



Pomorski Uniwersytet Medyczny w Szczecinie

SYLLABUS of the MODULE (DENTAL SURGERY) General Information

| Module title: Dental Surgery | |
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| Module type | Obligatory |
| Faculty PMU | Faculty of Dentistry |
| Major | Dentistry |
| Level of study | long-cycle (S2J) |
| Mode of study | full-time studies |
| Year of studies, semester | Year 4, semester VII and VIII |
| ECTS credits (incl. semester breakdown) | 7 ECTS |
| Type/s of training | lectures (18 h) /seminars (20 h)/ practical (80 h), sum 118 h |
| Form of assessment* | <input checked="" type="checkbox"/> graded assessment: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> descriptive <input checked="" type="checkbox"/> test <input checked="" type="checkbox"/> practical <input checked="" type="checkbox"/> oral <input type="checkbox"/> non-graded assessment <ul style="list-style-type: none"> <input type="checkbox"/> final examination <ul style="list-style-type: none"> <input type="checkbox"/> descriptive <input type="checkbox"/> test <input type="checkbox"/> practical <input type="checkbox"/> oral |
| Head of the Department/ Clinic, Unit | Katarzyna Barczak, MD, Ph.D., Assoc. Prof. |
| Tutor responsible for the module | Rok IV; DDS Joanna Andrzejak e-mail:joanna.andrzejak@pum.edu.pl Rok IV EP; DDS Patrycja Pawlik e-mail:patrycja.pawlik@pum.edu.pl DDS Alicja Rutkowska e-mail: alicja.rutkowska@pum.edu.pl |
| Department's/ Clinic's/ Unit's website | Department of Endodontic Surgery al. Powstańców Wlkp. 72, 70-111 Szczecin tel. 91 466-17-36 |

* replace into where applicable

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| Language | English |
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Detailed information

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| <p style="text-align: center;">Module objectives</p> | <p>The main goal of this program is to prepare future dentists to provide dental treatment to both children and adult patients. Particular emphasis will be placed on developing clinical thinking skills, being able to take a patient's medical history and carry out a clinical examination, perform diagnostic procedures, and conduct differential diagnosis. The acquired detailed knowledge of the etiopathogenesis of inflammatory and neoplastic diseases of the oral cavity and face, as well as becoming familiar with the basic medications used in the pharmacotherapy of oral and facial conditions, will enable graduates to effectively manage selected oral, head, and neck conditions in children and adult patients. Furthermore, the acquired skills in selecting and implementing various preventive methods for oral diseases and the stomatognathic system as a whole, promoting health education and encouraging health-promoting behaviors will allow for individualized planning of preventive and therapeutic procedures, as well as the implementation and evaluation of programs for individuals at high risk of masticatory diseases. Graduates will acquire knowledge of the interrelationships between general medicine and dentistry, the impact of general diseases and their treatment methods on dental care, as well as the ability to recognize symptoms of systemic diseases manifesting in the oral cavity. Students will learn to diagnose and undertake appropriate dental treatment before surgical procedures, radiotherapy, and chemotherapy.</p> | |
| <p style="text-align: center;">Prerequisite /essential requirements</p> | <p>Knowledge</p> | <p>Students must possess basic knowledge and principles of disinfection, sterilization, and aseptic procedures, as well as knowledge of dental office equipment, their use, and instrumentation. Students must also possess the knowledge of basic drug groups (their composition, properties and intended use), as well as materials used in dental surgery. Knowledge of the anatomy of the facial skeleton, etiopathogenesis of inflammatory and neoplastic diseases of the oral cavity and facial region are also required. The knowledge of basic medications used in the pharmacotherapy of oral and facial conditions is also required.</p> |
| | <p>Skills</p> | <p>Students must be able to work in a dental office with ergonomics and occupational safety in mind. Students are required to interpret basic and any additional laboratory tests, as well as describe and interpret basic radiological images and examinations of the head and neck region.</p> |
| | <p>Competences</p> | <p>Students are required to possess the habit of self-education, the ability to establish contact with patients, as well as teamwork skills.</p> |

