

**Pomeranian Medical University in Szczecin** 

# SYLLABUS of the MODULE (SUBJECT) General Information

Module title: PERIODONTAL AND MUCOUS MEMBRANE DISEASES				
Module type	Obligatory			
Faculty PMU	Faculty of Medicine and Dentistry			
Major	Dentistry			
Level of study	long-cycle (S2J)			
Mode of study	full-time studies			
Year of studies, semester	year 5 (semester IX and X)			
ECTS credits (incl. semester breakdown)	7 ECTS (semester IX-4, semester X-3)			
Type/s of training	seminars (14h)/ practical 81h (sem. IX-36h, sem. X-45h)			
Form of assessment*	□graded assessment: □descriptive □test □practical □oral □non-graded assessment ⊠final examination □descriptive ⊠test □practical □oral			
Head of the Department/ Clinic, Unit	Dr hab. n. med. Monika Machoy			
Tutor responsible for the moduledr hab. n. med. Małgorzata Mazurek-Mocho				
Department's/ Clinic's/ Unit's website	Department of Periodontology e-mail: perio@pum.edu.pl phone: 914661745 https://www.pum.edu.pl/wydzialy/wydzial-lekarsko- stomatologiczny/zaklad-periodontologii			
Language	English			

 $<sup>^*</sup>$  replace  $\Box$  into  $\boxtimes$  where applicable

# **Detailed information**

Module objectives		<ul> <li>The aim of Periodontal and Mucosal Diseases is to:</li> <li>acquire practical skills in the diagnosis, differentiation, and comprehensive treatment of periodontal diseases,</li> <li>learn practical cooperation with patients with periodontal disease and the use of basic periodontal treatments in prevention, treatment and preservation of treatment effects,</li> <li>integrate knowledge of basic disciplines of the impact of periodontal disease on the general health of the patient,</li> <li>familiarize students with the symptomatology, diagnosis and preventive treatment of selected diseases of oral mucosa, with particular emphasis on changes and precancerous conditions,</li> <li>acquire the ability to use additional examinations,</li> <li>acquire skills in treatment of diseases of oral mucosa including pharmacological and physical therapy.</li> </ul>
Prerequisite /essential	Knowledge	<ul> <li>Knowledge of:</li> <li>anatomy and physiology of parodontium,</li> <li>principles of ergonomics and periodontal instrumentation,</li> <li>types of periodontal diseases, diagnostic criteria and differentiation of periodontal disease,</li> <li>algorithm of action in individual clinical periodontal disease,</li> <li>impact of periodontal disease on the general health of the patient,</li> <li>diagnostics and principles of treatment planning in occlusal trauma, masticatory parafunctions and functional disorders of the temporomandibular joint.</li> <li>the anatomy and physiology of oral mucosa,</li> <li>oral microbiology,</li> <li>rules for collecting biological material for microbiological, cytological and histological examination;</li> <li>the capabilities and the use of immunoassays in the histopathological diagnosis of selected diseases of oral cavity.</li> </ul>
requirements	Skills Competences	<ul> <li>Skills of:</li> <li>using the periodontal instruments,</li> <li>work according to the principles of ergonomics and teamwork including the "four hands" work,</li> <li>subject survey, determining the health of parodontium and oral mucosa,</li> <li>prevention and basic treatment of periodontal diseases.</li> <li>An ability to:</li> <li>diagnose deviations from the physiology of oral cavity,</li> <li>interpret the results of additional blood tests,</li> <li>check blood pressure, handling shock and cardiac arrest,</li> <li>communicate in a professional way with patients of all ages,</li> <li>manage patient medical records.</li> <li>A habit of self-education, teamwork, use of all available sources of medical knowledge, respect for professional secrecy, an awareness of the need for cooperation of dentist with doctors of other specialties, cooperation in a team</li> </ul>

patient-doctor-dental assistant.

