BIO - DEPARTMENT OF BIOLOGY

BIO/VAA11 Biology

0 cr. Pre-Exam Credit

possible semester ZS

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

doc. RNDr. Vladimír Divoký, Ph.D.

The teaching program is focused on knowledge of aspects of general biology necessary for further study of specialized medical branches. After passing the examination, the student is better able to understand the medical aspects which require knowledge of general biological principles, morphological and functional cytology.

BIO/VAB11 Biology	13 cr. Pre-Exam Credit,Exam
	30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]
doc. RNDr. Vladimír Divoký, Ph.D.	possible semester LS
The subject enables students to understand elementary cell	ular processes and rules controlling reproduction of cells and

organisms. The knowledge is essential for further study of medicine as well as for clinical practice. Prerequisite courses BIO/VAA11

BIO/VA011 Biology

12 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

75 [Hours/Semestr] + Exercise 60 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

doc. RNDr. Vladimír Divoký, Ph.D.

The course is focused on the study of basic cellular processes, the biology of selected human pathogens, human genetics and the principles of molecular methods in medicine. The biology course provides extended basics of medical biology following the secondary school curriculum, relevant with A levels or International Baccalaureate, and is designed to help students to understand the links between dysfunctional biological processes and the development of human diseases. Lectures and practices include functional anatomy of eukaryotic cells, dynamics of macromolecules, tissue function with an emphasis on the biology of blood, stem cells and tumour biology. Cellular and molecular biology module is followed by general genetics, genetics of selected human diseases, population genetics, prognosis and prevention of genetic diseases and immunogenetics. The subject is completed by a written exam.

BIO/ZAA11 Biology and Genetics

0 cr. Pre-Exam Credit 30 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester ZS

doc. RNDr. Vladimír Divoký, Ph.D.

The subject advances the subject matter of secondary school biology and extends the students' knowledge of cellular biology and genetics, focused on human organism. The practicum is designed to help students to understand the links between dysfunctional biological processes and development of human diseases.

BIO/ZAB11 Biology and Genetics

 $9 \, \mathrm{cr.}\,\mathrm{Pre}\text{-}\mathrm{Exam}\,\mathrm{Credit},\mathrm{Exam}$

30 [Hours/Semestr] + Seminar 45 [Hours/Semestr] possible semester LS

doc. RNDr. Vladimír Divoký, Ph.D.

The subject advances the subject matter of secondary school genetics and extends the students' knowledge of genetics with special attention to human genetics. The seminars are designed to teach students how to use theoretical genetics in clinical medicine.

Prerequisite courses BIO/ZAA11

CJA - DEPARTMENT OF FOREIGN LANGUAGES

CJA/VAA12 Czech 1

0 cr. Pre-Exam Credit Seminar 60 [Hours/Semestr] possible semester ZS

Mgr. Dagmar Hrabalová

обу.

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

CJA/VAA22 Czech 2

Mgr. Lenka Podhorná

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAB12 nebo CJA/VAB41, LCH/VAA11, BIO/VA011 nebo BIO/VAB11, CJA/VA031, LBF/VA011 nebo LBF/VAB11, KAR/VAB11, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, HIE/VAB11 nebo HIE/VAB12, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

CJA/VAA32 Czech 3

Mgr. Dagmar Hrabalová

Improving the knowledge of basic Czech and making students familiar with the basic medical terminology; learning to read and understand simple medical texts in the Czech language.

Prerequisite courses CJA/VAB22 nebo CJA/VAB42

CJA/VAA41 Czech I

Mgr. Dagmar Hrabalová

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

CJA/VAA42	Czech II	0 cr. Pre-Exam Credit
		Seminar 60 [Hours/Semestr]
Mgr. Lenka Po	dhorná	possible semester ZS

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAB12 nebo CJA/VAB41, LCH/VAA11, BIO/VA011 nebo BIO/VAB11, CJA/VA031, LBF/VA011 nebo LBF/VAB11, KAR/VAB11, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, HIE/VAB11 nebo HIE/VAB12, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

CJA/VAA43 Czech III

Mgr. Dagmar Hrabalová

Improving the knowledge of basic Czech and making students familiar with the basic medical terminology; learning to read and understand simple medical texts in the Czech language.

Prerequisite courses CJA/VAB22 nebo CJA/VAB42

CJA/VAB12 Czech 1

Mgr. Dagmar Hrabalová

0 cr. Pre-Exam Credit Seminar 60 [Hours/Semestr] possible semester ZS

0 cr. Pre-Exam Credit Seminar 30 [Hours/Semestr] possible semester ZS

0 cr. Pre-Exam Credit Seminar 60 [Hours/Semestr]

possible semester ZS

0 cr. Pre-Exam Credit Seminar 30 [Hours/Semestr] possible semester ZS

6 cr. Pre-Exam Credit, Exam

Seminar 60 [Hours/Semestr] possible semester LS Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAA12 nebo CJA/VAA41

CJA/VAB22 Czech 2

6 cr. Pre-Exam Credit, Exam

possible semester LS

Seminar 60 [Hours/Semestr]

Mgr. Lenka Podhorná

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAA22 nebo CJA/VAA42, CJA/VA031, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LCH/VAB11 nebo LCH/VAB20, NAN/VAB12 nebo NAN/VAB13, LBF/VA011 nebo LBF/VAB11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

CJA/VAB32 Czech 3

Mgr. Dagmar Hrabalová

Seminar 30 [Hours/Semestr]

possible semester LS

6 cr. Pre-Exam Credit, Exam

possible semester LS

6 cr. Pre-Exam Credit, Exam

Improving the knowledge of basic Czech and making students familiar with the basic medical terminology; learning to read and understand simple medical texts in the Czech language.

Prerequisite courses CJA/VAA32 nebo CJA/VAA43, CJA/VAB22 nebo CJA/VAB42

CJA/VAB41 Czech I

Mgr. Dagmar Hrabalová

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAA12 nebo CJA/VAA41

CJA/VAB42 Czech II

possible semester LS

6 cr. Pre-Exam Credit, Exam

possible semester LS

Seminar 30 [Hours/Semestr]

Seminar 60 [Hours/Semestr]

Mgr. Lenka Podhorná

Acquisition of basic communication strategies, language structures and vocabulary in order to speak the language in everyday life situations; making students familiar with basic linguistic terminology and with the basic grammar structure of the Czech language.

