

# **ORAL SURGERY**

1. IMPRINT			
Academic Year	2024/2025		
Department	Faculty of Medicine and Dentistry		
Field of study	English Dentistry Division		
Main scientific discipline	Medical Sciences		
Study Profile	General academic		
Level of studies	Uniform MSc		
Form of studies	Full-time program		
Type of module / course	Obligatory		
Form of verification of learning outcomes	Completion		
Educational Unit / Educational Units (and address / addresses of unit / units)	Department of Oral Surgery  Medical University of Warsaw Faculty of Dental Medicine Binieckiego 6 Street  02-097 Warsaw, UCS, floor I Phone No. (22) 116 64 41 Email: zcs1@wum.edu.pl		

Head of Educational Unit / Heads of Educational Units	Prof. Andrzej Wojtowicz, PhD, DDS
Course coordinator	Prof. Andrzej Wojtowicz, PhD, DDS  Michał Oszwałdowski, DDS
Person responsible for syllabus	Michał Oszwałdowski, DDS e-mail: michal.oszwaldowski@wum.edu.pl
Teachers	Prof. Andrzej Wojtowicz, PhD, DDS e-mail: andrzej.wojtowicz@wum.edu.pl Krzysztof Kukuła, PhD, DDS e-mail: krzysztof.kukula@wum.edu.pl Assoc. Prof. Maciej Czerniuk, PhD, DDS e-mail: maciej.czerniuk@wum.edu.pl Marcin Adamiec, PhD, DDS e-mail: marcin.adamiec@wum.edu.pl Michał Oszwałdowski, DDS e-mail: michal.oszwaldowski@wum.edu.pl Fryderyk Zieliński, DDS e-mail: fryderyk.zieliński@wum.edu.pl Rafał Wojda, DDS e-mail: rafał.wojda@wum.edu.pl Jakub Kołodziejek, DDS e-mail: Jakub.kolodziejek@wum.edu.pl Michał Makuch, DDS e-mail: michal.makuch@wum.edu.pl Adam Jakimiak, DDS e-mail: michal.makuch@wum.edu.pl

2. BASIC INFORMATION				
Year and semester of studies	Year IV, semester VII and VIII	Number of ECTS credits	6	
FORMS OF CLASSES		Number	ECTS credits calculation	
Contacting hours with academic teacher		of hours		
Lecture (L)		12 (on-line e- learning)	0,4	

Seminar (S)	20	0,6	
Discussions (D)	87	2,9	
e-learning (e-L)	0	0	
Practical classes (PC)	0	0	
Work placement (WP)	0	0	
Unassisted student's work			
Preparation for classes and completions	63	2,1	

3.	COURSE OBJECTIVES
C1	Acquiring knowledge enabling the recognition and differentiation of pathologies within the oral cavity in the field of dental surgery.
C2	Acquiring the skills enabling the recognition and differentiation of pathologies within the oral cavity in the field of dental surgery.
С3	Gaining the knowledge and skills allowing for independent performance of basic preventive and therapeutic treatments of oral cavity diseases in the field of dental surgery and keeping medical records.
C4	Acquiring skills required to determine about referring a patient for treatment to the Department of Cranio-Maxillofacial Surgery and related specialties.

# 4. STANDARDS OF LEARNING — DETAILED DESCRIPTION OF EFFECTS OF LEARNING Code and number of effects of learning in accordance with standards of learning. Effects in the field of:

## Knowledge – Graduate\* knows and understands:

F.W4	symptoms, course and management in selected diseases of the oral cavity, head and neck, considering age groups;
F.W6	principles of management in the case of diseases of the periapical tissues;
F.W8	principles of management in the case of cysts, precancerous conditions and head and neck cancers;
F.W10	indications and contraindications for treatment with the use of dental implants;
F.W13	principles of antibiotic therapy and antibiotic resistance;

F.W15	therapeutic methods for reducing and relieving pain and reducing anxiety and stress;
F.W16	principles of anesthesia in dental procedures and basic pharmacological agents;
F.W19	pathomechanism of the influence of oral cavity diseases on general health;
F.W20	pathomechanism of the impact of general diseases or therapies on the oral cavity;
F.W23	the specificity of dental care for a patient burdened with a general disease and the principles of cooperation with the physician in charge of the underlying disease.