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	knows occlusion norms in different phases of ontogenesis and deviations from norms	F.W1.	ET, S, PS, W
W02	knows and understands the principles of preventive and therapeutic management in the masticatory system diseases at various stages of development;	F.W2.	ET, S, PS, W
W03	knows and understands viral, bacterial and mycotic flora of oral cavity and importance thereof	F.W3.	ET, S, PS, W
W04	knows and understands symptoms, course and treatment methods of specified diseases of oral cavity, head and neck with regard to age groups	F.W4.	ET, S, PS, W
W05	knows and understands principles of management in the case of pulp diseases and mineralized dental tissues as well as teeth and facial bones trauma	F.W5.	ET, S, PS, W
W06	knows and understands diagnostics and treatment of periodontal and oral mucosa diseases	F.W9.	ET, S, PS, W
U01	is able to interview patient or his/her family	F.U1.	ET, S, PS, W
U02	is able to carry out dental examination of patient	F.U2.	ET, S, PS, W
U03	is able to provide patient with explanation about nature of ailment, establish treatment confirmed by informed consent of the patient as well as establish prognosis	F.U3.	ET, S, PS, W
U04	is able to provide patient or his/her family with the information about unfavourable prognosis	F.U4.	ET, S, PS, W
U05	is able to sample and protect material for diagnostic tests, including cytology	F.U5.	ET, S, PS, W
U06	is able to interpret results of auxiliary diagnostics and consultations	F.U6.	ET, S, PS, W
U07	is able to determine indications and contraindications to a specified dental procedure	F.U7.	ET, S, PS, W
U08	is able to treat tooth-derived and non-tooth-derived acute and chronic inflammation of soft tissue, periodontium and jaw bones	F.U8.	ET, S, PS, W
U09	is able to menage general and local complications during and after dental procedures	F.U9.	ET, S, PS, W
U10	is able to prescribe medicines taking into account their interactions and side effects	F.U10.	ET, S, PS, W
U11	is able to keep current patient records, refer patient to general and specialist dental and medical examination or treatment	F.U11.	PS, O
U12	is able to present selected medical problems in oral or written form relevantly to recipient standards	F.U13.	PS, O
U13	is able to establish treatment for stomatognathic system tissues diseases	F.U15.	ET, S, PS, W

U14	is able to diagnoses and perform basic treatment of periodontal diseases	F.U17.	ET, S, PS, W
K01	is ready to establish and maintain deep and respectful contact with the patient as well as to show understanding for ideological and cultural differences	K.1.	PS, O
K02	is ready to be guided by the patient wellbeing	K.2.	PS, O
K03	is ready to respect physician-patient privilege and patient's rights	K.3.	PS, O
K04	is ready to take activities towards patient on the basis of ethical principles with awareness of social conditions and disease restrictions	K.4.	PS, O
K05	is ready to notice and recognize own limitations, make self-assessment of educational deficits and needs	K.5.	PS, O
K06	is ready to propagate health-promoting behaviour	K.6.	PS, O
K07	is ready to draw conclusions from own measurements or observations	K.8.	PS, O
K08	is ready to assume responsibility related to decisions taken as a part of professional activity, also in terms of own safety and the safety of others	K.11.	PS, O

Table presenting LEARNING OUTCOMES in relation to the form of classes								
			Type of training					
No. of learning outcome	Learning outcomes	Lecture	Seminar	Practical	<b>Clinical</b> classes	Simulations	<b>E-learning</b>	Other
1.	F.W1.				Х			
2.	F.W2.	х			х			
3.	F.W3.	Х	х		х		Х	
4.	F.W4.	х	х		х			
5.	F.W5.		х		х			
6.	F.W9.	Х	х		х			
7.	F.W1.				х			
8.	F.W2.	Х			х			
9.	F.W3.	Х	х		х		Х	
10.	F.U1.		х		х			
11.	F.U2.		х		х			
12.	F.U3.		х		х			
13.	F.U4.				х			
14.	F.U5.		х		Х			
15.	F.U6.				Х			
16.	F.U7.	Х	х		Х		х	
17.	F.U8.		х		Х			
18.	F.U9.				х			

19.	F.U10.	Х	Х	Х	Х	
20.	F.U11.			х		
21.	F.U13.	Х	Х	Х		
22.	F.U15.	Х	Х	Х		
23.	F.U17.	Х	X	х		
24.	K.1.			Х		
25.	K.2.			Х		
26.	K.3.			Х		
27.	K.4.			Х		
28.	K.5.			Х		
29.	K.6.			Х		
30.	K.8.			Х		
31.	K.11.			Х		