Prerequisite courses CJA/VAA22 nebo CJA/VAA42, CJA/VA031, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LCH/VAB11 nebo LCH/VAB20, NAN/VAB12 nebo NAN/VAB13, LBF/VA011 nebo LBF/VAB11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

CJA/VAB43 Czech III

Mgr. Dagmar Hrabalová

Improving the knowledge of basic Czech and making students familiar with the basic medical terminology; learning to read and understand simple medical texts in the Czech language.

Prerequisite courses CJA/VAA32 nebo CJA/VAA43, CJA/VAB22 nebo CJA/VAB42

Latin and Medical Terminology **CJA/VA031**

3 cr. Pre-Exam Credit, Exam

Seminar 30 [Hours/Semestr] possible semester ZS/LS

Mgr. Petra Nováčková

Seminar 60 [Hours/Semestr]

6 cr. Pre-Exam Credit, Exam

Learning the fundamentals of Latin morphology; knowledge of Latin and Greek suffixes and prefixes; ability to understand the composed terms; ability to make simple diagnoses.

CALIFICATION Medical Communication	
	Seminar 30 [Hours/Semestr]
Mgr. Veronika Glogarová	possible semester ZS/LS
Improving communication skills in Czech in medical practice. Gaining confidence colleagues in Czech. Prerequisite courses CJA/VAA43, CJA/VAB43	e when communicating with patients and
CJA/ZAA41 Czech 1	0 cr. Pre-Exam Credit
	Seminar 90 [Hours/Semestr]
Mgr. Lenka Podhorná	possible semester ZS
Teaching by objectives, correct pronunciation, drilling vocabulary, practising gra	mmatical structures, making students

familiar with the basic dental terminology a with basic examination instructions.

CJA/ZAA42 Czech 2

Seminar 30 [Hours/Semestr] Mgr. Lenka Podhorná possible semester ZS Teaching by objectives, correct pronunciation, drilling vocabulary, practising grammatical structures, making students familiar with the basic dental terminology a with basic examination instructions.

Prerequisite courses CJA/ZAB41, CJA/ZAA41, LCH/ZAA11, BIO/ZAB11, LBF/ZAB11, NAN/ZAB11, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, KAR/VAB11, HIE/ZAB11

CJA/ZAB41 Czech 1	10 cr. Pre-Exam Credit,Exam
	Seminar 90 [Hours/Semestr]
Mgr. Lenka Podhorná	possible semester LS
Teaching by objectives, correct pronunciation, drilling vocabu	lary, practising grammatical structures, making students

irilling vocabulary, practising grammatical structures, making students objectives, correct pronunciation, o familiar with the basic dental terminology a with basic examination instructions. Prerequisite courses CJA/ZAA41

CJA/ZAB42 Czech 2	4 cr. Pre-Exam Credit,Exam
	Seminar 30 [Hours/Semestr]
Mgr. Lenka Podhorná	possible semester LS
Teaching by objectives, correct pronunciation, drilling vocab	ulary, practising grammatical structures, making students
familiar with the basic dental terminology a with basic exam	nination instructions.
Prerequisite courses CIA/7AA42 CIA/7AB41 BIO/7A	R11 RE/ZAR11 CH/ZAA11 NAN/ZAR11 CIA/ZAA41

Prerequisite courses CJA/ZAA42, CJA/ZAB41, BIO/ZAB11, LBF/ZAB11, LCH/ZAA11, NAN/ZAB11, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

CJA/ZA031 **Czech for Medical Communication**

Mgr. Veronika Glogarová

Improving communication skills in Czech in medical practice. Gaining confidence when communicating with patients in Czech.

Prerequisite courses CJA/ZAA42, CJA/ZAB42

CJA/VA045 Czech for Medical Communication

0 cr. Pre-Exam Credit

3 cr. Pre-Exam Credit

3 cr. Pre-Exam Credit Seminar 30 [Hours/Semestr] possible semester ZS/LS

DET - DEPARTMENT OF PEDIATRICS

DET/VA014 Pediatrics

60 [Hours/Semestr] + Exercise 104 [Hours/Semestr] + Seminar 34 [Hours/Semestr]

MUDr. Barbora Ludíková, Ph.D., prof. MUDr. Dagmar Pospíšilová, Ph.D.

Acquisition of basic theoretical knowledge and practical skills through assessing all components of children's development in the individual age groups, the ability to recognize common childhood diseases in accordance with the principles of evidence-based medicine (EBM).

Prerequisite courses FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, MIK/VAA12 nebo MIK/VAB31

DET/VA051 Pediatrics

34 [Hours/Semestr] + Exercise 104 [Hours/Semestr] + Practice 60 [Hours/Semestr]

doc. MUDr. Eva Karásková, Ph.D.

Goal of the subject is to acquire basic theoretical knowledge and practical skills through assessing all components of children's development in the individual age groups, the ability to recognize common childhood diseases in accordance with the principles of evidence-based medicine (EBM).

Prerequisite courses FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, MIK/VAA12 nebo MIK/VAB31

DET/VA052 Exam in Pediatrics

doc. MUDr. Eva Karásková, Ph.D.

The examination verifies ability to utilize general as well as specialized knowledge of Pediatrics, qualification to examine a child's progress and state of health including evaluation of anomalies and influence of family, school and social environment.

Prerequisite courses DET/VC051 Preclusive courses DET/VC091

DET/VA091 Pediatrics

prof. MUDr. Kateřina Bouchalová, Ph.D., doc. MUDr. Eva Karásková, Ph.D.

The examination tests the ability to apply general and special knowledge of paediatrics, to competently examine the child's development and health status, including assessment of deviations and the influence of family, school and social environment.