| Description of the learning outcomes for the subject /module | | | |
|---|--|---|---|
| No. of learning outcome | Student, who has passed the (subject) knows /is able to /can: | SYMBOL (referring the standards) | Method of verification of learning outcomes* |
| W01 | The student knows and understands the principles of preventive and therapeutic treatment of oral cavity/masticatory diseases at various stages of its development | F.W2 | K W PM |
| W02 | The student knows and understands the symptoms, course and procedures for specific diseases of the oral cavity, head and neck, taking into account various age groups | F.W4 | K W S |
| W03 | The student knows and understands the principles of treatment in the case of periapical tissue diseases | F.W6 | R K W PM |
| W04 | The student knows the procedures involved in the treatment of cysts, precancerous conditions and head and neck cancers | F.W8 | W PM S |
| W05 | The student knows and understands the causes of complications involved with diseases of the stomatognathic system, as well as treatment protocol in the event of complications | F.W12 | R K W PM |
| W06 | The student knows and understands therapeutic methods for reducing and eliminating pain, as well as reducing anxiety and stress in patients | F.W15 | R K W PM |
| W07 | The student knows and understands the principles of anesthesia in dental procedures and has basic knowledge of pharmacological agents used in dental surgery | F.W16 | R K W PM |
| W08 | The student knows and understands the principles of treatment in the case of masticatory diseases, injuries to the teeth and the maxilla/mandible | F.W22. | R K W PM |
| W09 | The student knows and understands the specifics of dental care for a patient with a general disease, as well as the principles of teamwork with the main doctor treating the underlying systemic disease | F.W23. | R K W PM |
| U01 | The student is able to conduct a medical interview with the patient and his/her family | F.U1. | R K PM |
| U02 | The student is able to perform a dental examination | F.U2. | R K PM |
| U3 | The student is able to explain to the patient the nature of his/her ailment, determine the proper treatment protocol based on the patient's informed consent and the prognosis of the disease | F.U3. | SP, RZĆ R |

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| U4 | The student is able to provide the patient or his/her family with proper information about an unfavorable prognosis | F.U4. | SP RZĆ R |
| U5 | The student is able to collect and preserve tissue material for diagnostic tests, including cytological tests | F.U5. | S SP |
| U6 | The student is able to interpret the results of additional tests and consultations | F.U6. | SP PS |
| U7 | The student is able to keep up with current patient records, write referrals to other dental specialists as well as referrals for general medical tests and/or treatment | F.U11. | SP PS R |
| U8 | The student is able to formulate research problems in the field of dentistry | F.U12. | SP RZĆ |
| U9 | The student can present selected medical problems orally or in writing in a manner appropriate to the patient's level | F.U13. | SP RZĆ |
| U10 | The student is able to use appropriate medications during and after dental procedures to relieve pain and anxiety | F.U16 | K R SP |
| K01 | The student is ready to act in the best interests of the patient | K.2. | K R SP |
| K02 | The student is ready to respect medical confidentiality and patient rights | K.3. | SP K |
| K03 | The student is ready to give proper medical care to the patient based on ethical principles with awareness of the social conditions and limitations resulting from the disease | K.4. | W R S |
| K04 | The student is ready to notice and recognize his/her own limitations, make a self-assessment of deficits and educational needs | K.5. | R, SP |
| K05 | The student is ready to promote health-promoting behaviors in a patient | K.6. | SP, R |

Table presenting LEARNING OUTCOMES in relation to the form of classes

| No. of learning outcome | Learning outcomes | Type of training | | | | | | |
|-------------------------|-------------------|------------------|---------|-----------|------------------|-------------|------------|----------|
| | | Lecture | Seminar | Practical | Clinical classes | Simulations | E-learning | Other... |
| W01 | F.W2 | x | x | | x | | | |
| W02 | F.W4 | x | x | | x | | | |
| W03 | F.W6 | x | x | | x | | | |
| W04 | F.W8 | | | | | | | |
| W05 | F.W12 | x | x | | x | | | |
| W06 | F.W15 | x | x | | x | | | |
| W07 | F.W16 | x | x | | x | | | |
| W08 | F.W22. | x | x | | x | | | |
| W09 | F.W23. | x | x | | x | | | |