Table presenting TEACHING PROGRAMME				
No. of a teaching programme	Teaching programme	No. of hours	References to learning outcomes	
Winter semest	er			
Seminars – 14	h			
TK 01	Anatomy and physiology of the periodontium. Indicators of periodontal condition and hygiene. Radiological visualization of periodontal diseases.	1	W06, U14	
TK 02	<b>Etiopathogenesis of periodontal diseases.</b> Risk factors for periodontal disease.	1	W02, W03	
TK 03	Classification of periodontal diseases from 2017. symptomatology, differential diagnosis of gingivitis and periodontitis	1	W01, W02, W04, W06	
TK 04	<b>Prevention and non-surgical treatment of</b> <b>periodontal diseases.</b> Supportive pharmacotherapy. The role of lasers in the treatment of periodontal diseases.	1	W02, W03, W04, W06, U01, U02, U11-U14, K01-K08	
TK05	Management of acute periodontal conditions. Schemes of comprehensive treatment of periodontal diseases.	1	W02, W03, W04, W06, U01, U02, U11-U14, K01-K09	
TK06	<b>Surgical treatment of periodontal diseases:</b> Indications and contraindications for periodontal treatments. Guided tissue regeneration in the treatment of periodontal diseases. Management of open root furcation. Treatment of eczema.	1	W02, W03, W04, W06, U01-U14, K01-K09	
TK07	<b>Rehabilitation of the masticatory system:</b> prosthetic, orthodontic and implantological rehab. in periodontal diseases, treatment of traumatic occlusion. Maintenance phase of periodontal treatment.	1	W01, W02, W03, W04, W06, U01- U14, K01-K09	
TK08	Anatomy and physiology of the oral cavity. Patient examination and symptomatology of oral mucosa diseases.	1	W01, U01	

TK09	Oral lesions with blisters and vesicles: aphthous ulcers, viral diseases and autoimmune diseases: pemphigus, pemphigoid, exudative erythema	1	W01, W02, W03, K01-K08, U01-U14
TK10	Lesions in the oral cavity leading to the formation of white, red and white-red lesions: mycosis, atrophic lesions, lupus erythematosus, scleroderma, sexually transmitted diseases, HPV infections, keratinization disorders.	1	W01, W02, W03, K01-K08, U01-U14
TK11	Lesions in the oral cavity leading to the formation of white, red and white-red lesions part 2: leukoplakia, Wilson's lichen planus, white spongiform nevus, hairy tongue, exfoliative cheilitis, geographic tongue.	1	W01, W02, W04, W06, K01-K08, U01-U14
TK12	<b>Pre-cancerous conditions</b> (Gwieździński's classification). Preventive oncology. Oral mucositis in the course of chemo- and radiotherapy. Graft versus host disease. Preparation of the dental patient for the treatment of cancer.	1	W01, W02, W04, W06, K01-K08, U01-U14
TK13	<b>Changes on the oral mucosa</b> in the course of diseases of the hematopoietic and lymphatic systems.	1	W01, W02, W04, W06, K01-K08, U01-U14
TK14	<b>Burning mouth syndrome</b> . Principles of diagnosis and treatment. Differential diagnosis with oral candidosis, atrophic stomatitis, xerostomia, pain syndromes, denture and orthodontic stomatitis and Sjogren's syndrome.	1	K01-K08, U01-U14
Practical class	es – 36h		
TK1	Clinical exercises with patients Admission of patients, examination of the periodontium and oral mucosa condition. Assessment of hygiene indicators, learning about oral hygiene. Establishing a preventive and therapeutic plan. Performing professional hygiene treatments, splinting of teeth.	36	W01-W06, U01- U14, K01-K08
Summer seme	ster		1
Practical class			
TK01	Classification of periodontal and peri-implant diseases 2017.	1	W01
TK02	Healing of wound in the periodontium. Surgical periodontal treatment. Resection and regenerative surgery.	1	W01-W06, U01- U14, K01-K08
TK03	Surgical possibilities of improving the prosthetic field before prosthetic treatment: surgical lengthening of crowns, methods of preserving the ridge after extraction, reconstruction of soft tissues and bones within the edentulous process.	1	W01-W06, U01- U14, K01-K08