Prerequisite courses DET/VA011 nebo DET/VA012 nebo DET/VA014 nebo DET/VA051, DET/VA014 nebo DET/VA051 nebo DET/VABP2, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, MIK/VAA12 nebo MIK/VAB31

DET/ZAA12 Pediatrics

2 cr. Colloquium Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr] possible semester ZS

MUDr. Barbora Ludíková, Ph.D.

Theoretical and practical education is focused on the basics of paediatrics, diagnostics and therapy of the most common children diseases, especially with accent on the oral cavity. Another goal is inform and introduce students into the children emergency medicine they could meet in dentistry.

DGZ - CENTER FOR DIGITAL HEALTHCARE

DGZ/VA011 Basics of Digital Medicine

2 cr. Pre-Exam Credit, Exam

Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

Ing. Antonín Hlavinka, doc. MUDr. Eva Klásková, Ph.D.

Exam

12 cr. Pre-Exam Credit

possible semester ZS/LS

0 cr.

6 cr. Pre-Exam Credit

possible semester ZS/LS

possible semester ZS/LS

0 cr. State Rigorous Exam

possible semester ZS/LS

possible semester ZS/LS

The aim of the course is to acquaint students of the General Medicine with the basic principles of digital medicine of the third millennium. Emphasis is placed on mastering the basic IT principles, including IT security, legal and technical aspects, as well as on the use in everyday clinical practice in fields and diagnoses where digital medicine, resp. telemedicine brings clear benefits to the patient, healthcare facilities and healthcare payers.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

DGZ/VA041 Basics of Digital Medicine 2 cr. Colloquium Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr] Ing. Antonín Hlavinka, doc. MUDr. Eva Klásková, Ph.D. possible semester ZS/LS The aim of the course is to acquaint students of the General Medicine with the basic principles of digital medicine of the third millennium. Emphasis is placed on mastering the basic IT principles, including IT security, legal and technical aspects, as well as on the use in everyday clinical practice in fields and diagnoses where digital medicine, resp.

telemedicine brings clear benefits to the patient, healthcare facilities and healthcare payers.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

DLF - DEAN'S OFFICE OF THE FACULTY OF MEDICINE AND DENTISTRY

DLF/VC051 Student Research - Active Participat. 1

doc. MUDr. Eva Klásková, Ph.D., prof. RNDr. Hana Kolářová, CSc., MDDr. Iva Voborná, Ph.D.

Active participation of undergraduate students in research activities of departments within the Medical school. Students are involved in experimental work, data collection and analysis, including clinical data of patients. Students are familiarized with the scientific work and may initiate their scientific career.

DLF/VC052 Student Research - Active Participat. 2

doc. MUDr. Eva Klásková, Ph.D., prof. RNDr. Hana Kolářová, CSc., MDDr. Iva Voborná, Ph.D.

Active participation of undergraduate students in research activities of departments within the Medical school. Students are involved in experimental work, data collection and analysis, including clinical data of patients. Students are familiarized with the scientific work and may initiate their scientific career.

DLF/VC053 **Student Research-Active Participation 3**

doc. MUDr. Eva Klásková, Ph.D., prof. RNDr. Hana Kolářová, CSc., MDDr. Iva Voborná, Ph.D.

Active participation of undergraduate students in research activities of departments within the Medical school. Students are involved in experimental work, data collection and analysis, including clinical data of patients. Students are familiarized with the scientific work and may initiate their scientific career.

FAR - DEPARTMENT OF PHARMACOLOGY

FAR/VAA11 Pharmacology 2

doc. MUDr. Karel Urbánek, Ph.D.

5 cr. Pre-Exam Credit,Exam

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester ZS

The student should be familiar with special pharmacology including principles of pharmacotherapy, drug adverse effects, important drug interactions and principles of pharmacotherapy in special age groups of patients.

Prerequisite courses MIK/VAA12 nebo MIK/VAB31, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, FAR/VAA32 nebo FAR/VAB11

2 cr Pre-Exam Credit

possible semester ZS/LS

2 cr. Pre-Exam Credit

possible semester ZS/LS

2 cr. Pre-Exam Credit

possible semester ZS/LS

FAR/VAA32 Pharmacology 1

15 [Hours/Semestr] + Exercise 45 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

doc. MUDr. Karel Urbánek, Ph.D.

The student should be familiar with basic principles of general pharmacology, to have a basic knowledge of the pharmacology of the major drug groups affecting the CNS, vegetative nervous system and pain, to be able to prescribe correctly all basic drug forms, either from the group of manufactured or individually prepared drugs.

Prerequisite courses NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, MIK/VAA12 nebo MIK/VAB31

FAR/VAB11 Pharmacology 1

doc. MUDr. Karel Urbánek, Ph.D.

The student is to know drug nomenclature, principles of prescription and important drug formulations. He should be familiar with basic principles of pharmacokinetics and pharmacodynamics, types of drug adverse effects and interactions; from the special topics mainly the pharmacology of vegetative nervous system and central nervous system.

Prerequisite courses NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, MIK/VAA12 nebo MIK/VAB31

FAR/VAB21 Clinical Pharmacology

doc. MUDr. Karel Urbánek, Ph.D.

The student is to know basic principles of clinical pharmacology in clinical medicine. He should be familiar with the use of therapeutic drug monitoring and methods of solution of the drug-related problems connected with adverse effects and drug interactions. The student should be familiar with proper pharmacotherapy in the most important diseases and principles of pharmacotherapy in special groups of patients.

Prerequisite courses FAR/VAA32 nebo FAR/VAB11, PFY/VAA31 nebo PFY/VAB11, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32

FAR/VA042 Modern Biologic and Hormonal Pharmac...

doc. MUDr. Karel Urbánek, Ph.D.

The aim of the course is to acquaint students with the latest developments in the field of biological and hormonal pharmacotherapy in internal medicine and oncology. The course is designed primarily for students who want to study during and after profiling in fields in which it has in recent years introduced biological and hormonal therapy. Prerequisite courses FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, FAR/VAA32 nebo

FAR/VAB11

FAR/ZAA11 Pharmacology	0 cr. Pre-Exam Credit
	Seminar 45 [Hours/Semestr]
prof. MUDr. Rostislav Večeřa, Ph.D.	possible semester ZS

The student is to be able to prescribe correctly all basic drug forms, both from the group of factory made and individually prepared drugs. The student should be familiar with basic principles of drug pharmacokinetics and pharmacodynamics.