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|-----|--------|---|---|--|---|--|--|--|
| U1 | F.U1. | x | x | | x | | | |
| U2 | F.U2. | x | x | | x | | | |
| U3 | F.U3. | | x | | x | | | |
| U4 | F.U4 | | | | x | | | |
| U5 | F.U5 | | | | x | | | |
| U6 | F.U6. | | x | | x | | | |
| U7 | F.U11. | | x | | x | | | |
| U8 | F.U12. | | x | | x | | | |
| U9 | F.U13. | | x | | x | | | |
| U10 | F.U16. | | x | | x | | | |
| K1 | K.2. | | | | X | | | |
| K2 | K.3. | | | | X | | | |
| K3 | K.4. | | | | X | | | |
| K4 | K.5. | | | | X | | | |
| K5 | K.6 | | | | x | | | |

| Table presenting TEACHING PROGRAMME | | | |
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| No. of a teaching programme | Teaching programme | No. of hours | References to learning outcomes |
| Winter semester | | | |
| Lectures | | | |
| TK01 | Introduction to diagnosis and treatment in dental surgery, current guidelines for the use of antibiotic therapy | 1 | W01, W02, W04, W07 |
| TK02 | Techniques and types of incisions in dental surgery. The role of suturing in proper healing after surgical procedures. | 1 | W03, W04, W08 |
| TK03 | Complications during and after tooth extraction, prevention and treatment. | 1 | W01, W02, W03, W05, W08 |
| TK04 | Surgical techniques for the treatment of impacted, supernumerary, and additional teeth. Radiological diagnosis and post-operative management. | 2 | W01, W02, W03, W05, W06, W07, W08, W09 |
| TK05 | Atraumatic methods of tooth extraction. | 1 | W01, W02, W03, W05, W06, W07, W08, W09 |
| TK06 | Endodontic microsurgery. Root apex resection, hemisection, radectomy, premolarization. Indications, contraindications, principles of given procedures and failures. | 1 | W01, W02, W03, W05, W06, W07, W08, W09 |
| TK07 | The specificity and course of inflammatory processes in the neck and facial region. Diagnosis and treatment. Causes of peri maxillary infections. | 2 | W01, W05, W08, W09 |
| Seminars | | | |
| TK01 | Indications and contraindications for tooth extraction, extraction techniques, post-extraction complications and management. Current guidelines for the use of antibiotic therapy in dental surgery. | 3 | W01, W02, W03, W05, W08 |

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| TK02 | Surgical extraction of impacted teeth, indications and contraindications for the procedure, complications. | 3 | W01,W02,W03,W05 W06,W07,W08,W09 |
| TK03 | Endodontic microsurgery. Root apex resection, hemisection, radectomy, premolarization. Indications, contraindications, principles of given procedures and failures. | 3 | W01,W02,W03,W05 W06,W07,W08,W09 |
| TK04 | Specific and nonspecific inflammation of the tissues of the neck and facial skeleton. Odontogenic and non-odontogenic inflammation, causes, diagnosis, and treatment. | 3 | W01,W05,W08,W09 |
| TK05 | Types and techniques of anesthesia in dental surgery, complications and prevention. Pharmacological methods for post-operative pain management and treatment of post-operative inflammation. | 3 | W01, W06 |
| Practical classes | | | |
| TK06 | Surgical tooth extraction techniques. Impacted teeth issues. Post-extraction complications (oroantral communication) | 20 | W1,W3,W4,U1,U2,U5 |
| TK07 | Suturing techniques. | 15 | W1,W3,W4,U5,K1,K2 |
| TK08 | Odontogenic inflammatory diseases, intraoral abscesses. Diagnostics and treatment. | 10 | W5,W8,W9,K1, K2,U6,U7,U8 |
| Simulation | | | |
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| | | | |
| E-learning | | | |
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| Summer semester | | | |
| Lectures | | | |
| TK01 | Pharmacological preparation of patients for dental surgery procedures with systemic diseases, in particular patients taking bisphosphonates and patients with bleeding disorders. | 1 | W01,W02,W03,W05 W06,W07 |
| TK02 | Paranasal sinus diseases. Oroantral communications, diagnosis and treatment. | 1 | W01,W02,W04,W06 |
| TK03 | Diseases of the salivary glands. | 1 | W01,W02,W04,W05 |
| TK04 | Diseases and treatment of the temporomandibular joint. | 1 | W01,W02,W03,W04 W05,W06,W07 |
| TK05 | Maxillary and mandibular cysts, diagnosis and treatment. | 1 | W01,W03,W05 |
| TK06 | Introduction to implantology, types of implantation methods, indications and contraindications for the procedure, post-operative complications. | 1 | W01,W02,W03,W05 W06,W07,W08 W09 |
| TK07 | Periodontal surgery procedures before and during implantation treatment. Bone grafting materials, barrier membranes, complications and post-operative complications. | 1 | W01,W02,W03,W05 W06,W07,W08 W09 |
| TK08 | Surgical preparation of the prosthetic base. | 1 | W01,W02,W03,W05 W06,W07,W08,W09 |
| TK09 | Introduction to oncology, patient examination. Benign, locally malignant and malignant lesions. | 1 | W01,W02,W04 W05,W08 |