# Skills- Graduate\* is able to:

conduct a medical interview with the patient or his family;
conduct a dental physical examination of the patient;
explain to the patient the essence of his ailments, establish the treatment method confirmed by the patient's nformed consent and the prognosis;
provide the patient or his family with information about an unfavorable prognosis;
collect and preserve material for diagnostic tests, including cytological tests;
nterpret the results of additional tests and consultations;
determine indications and contraindications for a specific dental procedure;
conduct treatment of acute and chronic, odontogenic and non-odontogenic inflammatory processes within soft cissues of the oral cavity, periodontium and jaws;
proceed in the event of general and local complications during and after dental procedures;
prescribe medications, considering their interactions and side effects;
keep current patient records, prescribe referrals for tests or for a specialized dental and medical treatment;
formulate research problems in the field of dentistry;
present selected medical problems in oral or written form, in a manner adequate to the level of recipients;
establish treatment in diseases of the stomatognathic system tissues;
use appropriate medications during and after dental surgery to relieve pain and anxiety;

<sup>\*</sup> In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

5. Addition	5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)		
Number of effect of learning	Effects of learning i time		

# Knowledge – Graduate knows and understands:

K1			
K2			
Skills- Graduate is	able to:		
S1			
S2			
Social Competencies – Graduate is ready for:			
SC1	Competencies gained by students after year IV should allow them to collaborate individually with the patient under supervision of a teaching assistant. This involves sufficient knowledge and skills that allow students to independently take medical history and perform physical examination, perform local anaesthesia and simple tooth extractions under supervision of a teaching assistant.		
SC2			

6. CLASSES			
Form of class	Class contents	Effects of Learning	
	L1 - Lecture 1 Introduction to oncology, HPV. (Oncogenic factors, precancerous conditions, pre-invasive cancer. Mechanism of growth of tumors at the level of cells and tissues. Effect of viruses on oncogenesis). Real-time form of elearning.	F.W.4, F.W.8	
	L2 - Lecture 2 Management of odontogenic tumors and dental abnormalities. (Classification and differentiation of odontogenic tumors. Clinical picture, diagnosis, and treatment. Developmental disorders of teeth, indications for tooth extraction). Real-time form of e-learning.	F.W.4, F.W.8	
Lectures	L3 - Lecture 3 Specificity of surgical treatment in children. (The ontogenesis of the dental organ. Surgical procedure with teeth in developmental age. Dental abnormalities. Indications for tooth extraction in the period of deciduous, mixed, and permanent dentition). Real-time form of e-learning.	F.W.4, F.W.13, F.W.16, F.W.15	
	L4 - Lecture 4 Maxillary sinus diseases. (Anatomy and physiology of the paranasal sinuses. Inflammation and odontogenic causes. Diagnostics and treatment. Causes and methods of treatment of the oroantral communication. Cysts and tumors of the maxillary sinus.) Real-time form of e-learning.	F.W.4, F.W.8., F.W.10, F.W13	
	L5 - Lecture 5 Application of novel solutions in implant and regenerative procedures in oral surgery. (The basics of implantology, types of dental implants. The term osseointegration. The use of tissue engineering achievements in tissue regeneration. The use of bone substitute materials in the treatment of bone defects.) Real-time form of e-learning.	F.W. 10	