FAR/ZAA21	Clinical Pharmacology	1 cr. Colloquium
		Seminar 15 [Hours/Semestr]
prof. MUDr. R	ostislav Večeřa, Ph.D.	possible semester ZS

3 cr. Pre-Exam Credit 30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester LS

2 cr. Colloquium

Seminar 30 [Hours/Semestr]

possible semester LS

2 cr. Colloquium

Seminar 8 [Hours/Semestr]

possible semester ZS

possible semester ZS

0 cr Pre-Exam Credit

The student will gain knowledge of the main pharmacotherapeutic groups and their use in the pathologic conditions, also about drug side effects and interactions, and about principles of drug clinical trials and the practical use of clinical pharmacology.

FAR/ZAB12 Pharmacology

prof. MUDr. Rostislav Večeřa, Ph.D.

The student should be familiar with basic principles of general pharmacology; have a basic knowledge of pharmacology of major drug groups in the dentistry practice (analgetics, antibiotics, local anesthetics, etc.). Prerequisite courses FAR/ZAA11

FYZ - DEPARTMENT OF PHYSIOLOGY

FYZ/VAA11 Physiology

doc. MUDr. PharmDr. Lenka Bartošíková. Ph.D.

The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo CJA/VAB41, CJA/VA031, LCH/VAA11, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, BIO/VAA11, CJA/VAA12 nebo CJA/VAA41, LBF/VAA11, HIE/VAB11 nebo HIE/VAB12

FYZ/VAA21 Physiology 1

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

doc. MUDr. PharmDr. Lenka Bartošíková, Ph.D.

Human physiology is the science of the mechanical, physical, and biochemical functions of humans is good health, their organs, and the cells of which they are composed. The principal level of focus of physiology is at the level of organs and systems. The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo CJA/VAB41, CJA/VA031, LCH/VAA11, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, BIO/VAA11, CJA/VAA12 nebo CJA/VAA41, LBF/VAA11, HIE/VAB11 nebo HIE/VAB12

FYZ/VAB12 Physiology

45 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

45 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

doc. MUDr. PharmDr. Lenka Bartošíková, Ph.D.

The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses FYZ/VAA11 nebo FYZ/VAA21, CJA/VA031, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, LCH/VAB11 nebo LCH/VAB20, LBF/VA011 nebo LBF/VAB11, CJA/VAA12 nebo CJA/VAA41, BIO/VAA11, NAN/VAB12 nebo NAN/VAB13

FYZ/VAB21 Physiology 2

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

doc. MUDr. PharmDr. Lenka Bartošíková, Ph.D.

Human physiology is the science of the mechanical, physical, and biochemical functions of humans is good health, their organs, and the cells of which they are composed. The principal level of focus of physiology is at the level of organs and systems. The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses FYZ/VAA11 nebo FYZ/VAA21, CJA/VA031, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, LCH/VAB11 nebo LCH/VAB20, LBF/VA011 nebo

6 cr. Pre-Exam Credit, Exam

Seminar 45 [Hours/Semestr]

possible semester LS

0 cr. Pre-Exam Credit

possible semester ZS

possible semester LS

16 cr. Pre-Exam Credit, Exam

possible semester ZS

0 cr. Pre-Exam Credit

possible semester LS

15 cr. Pre-Exam Credit, Exam

FYZ/ZAA11 Physiology

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

doc. MUDr. PharmDr. Lenka Bartošíková, Ph.D.

The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses LBF/ZAB11, LCH/ZAA11, BIO/ZAB11, NAN/ZAB11, CJA/ZAB41, HIE/ZAB11, KAR/VAB11, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, CJA/ZAA41

FYZ/ZAB11 Physiology

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

doc. MUDr. PharmDr. Lenka Bartošíková, Ph.D.

The broad goal of the teaching of undergraduate students in physiology aims at providing the student comprehensive knowledge of the normal functions of the organ systems of the body to facilitate an understanding of the physiological basis of health and diseases.

Prerequisite courses FYZ/ZAA11, LBF/ZAB11, LCH/ZAA11, BIO/ZAB11, CJA/ZAB41, NAN/ZAB11, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

HEO - DEPARTMENT OF HEMATO-ONCOLOGY

HEO/VA061 Communication Skills for Challenging...

prof. MUDr. Vít Procházka, Ph.D.

The course is framed as a "flipped classroom" - resources and information will be provided to students well in advance before in-person sessions start, and students will be expected to fully comprehend the information before the respective class sessions. This theoretical knowledge will be applied in practical interactive classroom activities. In the first session students will learn how to analyze and provide structured assessment of video documented real-life communications between doctors and patients. In the second session, students will develop their own skills through role-modeling challenging communication situations - i.e., working in teams and pairs with provided communication scenarios.

Prerequisite courses IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

HIE - DEPARTMENT OF HISTOLOGY AND EMBRYOLOGY

HIE/VAA12	Histology and Embryology 2	8 cr. Pre-Exam Credit,Exam
		45 [Hours/Semestr] + Exercise 45 [Hours/Semestr]
doc. MUDr. Z	deněk Tauber, CSc., doc. Mgr. Kateřina Čížk	ová, Ph.D. possible semester ZS
Contents of th	e second part comprise the microscopic anatom	/ and embryology of organ systems.
Prerequis	ite courses HIE/VAB11 nebo HIE/VAB12,KAR/V	AB11, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo
CJA/VAB4	1, CJA/VA031, LCH/VAA11, LBF/VA011 nebo	LBF/VAB11, NAN/VAB12 nebo NAN/VAB13,

NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

HIE/VAA21 **Histology and Embryology 2**

15 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

doc. MUDr. Zdeněk Tauber, CSc., doc. Mgr. Kateřina Čížková, Ph.D.

The second semester of Histology and Embryology focuses on the microscopic anatomy and embryology of organ systems.