TK04	The specificity of prosthetic treatment of patients with periodontitis - characteristics of fixed and removable restorations.	1	W01-W06, U01- U14, K01-K08
TK05	Algorithms for comprehensive treatment of periodontitis (sequence of proceedings, difficult and questionable cases, decision errors).	1	W01-W06, U01- U14, K01-K08
TK06	Lesions on the cheek mucosa, mouth-atrium and mouth-floor. Lesions of the gums, toothless alveolar process and palate.	1	W01-W06, U01- U14, K01-K08
TK07	Lesions on the tongue. Lesions on the lips.	1	W01-W06, U01- U14, K01-K08
TK08	Diseases of the salivary glands and associated clinical symptoms in the oral cavity.	1	W01-W06, U01- U14, K01-K08
TK09	Oral changes due to blood diseases. Preparation of a patient for hematopoietic stem cell transplantation. Patient care after transplantation.	1	W01-W06, U01- U14, K01-K08
TK10	Oral changes in children.	1	W01-W06, U01- U14, K01-K08
TK11	The influence of nicotinism on periodontium and oral mucosa. Methods of combating nicotine addiction. Minimal anti-smoking intervention.	1	W01-W06, U01- U14, K01-K08
TK12	Antibiotic therapy in dentistry - discussion of the Recommendations of the Polish Dental Society and the National Program for the Protection of Antibiotics Working Group on the use of antibiotics in dentistry.	1	W01-W06, U01- U14, K01-K08
TK13	Admission of patients, examination of the periodontium and oral mucosa condition. Assessment of hygiene indicators, learning about oral hygiene. Establishing a preventive and therapeutic plan. Performing professional hygiene treatments, splinting of teeth.	38	W01-W06, U01- U14, K01-K08
Booklist			

#### Booklist

### **Obligatory literature**

### 1. Articles about new classification of periodontal diseases

- 1. Caton J et al. A new classification scheme for periodontal and peri-implant diseases and conditions- introduction and key changes from the 1999 classification. J Periodontol 2018; 89 (Suppl 1):S1-S8.
- 2. Chapple ILC et al. Periodontal health and gingival diseases and conditions on an intact and a reduced periodontium: Consensus report of workgroup 1 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Periodontol. 2018; 89(Suppl 1): S74-S84.
- 3. Murakami S et al. Dental plaque-induced gingival conditions. J Periodontol. 2018; 89(Suppl 1):S17-S27.
- 4. Holmstrup P et al. Non-plaque-induced gingival diseases. J Periodontol.2018;89(Suppl 1): S28-S45.
- 5. Lang NP et al. Periodontal health. J Periodontol.2018; 89(Suppl 1): S9-S16.
- 6. Papanou PN et al. Periodontitis: Consensus report of Workgroup 2 of the 2017 World

Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Periodontol.2018;89 (Suppl 1): S173-S182.

- 7. Herrera D et al. Acute periodontal lesions (periodontal abscesses and necrotizing periodontal diseases) and endo-periodontal lesions. J Periodontol. 2018 (Suppl 1): S85-S102.
- 8. Tonetti MS et al. Staging and grading of periodontitis: Framework and proposal of a new classification and case definition. J Periodontol. 2018;89 (Suppl 1): S159-S172.
- 9. Jepsen S et al. Periodontal manifestations of systemic diseases and developmental and acquired conditions: Consensus report of workgroup 3 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Periodontol.2018; 89 (Suppl 1): S237-S248.
- Albandar JM et al. Manifestations of systemic diseases and conditions that affect the periodontal attachment apparatus: Case definitions and diagnostic considerations. J Periodontol.2018; 89 (Suppl 1):S183-S203.
- 11. Berglundh T et al. Peri-implant diseases and conditions: Consensus report of workgroup 4 of the 2017 World Workshop on the Classification of Periodontal and Peri-Implant Diseases and Conditions. J Periodontol.2018; 89 (Suppl 1): S313-S318.
- 12. Renvert S et al. Peri-implant health, peri-implant mucositis and peri-implantitis: Case definitions and diagnostic considerations. J Periodontol.2018;89 (Suppl1):S304-S312.
- 13. Cortellini P et al. Mucogingival conditions in the natural dentition: Narrative review, case definitions, and diagnostic considerations. J Periodontol. 2018;89 (Suppl 1): S204-S213.
- 14. Fan J et al. Occlusal trauma and excessive occlusal forces: Narrative review, case definitions, and diagnostic considerations. J Periodontol. 2018;89 (Suppl 1): S214-S222.
- 15. Ercoli C et al. Dental prostheses and tooth-related factors. J Periodontol.2018;89 (Suppl 1): S223-S236.