	L6 - Lecture 6 Cysts of the jaws, diagnostics, management. (Classification of maxillary cysts, odontogenic and non-odontogenic cysts. Cyst growth mechanism. Diagnostics and treatment). Real-time form of e-learning.	F.W.4, F.W.6, F.W.8
	S1. Inflammation - general information, types of inflammation (General information on the pathophysiology of inflammation, definition, clinical symptoms, appearance of tissue changes. Acute and chronic, specific, non-specific, limited, diffuse, primary and secondary inflammations. Dental and non-odontogenic.)	F.W.4, F.W.13, F.W.19, F.W.20, F.W.23
	S2. Odontogenic inflammations (non-specific). Routes of infection spread from the periapical region in the mandible and maxilla - periodontal ligament inflammation, periostitis, subperiosteal abscess, submucosal abscess, subcutaneous abscesses, involvement of spaces - clinical presentation, differentiation. (Topography of anatomical spaces, pathways of inflammation spread. Definition of abscess, empyema, inflammatory infiltrate, phlegmon. Diagnostics and treatment.)	F.W.4, F.W.13, F.W.19, F.W.20, F.W.23
	S3. Abscesses of interfacial spaces, routes of spread, diagnosis, management. (Topography of anatomical spaces, pathways of inflammation spread. Definition of abscess, empyema, inflammatory infiltrate, phlegmon. Diagnostics and treatment.)	F.W.4, F.W.13, F.W.19, F.W.20, F.W.23
	S4. Osteomyelitis of the jaws: acute, chronic, diagnosis and management. Complications of inflammation of the oral cavity. (Causes of osteitis, clinical picture, methods of treatment of acute and chronic osteitis. Effect of radio and chemotherapy on the formation of osteitis.)	F.W.4, F.W.13, F.W.19, F.W.20, F.W.23
seminars	S5. Specific infections: actinomycosis, syphilis, tuberculosis (clinical symptoms in the oral cavity). Complications of oral inflammation. (Causes and clinical picture of specific inflammations. Diagnostics and treatment methods.	F.W.4, F.W.13, F.W.19, F.W.20, F.W.23
	S6. Test  S7. The role of the surgeon in preparing the patient for orthodontic treatment. (Orthodontic indications for tooth extraction. When to perform procedures. Exposing impacted teeth. Germectomy procedure.)	F.W. 4
	S8. Odontogenic diseases of sinuses. Diagnosis and management. (Effect of odontogenic inflammations on sinusitis. latrogenic causes of sinus mucosa inflammation. Anatomical conditions favoring the spread of odontogenic inflammations to the lumen of the maxillary sinus.)	F.W.4, F.W.8., F.W.10, F.W.13
	S9. Surgical preparation of the oral cavity for prosthesis. (Discussion of surgical procedures performed in hard and soft tissues. Tissue corrective procedures, tissue regeneration. Reconstruction of the ridge in horizontal and vertical dimensions.  Soft tissue management.)	F.W.4, F.W.10, F.W.23
	S10. Materials in guided tissue regeneration. Augmentation procedures, indications, and patient selection.	F.W.10, F.W.23
	(What is the Lynch triad. Classification of bone substitutes, barrier membranes. Resorbable and non-resorbable materials. Use of growth factors and stem cells for guided bone	

regeneration.)	
S 11 Test	
S.12 Augmentation procedures, indications and patient selection, presentation of cases.	F.W.10, F.W.23
S13. Primary and permanent tooth trauma indications, treatment techniques. Impacted supernumerary teeth. (Classification of injuries according to Andreasen. Orthopedic and surgical treatment methods. Management of dislocated teeth. Dental replantation procedures.)	F.W.4, F.W.13, F.W.15, F.W.16
S14. Surgical removal of impacted and supernumerary teeth (indications, surgical techniques). (Classification of impacted teeth. Differentiation of partially and fully impacted, non-erupted teeth)	F.W.4, F.W.8, F.W.13, F.W.15, F.W.16, F.W.19
S15. Soft tissue cysts of the oral cavity, face and neck: epidermoid, dermoid, salivary, lateral and medial of the neck. Cyst treatment methods. (Mucocele and developmental cysts mechanism of formation, image clinical, diagnosis, treatment.)	F.W. 8
S16. Oral implantology – introduction, indications, patient selection. (Discussion of implantological techniques. Immediate, early, and delayed implantation. Indications and contraindications, local and general.)	F.W.10, F.W>23
S17 Test	
S18. Premalignant lesions: diagnosis, management (presentation of clinical cases). (Definition of the precancerous state, tissue appearance, clinical picture. Methods of early cancer detection.)	F.W4, F.W8
S19. Neoplasms of the oral cavity - introduction, types of neoplasia, sample collection for histopathologic evaluation. (Discussion of the basic groups of neoplasms of epithelial and connective tissue origin. Presentation of the clinical classification of TNM. Discussion of the mechanism of growth and spread of head and neck tumors. Principles of collecting and storing tissue material for examination.)	F.W.4, F.W.8, F.W.20, F.W.23
S20. Apicoectomy (indications, contraindications, surgical techniques). Short test. (Mechanism of periapical lesions formation. Discussion treatments, peri-procedure procedures, tissue healing process, prognosis.)	F.W.4, F.W.8, F.W.16
S21. Odontogenic tumours (etiopathogenesis, types, diagnosis, management, differentiation). (Classification of odontogenic tumors true neoplasms and hamartomatous changes, incidence, clinical picture)	F.W.4, F.W.8
S22. Tumour-like lesions of the jaws: epulides, central granulomas, fibrous dysplasia, cherubism. Lesions of the jaws in other diseases (histiocytosis, Langerhans cell histiocytosis). (Differentiation of hyperplastic and hyperplastic lesions from tumors cancerous. Clinical picture, diagnosis and treatment.)	F.W.4, F.W.8, F.W.23
S 23. Test on the subject of seminars and lectures.	