Prerequisite courses HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, CJA/VA031, LCH/VAA11, LBF/VA011 nebo LBF/VAB11, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, LCH/VAB11 nebo LCH/VAB20, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

9 cr. Pre-Exam Credit, Exam

0 cr. Pre-Exam Credit

possible semester ZS

possible semester LS

2 cr. Colloquium

3 [Hours/Semestr] + Exercise 3 [Hours/Semestr]

possible semester ZS/LS

6 cr. Pre-Exam Credit, Exam

possible semester ZS

HIE/VAB11	Histology and Embryology 1	5 cr. Pre-Exam Credit
	30 [Hou	rs/Semestr] + Exercise 45 [Hours/Semestr]
doc. MUDr. Zo	deněk Tauber, CSc., doc. Mgr. Kateřina Čížková, Ph.D.	possible semester LS
The Cost want a	f histories and such marked to feature days within a basis that	

The first part of histology and embryology is focused on gaining both theoretical and practical knowledge of the microscopic structure of tissues, cardiovascular, and lymphoreticular systems, and basic embryology.

HIE/VAB12 **Histology and Embryology 1**

doc. MUDr. Zdeněk Tauber, CSc., doc. Mgr. Kateřina Čížková, Ph.D.

The first semester of histology and embryology includes gaining of both, theoretical and practical knowledge of the microscopic structure of basic tissue types. The cardiovascular and lymphatic systems are also discussed, as well as the basics of embryology.

HIE/VAB21 **Basic Histochemistry**

doc. Mgr. Kateřina Čížková, Ph.D.

The course covers basic histochemical methods used for the detection of various chemical substances (e.g. lipids, iron, polysacharides and enzymes) and the principles these methods are based on. In addition, their practical use and importance for the understanding of chemical processes in human body will be discussed. Immunohistochemical techniques as a subset of histochemistry offer high specificity and sensitivity for the detection of intra- and extracellular components using a specific bond of antibody to antigen. The principle and practical application in research and diagnostics will be discussed.

Prerequisite courses HIE/VAB11 nebo HIE/VAB12, HIE/VAA12 nebo HIE/VAA21

HIE/ZAA12 **Histology and Embryology 2**

45 [Hours/Semestr] + Exercise 39 [Hours/Semestr]

doc. MUDr. Zdeněk Tauber, CSc., doc. Mgr. Kateřina Čížková, Ph.D.

Contents of the second part comprise the histology and embryology of the orofacial region and the digestive system. The microscopic anatomy and embryology of other systems will be discussed in reduced form according to requirements of the subject.

Prerequisite courses HIE/ZAB11, LBF/ZAB11, LCH/ZAA11, BIO/ZAB11, NAN/ZAB11, CJA/ZAB41, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, KAR/VAB11

HIE/ZAB11	Histology and Embryology 1		4 cr. Pre-Exam Credit
		30 [Hours/Semestr] + Exercise	e 45 [Hours/Semestr]
doc. MUDr. Zo	leněk Tauber, CSc., doc. Mgr. Kateřina Čížko	ová, Ph.D.	possible semester LS

The first part of histology and embryology is focused on gaining both theoretical and practical knowledge of the microscopic structure of tissues, cardiovascular, and lymphoreticular systems, and basic embryology.

CHO - DEPARTMENTS OF SURGERY

MUDr. Mgr. Pavel Skalický, Ph.D.

CH0/VAB11 Introduction to Clinical Medicine 2

Exercise 21 [Hours/Semestr] + Seminar 16 [Hours/Semestr]

possible semester LS

3 cr.

Students get basic information about surgical disciplines. Lessons contain practice of basic surgical skills - suturing, knotting, treatment of traumatic wound, fracture bone fixation. The aim of pediatric propedeutics is to teach students to understand pediatrics as a developmental medicine with its typical preventive character. The aim is to acquire basic skills for communication with patients and their legal representatives during taking a history (professionalism and humanity). To introduce basic differences between examination of children at different ages and examination of adults.

Prerequisite courses CJA/VA031 nebo CJA/VAA31, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, FYZ/VAA11 nebo FYZ/VAA21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, IN0/VAA11 nebo IN0/VAA21

Seminar 4 [Hours/Semestr] possible semester LS

6 cr. Pre-Exam Credit, Exam

possible semester ZS

Colloquium

1 cr. Pre-Exam Credit

4 cr. Pre-Exam Credit 15 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester LS

CH0/VAB31 Introduction to Clinical Medicine 2 3 cr.

Exercise 21 [Hours/Semestr] + Seminar 16 [Hours/Semestr]

doc. MUDr. Pavel Dráč, Ph.D., prof. MUDr. Vladimír Mihál, CSc., doc. possible semester LS MUDr. Miroslav Pach, CSc., MUDr. Mgr. Pavel Skalický, Ph.D.

The content of the course includes the basics of propedeutics in surgical disciplines and pediatrics. Surgical lessons contain practice of basic surgical skills - suturing, knotting, treatment of traumatic wound, fracture bone fixation. The aim of pediatric propedeutics is to teach students to understand pediatrics as a developmental medicine with its typical preventive character. The aim is to acquire basic skills for communication with patients and their legal representatives during taking a history (professionalism and humanity) and to learn the basic differences between examination of children at different ages and examination of adults.

Prerequisite courses CJA/VA031 nebo CJA/VAA31, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, FYZ/VAA11 nebo FYZ/VAA21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, IN0/VAA11 nebo IN0/VAA21

CH0/VA025 Surgery 2

1 [Weeks/Semestr] + Exercise 2 [Weeks/Semestr] + Practice 2 [Weeks/Semestr] prof. MUDr. JUDr. Dušan Klos, Ph.D., MHA, LL.M., prof. MUDr. Čestmír possible semester ZS/LS Neoral, CSc.

Improvement of theoretical and practical basics of general, abdominal, thoracic, vascular, plastic and cardiosurgery. Teaching prepares students for passing of the state rigorous exam.

