
- Knowledge, skills and competencies related to basic knowledge and the ability to gather information from the literature
- Knowledge, skills and competencies related to the collection of clinical information
- Knowledge, skills and competencies related to diagnosis and therapy planning
- Knowledge, skills and competencies related to the therapy, establishment and maintenance of oral health
- Knowledge, skills and competencies related to preventive measures and health promotion

Course learning outcomes

Knowledge

1. Outline surgical protocols for the treatment of facial trauma (order of urgency, specificity of soft tissue blood supply, primary wound care).
2. Define potentially malignant disease of the oral cavity (clinical examination, biopsy) and state indications for neck dissection in patients with head and neck cancer (elective neck dissection, curative neck dissection).
3. Describe methods and protocols for postoperative care of patients after orthognathic surgery (elastic intermaxillary fixation, negative pressure drainage)
4. Classify cleft lip and palate (primary cleft, secondary cleft) and describe treatment protocols for orofacial clefts (use of palatal plate, time period for cleft lip and palate surgery)
5. Describe the methods of reconstruction of defects in the head and neck area after oncological surgery.

Skills

6. Define criteria for identifying benign and malignant skin tumours and list risk factors for their occurrence
7. Perform a physical examination of the traumatized maxillofacial patient
8. Collect patient history data relevant to diseases of the maxillofacial region

Competencies

9. Assist in minor surgical procedures in the maxillofacial region
10. Design flaps to reconstruct skin defects after surgical procedures under local anaesthesia.

Course content

Seminars

	Topics – winter semester	Hours
1.	Introduction to oral and maxillofacial surgery	2
2.	Maxillofacial traumatology (epidemiology, soft tissue injuries and mandibular fractures)	2
3.	Maxillofacial traumatology (middle facial fractures)	2
4.	Facial bone deformities (orthodontic preparation and planning)	2
5.	Facial bone deformities (orthognathic surgery)	2
6.	Plastic and reconstructive surgery of the head and neck (skin circulation, types and division of lobes, types of reconstruction)	2
7.	Inflammations in the maxillofacial region (odontogenic, non-odontogenic and specific inflammations)	2
8.	Differential diagnosis of jaw opacity	2
9.	Oncologic surgery of the head and neck (aetiology, epidemiology, classification, pathology)	2
10.	Tumours of the oral cavity	2
11.	Skin tumours, melanoma, lip tumours	2
12.	Tumours of the paranasal sinuses	2
13.	Tumour and non-tumour salivary gland diseases	2
14.	Maxillofacial malformations (epidemiology, aetiology, most common syndromes)	2
15.	Maxillofacial malformations (treatment)	2

1 hour = 45 minutes

Practicals

	Topics – winter semester	Hours
1.	Patient anamnesis and its specifics in maxillofacial surgery (Department ward)	3
2.	Taking clinical status of a patient with head and neck diseases (Department ward)	3
3.	Examination of patients with head and neck injuries (Department ward)	3
4.	Intermaxillary fixation, osteosynthesis of facial bones (operating room)	3
5.	Examination of patients with facial bone deformity, model analysis and preoperative preparation (Department ward)	3
6.	Mandibular osteotomy, maxillary osteotomy (operating room)	3

7.	Reconstruction of skin defect with local flap (operating room)	3
8.	Reconstruction of large head and neck defects with myocutaneous or microvascular flap (operating room)	3
9.	Postoperative patient care (Department ward)	3
10.	Differential diagnosis of skin changes (outpatient clinic)	3
11.	Neck dissection (operating room)	3
12.	Monoblock resection of intraoral cancer (operating room)	3
13.	Intraoral tumor excision (operating room)	3
14.	New patient admission procedure (outpatient clinic)	3
15.	Lip and palate plastic surgery (operating room)	3

1 hour = 45 minutes

Obligations that students have on the course

Students are required to attend class and complete the tasks assigned to them.

Description of the method of evaluation of students work on the course

During the shift, attendance in class and student activity during seminars and exercises will be recorded.

Exam

The written exam will test the student's knowledge, which will form the final grade for the course.

Exam dates

	November	December	January	February	April	May	June	July	August	September
Dates	The exams will take place immediately after the end of the tour, and the exam dates will be arranged directly with the head of the course.									

Literature (mandatory)

- Ivica Lukšić et al. Maxillofacial Surgery. Sveučilište u Zagrebu: Naklada Ljevak; 2023.

Literature (supplementary)

The list of literature available in Croatian language:

- Virag M: Deset predrasuda i nešto više činjenica o melanomu. Medicinar 45 (3); 14-18, 2004.
- Zorić A, Knežević P, Aras I. Rascjepi usne i nepca-multidisciplinarni pristup. Zagreb: Medicinska naklada; 2014.