	PC - practical classes	
	PC1. Clinical aspects and instruments used in atraumatic tooth extraction.	F.U.7, F.U.11
	PC2. Clinical management in the event of intraoperative complications	F.U.9, F.U.16
	PC3. Incision of intraoral abscesses	F.U.8, F.U.15
	PC4. Incision of extraoral abscesses PC5. Dry socket	F.U.8, F.U.15 F.U.8, F.U.15
	PC6. Alveolar inflammation	F.U.8, F.U.15
	PC7. Pathways of spreading odontogenic inflammation between anatomical spaces - clinical aspects	F.U.1, F.U.2, F.U.3, F.U.7, F.U.9
	PC8. Differentiation of the spread of odontogenic inflammation based on the medic history and clinical examination	F.U.12
	PC9. Management of oro-antral communication and providing indications after oro-antral communication closure.	F.U.1, F.U.2, F.U.3, F.U.7, F.U.9, F.U.12
	PC10. The use of antibiotics, including their interactions and side effects	F.U.9,F.U.16
	PC11. Use of NSAIDs including their interactions and side effects	F.U.9, F.U.16
Practical classes	PC12. Clinical assessment of the healing process of open and closed wounds	F.U.8
	PC13. Types of surgical sutures and their application - practical use of materials	F.U.9
	PC14. Pre-prosthetic surgery – treatments on soft tissues	F.U. 3, F.U.12, F.U.13
	PC15. Pre-prosthetic surgery - treatments on hard tissues	F.U.3, F.U.12, F.U.13
	PC16. Odontogenic diseases of the maxillary sinuses - clinical impact	F.U.8, F.U.9
	PC17. Differentiation of changes in the maxillary sinuses - assessment of additional tests	F.U.1, F.U.2, F.U.3, F.U.4
	PC18. Examination of the temporomandibular joint	F.U.8
	PC19. Inflammatory conditions of the temporomandibular joint	F.U.8
	PC20. Methods of treating inflammation of the temporomandibular joint	F.U.1, F.U.2, F.U.12
	PC21. Types of neuralgia and their differentiation	F.U.1, F.U.2, F.U.6, F.U.12
	DC22. Duran continue to the conformal distribution of the conforma	F.U.1, F.U.2, F.U.6, F.U.12
	PC22. Provocative tests performed in the diagnosis of neuralgia	F.U.12, F.U.15
	PC23. Diagnosis and differentiation of craniofacial pain	F.U.9, F.U.10, F.U.16

PC24. Clinical aspects of root tip resection			
PC25. Proceedings in the case of inferior alveolar nerve palsy	F.U.9,	F.U.10, F.U.16	
	F.U.9,	F.U.10,	F.U.16
PC26. Management in case of heavy bleeding during the procedure	F.U.9,	F.U.10, F.U.16	
PC27.Management of post-extraction bleeding	F.U.9,	F.U.10, F.U.16	
PC28. Management of the root apex fracture	F.U.9,	F.U.10,	F.U.16
PC29. Management in the case of emergencies in the dental office - clinical aspects	F.U.5		
PC30. Practical learning of collecting material for histopathological examination			