Prerequisite courses KAR/VA023 nebo KAR/VC022, CH1/VABP1 nebo CH1/VABP2, ORT/VA011 nebo ORT/VA041, NCH/VA011 nebo NCH/VA051

CH0/VA061 Surgery 2

1 [Weeks/Semestr] + Exercise 2 [Weeks/Semestr] + Practice 2 [Weeks/Semestr] prof. MUDr. JUDr. Dušan Klos, Ph.D., MHA, LL.M. possible semester ZS/LS

Improvement of theoretical and practical basics of general, abdominal, thoracic, vascular, plastic and cardiac surgery. Teaching prepares students for passing of the state rigorous exam.

Prerequisite courses KAR/VA023 nebo KAR/VC022, CH1/VABP1 nebo CH1/VABP2, ORT/VA011 nebo ORT/VA041, NCH/VA011 nebo NCH/VA051

CH1 - DEPARTMENT OF SURGERY

CH1/VABP2 Surgery - Clinical Training

prof. MUDr. JUDr. Dušan Klos, Ph.D., MHA, LL.M.

The content of the course is training of practical surgical skills following the theoretical lessons of Surgery 1 block. Introduction to the work at the surgical wards (ward-rounds, admission of patients), outpatient department (small surgical procedures, sutures) and assistance at the operation theatre.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

CH1/VA013 Surgery 1

Exercise 100 [Hours/Semestr] + Seminar 26 [Hours/Semestr]

prof. MUDr. JUDr. Dušan Klos, Ph.D., MHA, LL.M.

The content of the course is an introduction to surgery, creating a basic volume of theoretical knowledge of general surgery (surgical propedeutics, acute abdomen) and individual surgical specialties (abdominal, thoracic, vascular, plastic surgery, traumatology, cardiac surgery).

Prerequisite courses CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAA11 nebo IN0/VAA21 nebo IN0/VAB11 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, PLE/VAB11 nebo PLE/VAB81 nebo SOL/VAB41 nebo TPO/VAB13, PVL/VAB12 nebo PVL/VAB32 nebo SOL/VAB31 nebo SOL/VAB32

1 cr. Pre-Exam Credit Practice 2 [Weeks/Semestr] possible semester LS

16 cr. Pre-Exam Credit

Colloquium

14 cr. Pre-Exam Credit

6 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

CH1/VA031 **Basics of Surgical Sutures**

MUDr. Josef Chudáček, Ph.D.

Theoretical preparation and practical training of basic surgical sutures and knotting, as well as fundamental laparoscopic techniques.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013 nebo CH2/ZAB11

CH1/VA063 **Basics of Burns**

MUDr. Hana Klosová, Ph.D.

Theoretical instruction and practical training to determine the severity of a burn injury and to assess the depth of burn, the management of burn wound treatment and practical training in aseptic and sterile techniques required for burn treatment procedures.

Prerequisite courses CH1/VA012 nebo CH1/VA013

CH1/VA093 Surgery

prof. MUDr. JUDr. Dušan Klos, Ph.D., MHA, LL.M.

The content of this course is the completion of the state rigorous examination itself. It is a continuation of the Surgery 2 block.

Prerequisite courses CH0/VABP1 nebo CH1/VABP1 nebo CH1/VABP2, CH0/VA023 nebo CH0/VA024 nebo CH0/VA025 nebo CH0/VA061, CH0/VAB22 nebo KAR/VA022 nebo KAR/VA023, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

CH2 - DEPARTMENT OF CARDIOVASCULAR AND TRANSPLANTATION SURGERY

CH2/ZAA12 Surgery 2

Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

doc. MUDr. Petr Dráč, Ph.D.

To familiarize students with general surgery, anesthesiology and resuscitation, orthopaedics and traumatology, neurosurgery, urology and plastic surgery.

Prerequisite courses CH2/ZAB11

CH2/ZAA13 Surgery 3

doc. MUDr. Petr Dráč. Ph.D.

To acquaint students with basic information on acute medicine, to introduce cardiopulmonary resuscitation and intensive care in the field of surgery, to provide basic overview of diagnostics and therapeutic approach in surgery. Prerequisite courses CH2/ZAB12, CH2/ZAA12, CH2/ZAB11

CH2/ZAB11 Surgery 1

doc. MUDr. Petr Dráč, Ph.D.

Exercise 30 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

possible semester LS

2 cr. Pre-Exam Credit

To provide knowledge of important information on general surgery, to acquaint with basic surgical instruments, to introduce both tactic and technique of the surgical procedure.

CH2/ZAB12 Surgery 2

3 cr. Pre-Exam Credit Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr] possible semester LS

doc. MUDr. Petr Dráč, Ph.D.

0 cr.State Rigorous Exam

0 cr. Pre-Exam Credit

possible semester ZS

2 cr. Pre-Exam Credit, Exam Seminar 15 [Hours/Semestr]

possible semester ZS

1 cr. Pre-Exam Credit Exercise 4 [Hours/Semestr] possible semester ZS/LS

2 [Hours/Semestr] + Exercise 2 [Hours/Semestr]

1 cr. Pre-Exam Credit

possible semester ZS/LS

possible semester ZS/LS

To familiarize students with general surgery, anesthesiology and resuscitation, orthopaedics and traumatology, neurosurgery, urology and plastic surgery.

Prerequisite courses CH2/ZAB11, CH2/ZAA12

INF - DEPARTMENT OF INFECTIOUS DISEASES

INF/VAA11 Infectious Diseases 1

0 cr. Pre-Exam Credit Exercise 21 [Hours/Semestr] + Seminar 9 [Hours/Semestr] possible semester ZS

doc. MUDr. Luděk Rožnovský, CSc.