## 2. Articles about treatment of periodontitis

- 1. Sanz M. et al. Treatment of stage I–III periodontitis—The EFP S3 level clinical practice guideline. Journal of Clinical Periodontology 2020, 48, 1, 164-165. J Clin Periodontol 2020,47,22:4-60.
- Tonetti M., Sanz M. Implementation of the new classification of periodontal diseases: Decision-making algorithms for clinical practice and education. J Clin Periodontol. 2019 Apr;46(4):398-405.
  - 3. Clinical Periodontology and Implant Dentistry. Edited by J. Lindhe, Niklaus P.Lang. Chichester : Wiley Blackwell, 2015.
  - 4. Color Atlas of Oral and Maxillofacial Diseases. Brad W. Neville et al. Copyright 2019 by Elsevier Inc.
  - Color atlas of common oral diseases. Robert P. Langlais, Craig S. Miller, Jill S. Nield-Gehrig, 5th ed. Philadelphia: Wolters Kluwer, 2017.
  - 6. Hans-Peter Mueller Periodontology- The Essentials. Thieme; Edycja 2. (2015)

### **Supplementary literature**

- 1. Carranza's Clinical Periodontology by Michael G. Newman, Henry Takei, Fermin A. Carranza, Perry R. Klokkevold
- 2. Periodontology: Color Atlas of Dental Medicine by Herbert F. Wolf, Edith M. Rateitschak-Pluss Klaus H. Rateitschak

### Standards of procedures required to obtain credit:

- Carrying out a medical interview with a patient U01, U13 5 procedures
- Conducting a physical examination of patient U02, U13, U16 5 procedures

• Interviewing a patient about:

- the essence of their ailments,
- method of treatment,
- prognosis,
- preventive measures (including minimal anti-smoking intervention),
- informed consent for treatment from a patient U03, U04, U14, U 16 5 procedures
- Referral to additional tests and interpretation of these test results with description in
- documentation U05, U06, U13, U16 3 procedures
- Establishing indications for dental procedures:
- supra and subgingival scaling,
- teeth sandblasting,
- correction of the frenum attachments,
- covering the gum recession,
- guided tissue regeneration (GTR),
- molar hemisection,
- tooth extraction
- U07, U16 4 procedures
- Establishing a written preventive and treatment plan U08, U09, U11, U15, U16 3 procedures
- Treatment of periodontal diseases removal of dental plaque, scaling, periodontal debridement U09, U10, U11, U15, U16 12 procedures
- Prescribing medication with regard to interactions and side effects U12, U15 3 procedures
- Diagnosis and treatment of mucous membrane diseases (including precancerous conditions) -
- U01, U02, U05, U07, U09, U12, U13 5 procedures

Student's workload				
Form of student's activity	Student's workload [h]			
(in-class participation; activeness, produce a report, etc.)	Tutor			
Contact hours with the tutor	95			
Time spent on preparation to seminars/ practical classess	20			
Time spent on reading recommended literature	20			
Time spent on writing report/making project				
Time spent on preparing to colloqium/ entry test				
Time spent on preparing to exam	40			
Other				
Student's workload in total	175			
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 colloqium
- R-report
- S practical skills assessment

 $RZ\dot{C}$  – 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 multimedial presentation

other...