### 7. LITERATURE

### **Obligatory**

- 1. James R. Hupp, Myron R. Tucker, Edward Ellis, III: Contemporary Oral and Maxillofacial Surgery. Mosby 2013; 6th edition
- 2. Karl R. Koerner: Manual of Minor Oral Surgery for the General Dentist. Wiley-Blackwell 2006; 1st edition
- 4. Paul Coulthard, Keith Horner, Philip Sloan, Elizabeth Theaker: Master Dentistry Volume 1. Oral and Maxillofacial Surgery, Radiology, Pathology and Oral Medicine. Churchill Livingstone 2013, 3rd edition
- 5. Roderick A. Cawson, Edward W. Odell: Cawson's Essentials of Oral Pathology and Oral Medicine. Churchill Livingstone 2008, 8th edition
- 6. James R. Hupp, Elie M. Ferneini: Head, Neck and Orofacial Infections: An Interdisciplinary Approach. Elsevier Inc. 2016,
- 7. Matteo Chiapasco, Manual of Oral Surgery. III Edition; Editorial Edra 2018

### Supplementary

- 1. Scientific journals: Oral Surgery, Oral Medicine, Oral Pathology, Oral Radiology, Journal of Oral and Maxillofacial Surgery, Journal of Oral Pathology & Medicine etc.
- 2. James L. Hiatt, Leslie P. Gartner: Textbook of Head and Neck Anatomy. Lippincott Williams & Wilkins 2009; 4th Edition

8. VERIFYING THE EFFECT OF LEARNING					
Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion			
Knowledge: K4, K6, K8, K10, K13, K15, K16, K19, K20, K23	Tests and colloquiums summarising each section of lectures and seminars.  Questions can be single or multiple choice. Correction of the test - oral test / answer.	Presence at seminars is obligatory. Passing tests – colloquiums is obligatory.			
	Presence at seminars is obligatory. Justified miss on seminar is required to be made up at a different date. The date and form of the seminars should be agreed with the assistant.	Each student has two dates for passing the colloquium. Of which the second term is the term intended for resit. In case			

	Quizzes on the topic currently being taught at the seminar or on topics previous seminars. They may be unannounced. Form: written.	of obtaining a grade insufficient on the first and on the second date, the student has the opportunity to pass the board test after obtaining written consent from Head of the Department.  Test is passed at >60% correct answers.  Grade Criterion 2.0 (failed) <60% 3.0 (sat.) >= 60% <68% 3.5 (r. good) >= 68% <75% 4.0 (good) >= 75% <82% 4.5 (m.t. good) >= 82% <90% 5.0 (v. good) >= 90%  The condition for the final pass of the year is to pass each seminar and pass all tests on the thematic scope of lectures and seminars.
Skills – F.U1, F.U2, F.U3, F.U4, F.U5, F.U6, F.U7, F.U8, F.U9, F.U10, F.U11, F.U12, F.U13, F.U15, F.U16	Reports from practical classes (tables of performed procedures)  Practical class performance review.	No missed classes (one justified miss in the Academic year is allowed). Justified miss (more than once) on seminar or practical class is required to be made up at a different date other than scheduled classes. (e.g. semester break).  Tables of performed procedures

### 9. ADDITIONAL INFORMATION

Lectures in the winter semester convey newest reports from consensuses and latest standards in oral surgery. Attendance to lectures is a necessary element to acquire modern knowledge and simultaneously provides solutions to distinguishing exam questions. Presence at lectures will be verified by attendance lists.

The grade from the 4th year is a component of the final grade in the subject.

Person responsible for didactics - Wojciech Popowski PhD, DDS, Michał Oszwałdowski DDS

Information on consultation hours available on the bulletin board at the department.

Students shall present for classes with protective clothing, footwear (changed) and identification badges.

The Students Scientific Association at the Department of Oral Surgery brings together students of dentistry from years 3, 4 and 5. Working in the association allows to broaden knowledge in oral surgery and prepare research projects individually or in teams. Lectures on interesting topics are held during scientific meetings of the Association. Students have the opportunity to present results from their research work on annual regional and national scientific conferences. Active members of the Scientific Association organize and

participate in oral surgery and implant dentistry congresses.

Announcements about Students Scientific Association can be found on the bulletin board at the department.

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### **ATTENTION**

The final 10 minutes of the last class in the block/semester/year should be allocated to students'
Survey of Evaluation of Classes and Academic Teachers