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| | Collection of biological material for histopathological examination. | | |
| Seminars | | | |
| TK01 | Introduction to implantology, indications and contraindications, types of implantation methods, post-operative complications. Bone augmentation procedures in implant-prosthetic treatment, barrier membranes, PRF. | 3 | W02, W03, W05, W05 |
| TK02 | Paranasal sinus diseases. Oroantral communication, diagnosis and treatment. | 2 | W1, W2, W04, |
| Practical classes | | | |
| TK03 | Salivary gland diseases and inflammation – classification, etiopathogenesis, differentiation. Diagnostics, treatment strategies. | 10 | W1, W3, K3, K4, U1, U2 |
| TK04 | Soft tissue cysts of the maxillofacial region. Differential diagnosis and treatment. | 10 | W5, W8, W9, U4, U5, K4, |
| TK05 | Endodontic microsurgery. Root apex resection, hemisection, radectomy, premolarization. Indications, contraindications, treatment procedures, post-operative complications. | 5 | W1, W2, W3, U1, U2, U7, K1, K2, K5 |
| TK02 | Treatment of patients under general anesthesia in a dental office. | 10 | W01, W02, W06, W07, W09, U01, U02, U06, K02 |
| Simulation | | | |
| | | | |
| E-learning | | | |
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| Booklist |
| Obligatory literature: |
| 1. Chirurgia stomatologiczna i szczękowo-twarzowa. Tom I-III , red. nauk. Mansur Rahnama. Warszawa: PZWL Wydawnictwo Lekarskie, 2024 |
| 2. |
| Supplementary literature: |
| 1. |
| 2. |
| Procedures required to complete the year: |
| 2 extractions 5 dressings 5 suturing procedures 10 assists during procedures (including 3 assists during surgical procedures in the surgical department) |

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| Student's workload | |
| Form of student's activity (in-class participation; activeness, produce a report, etc.) | Student's workload [h] |
| | Tutor |

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| Contact hours with the tutor | 118 |
| Time spent on preparation to seminars/ practical classes | 30 |
| Time spent on reading recommended literature | 20 |
| Time spent on writing report/making project | 5 |
| Time spent on preparing to colloquium/ entry test | 10 |
| Time spent on preparing to exam | 20 |
| Other | |
| Student's workload in total | 203 |
| ECTS credits for the subject (in total) | 7 |
| Remarks | |
| | |

* Selected examples of methods of assessment:

EP – written examination

EU – oral examination

ET – test examination

EPR – practical examination

K – colloquium

R – report

S – practical skills assessment

RZC – practical classes report, incl. discussion on results

O – student's active participation and attitude assessment

SL – lab report

SP – case study

PS - assessment of student's ability to work independently

W – entry test

PM – multimedia presentation

other...