Introduction to the problem and relations to the other medicine specializations, transmission od infectious diseases, epidemiologic strategy, clinical manifestation of infectious diseases, diferencial diagnosis and therapy. Viral hepatitis A, B, C, D, E, G; etiology, pathology, epidemiology, clinical features, serologic tests and findings, treatment, sequelae, carrier state of the virus of hepatitis B and C, chronic viral hepatitis - treatment of them. GIT infections (pathology of the infectious diarrhoea, bacterial and viral infectious diarrhoea, clinically important bacterial and viral carrier state. HIV/AIDS infection (stage, therapy, care of HIV/AIDS patiens), respiratory infections, herpes viruses infectious diseases ant treatment, infectious exantematous diseases, infectious diseases called by Streptococci and Staphylococci, zoonose, infectious diseases in childhood. Basic information about neuroinfections - bacterial and viral, lyme diseases, TBE encephalitis, meningococcal meningitis. Prion infections. Antibiotics from the view of infectionist, antibiotic resistence, antibiotic policy. Antivirotics. Antimycotics. Strategy of vaccination - contemporary status, view to the future. Infectious diseases and pregnancy. The infectious disease and the corticosteroid therapy. Anaerobic infections, tetanus. Clostridial infections. The introduction to the problem of the geographic and travel medicine. Malaria, leishmaniosis, schistosomiasis. Clinical demonstration of the patients.

Prerequisite courses IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

INF/VAB11 Infectious Diseases 2

4 cr. Pre-Exam Credit, Exam

possible semester LS

Exercise 9 [Hours/Semestr] + Seminar 9 [Hours/Semestr] prof. MUDr. Pavel Chalupa, CSc.

Introduction to the problem and relations to the other medicine specializations, transmission od infectious diseases, epidemiologic strategy. Viral hepatitis A, B, C, D, E, G; etiology, pathology, epidemiology, clinical features, serologic tests and findings, treatment, sequelae, carrier state of the virus of hepatitis B and C, chronic viral hepatitis - treatment of them. GIT infections (pathology of the infectious diarrhoea, bacterial and viral infectious diarrhoea, clinically important bacterial and viral carrier state. HIV/AIDS infection (stage, therapy, care of HIV/AIDS patiens), respiratory infections, herpes viruses infectious diseases ant treatment, infectious exantematous diseases, infectious diseases called by Streptococci and Staphylococci, zoonose, infectious diseases in childhood. Basic information about neuroinfections bacterial and viral, lyme diseases, TBE encephalitis, meningococcal meningitis. Strategy of vaccination - contemporary status, view to the future. Infectious diseases and pregnancy. Variola and vacination. The introduction to the problem of the geographic and travel medicine. Clinical demonstration of the patients.

Prerequisite courses INF/VAA11, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

INF/VA041 Infectious Diseases

4 cr. Pre-Exam Credit,Exam

Exercise 30 [Hours/Semestr] + Seminar 18 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Pavel Chalupa, CSc.

The students are acquainted with common manifestations of infectious diseases, development of an infectious diseases including sepsis and septic shock. They expand their knowledge of common but also rarer bacterial, parasitic and viral infections. The students will acquire basic knowledge of diagnosis, differential diagnosis and possible treatment of common but also significant imported infectious diseases. They will become familiar with vaccination against some infectious diseases and other possibilities of prevention. They will acquire knowledge of the running of an infectious ward, its hygienic epidemiological routine and standards of patient's isolation.

Prerequisite courses INF/VAA11, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

INF/ZAA11 Infectious Diseases

15 [Hours/Semestr] + Exercise 12 [Hours/Semestr] + Seminar 2 [Hours/Semestr]

prof. MUDr. Pavel Chalupa, CSc.

Introduction to the problem and relations of other medicine specializations, transmission od infectious diseases, epidemiologic strategy, clinical manifestation of infectious diseases, diferencial diagnosis and therapy. Viral hepatitis A, B, C, D, E, G; etiology, pathology, epidemiology, clinical features, serlogic tests and findings, treatment, sequelae, carrier state of the virus of hepatitis B and C, chronic viral hepatitis - treatment of them in the relationship to dental medicine. GIT infections (pathology of the infectious diarrhoea, bacterial and viral infectious diarrhoea, clinically important bacterial and viral carrier state HIV/AIDS infection (stage, therapy, care of HIV/AIDS patiens), respiratory infections, herpes viruses infectious diseases ant treatment, infectious exantematous diseases, infectious diseases called by Streptococci and Staphylococci, zoonose, infectious diseases in childhood. Basic information about neuroinfections bacterial and viral, lyme diseases, TBE encephalitis, meningococcal meningitis. Prion infections. Antibiotics from the view of infectionist, antibiotic resistence, antibiotic policy. Antivirotics. Antimycotics. Strategy of vaccination - contemporary status, view to the future. Infectious diseases and pregnancy. The infectious disease and the corticosteroid therapy. Anaerobic infections, tetanus. Clostridial infections. The introduction to the problem of the geographic and travel medicine. Clinical demonstration on the patients.

INO - DEPARTMENTS OF INTERNAL MEDICINE

INO/VAA11 Introduction to Clinical Medicine 1 Exercise 45 [Hours/Semestr] + Seminar 55 [Hours/Semestr]

MUDr. Diana Hexspoor Bawadekji, prof. MUDr. Vlastimil Ščudla, CSc. possible semester ZS

The aim of the "Introduction to Clinical Medicine" is to adopt complete clinical examination, i.e. the history of the patient as well as a detailed physical examination. The student should be able to express properly the findings and write down acquired data, to work out admission record, and to compile working clinical diagnosis and an examination plan within internal medicine.

Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, BIO/VA011 nebo BIO/VAB11, LBF/VA011 nebo LBF/VAB11, LCH/VAA11, CJA/VA031 nebo CJA/VAA31, CJA/VAB12 nebo CJA/VAB41, KAR/VAB11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, FYZ/VAA11 nebo FYZ/VAA21, LCH/VAA20 nebo LCH/VAA22, HIE/VAA12 nebo HIE/VAA21, HIE/VAB11 nebo HIE/VAB12, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, CJA/VAB22 nebo CJA/VAB42, PLE/VAA11 nebo PLE/VAA81 nebo SOL/VAA41, PLE/VAB11 nebo PLE/VAB81 nebo SOL/VAB41

INO/VAA21	Introduction to Clinical Medicine 1	6 cr. Pre-Exam Credit, Exam
	Exercise 45 [Hours/Semestr] +	Seminar 55 [Hours/Semestr]
prof. MUDr. J	iří Ehrmann, CSc., prof. MUDr. Vlastimil Ščudla, CSc.	possible semester ZS

The aim of the "Introduction to Clinical Medicine" is to adopt complete clinical examination, i.e. the history of the patient as well as a detailed physical examination. The student should be able to express properly the findings and write down acquired data, to work out admission record, and to compile working clinical diagnosis and an examination plan within internal medicine.

Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, BIO/VA011 nebo BIO/VAB11, LBF/VA011 nebo LBF/VAB11, LCH/VAA11, CJA/VA031 nebo CJA/VAA31, CJA/VAB12 nebo CJA/VAB41, KAR/VAB11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, FYZ/VAA11 nebo FYZ/VAA21, LCH/VAA20 nebo LCH/VAA22, HIE/VAA12 nebo HIE/VAA21, HIE/VAB11 nebo HIE/VAB12, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, CJA/VAB22 nebo CJA/VAB42, PLE/VAA11 nebo PLE/VAA81 nebo SOL/VAA41, PLE/VAB11 nebo PLE/VAB81 nebo SOL/VAB41

IN0/VA041 **Internal Medicine 4**

1 [Weeks/Semestr] + Practice 7 [Weeks/Semestr] + Practice 1 [Weeks/Semestr] prof. MUDr. Pavel Horák, CSc., prof. MUDr. Ondřej Urban, Ph.D. possible semester ZS/LS

A detailed introduction into the organization of the departments of internal medicine, including specialized centers and laboratories of supplementary or supporting branches of internal medicine. Mastery of a broad spectrum of basic practical skills in internal medicine. Extended theoretical knowledge and acquisition of "clinical thinking". Practical training preceding the internal medicine state examination aims at extending theoretical knowledge and acquiring other practical skills in undergraduate internal medicine.

Prerequisite courses IN3/VA012 nebo IN3/VAB12 nebo IN3/VAB13, IN3/VA012 nebo IN3/VAA12 nebo IN3/VAA13, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11

possible semester ZS

2 cr Pre-Exam Credit.Exam

5 cr. Pre-Exam Credit, Exam

24 cr. Pre-Exam Credit

prof. MUDr. Miloš Táborský, CSc., FESC, MBA

Active participation on cardiologic department: patients history, physical evaluation, diagnostic methods, therapy and prognostic significance of cardiovascular diseases. Participation in specialized cardiologic laboratories included. Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAA32 nebo FAR/VAB11, PLE/VABP2 nebo TPO/VABP1, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11

IN1/ZAA11 **Internal Medicine 1**

Students will acquire basic orientation in medical documentation, history taking, physical examination principles in internal medicine, general information about examination techniques used in internal medicine focused on orientation in heart and circulatory diseases examination possibilities. Acquired knowledge will be practiced during a bed-side practical training.

Prerequisite courses PFY/ZAB11

prof. MUDr. Ondřej Urban, Ph.D.

IN2 - DEPARTMENT OF INTERNAL MEDICINE II - GASTROENTEROLOGY AND IN2/VAA32 0 cr. Pre-Exam Credit **Internal Medicine 1**

The objective of the State Examination is a complex evaluation of acquisition of practical and theoretical knowledge of

prof. MUDr. Pavel Horák, CSc., prof. MUDr. Ondřej Urban, Ph.D.

Internal Medicine. The examination itself consists of two parts, practical and oral. The objective of the practical part of the State Examination is an evaluation of the student's ability to completely examine a patient, writing the case history, including a diagnostic conclusion, the differential - diagnostic analysis, the diagnostic and therapeutic procedure. The integral part of the examination is an evaluation of a selected radiographic and ECG record. The oral part of the State Examination is focused on an evaluation of the level of theoretical knowledge in the extent of the published syllabus in the form of answers to four questions and a related discussion.

This is the student's last contact with the practical side of internal medicine and its specialized subfields before graduation. The aim is to familiarize students in detail with the organization and operation of internal medicine departments, including specialized departments and laboratories of sub- and postgraduate fields of internal medicine with the intention of actively acquiring the widest possible range of basic practical skills in the field. In addition to the expansion of theoretical knowledge, the student must adopt the fundamentals of "clinical thinking".

Prerequisite courses IN3/VA012 nebo IN3/VAA12 nebo IN3/VAA13, IN3/VA012 nebo IN3/VAB12 nebo IN3/VAB13, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, IN0/VA041 nebo IN0/VA043 nebo IN0/VA044, PRL/VA011, PLE/VABP2 nebo TPO/VABP1, PLE/VAB11 nebo PLE/VAB81 nebo SOL/VAB41 nebo TPO/VAB11 nebo TPO/VAB13

IN1 - DEPARTMENT OF INTERNAL MEDICINE I - CARDIOLOGY

IN1/VA022 **Internal Medicine 2**

MUDr. Vlastimil Doupal, Ph.D.

Exercise 79 [Hours/Semestr] + Seminar 41 [Hours/Semestr]

possible semester ZS/LS

5 cr. Pre-Exam Credit

The block consists of 3 weeks of cardiology a 1 week of pneumology. Mastering of cardiology and pneumology history taking, physical examination, diagnosis, treatment and prognostic evaluation of diseases of the cardiovascular and respiratory system. Visits to specialized cardiology and pneumology laboratories and teaching on a phantom are also included.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAA32 nebo FAR/VAB11, PLE/VABP2 nebo TPO/VABP1, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11

IN1/VA042 **Internal Medicine 2**

Exercise 79 [Hours/Semestr] + Seminar 41 [Hours/Semestr]

possible semester ZS/LS

6 cr. Pre-Exam Credit

MUDr. Jan Galuszka, Ph.D.

Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

Exercise 37 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

possible semester ZS

possible semester ZS/LS

possible semester ZS

0 cr. Pre-Exam Credit

The aim of the course is to master the diagnosis, treatment and prognostic evaluation of internal diseases in the field of gastroenterology. Based on the history and physical examination, the student learns how to make a working diagnosis and develop a strategy for further examination procedures to establish a definitive diagnosis. The student will also be required to develop a treatment plan and comment on short-term, long-term prognosis and survival. The second component of this course is the general principles of nutrition with a focus on nutritional disorders in gastrointestinal and biliary diseases.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21, FYZ/VAA11 nebo FYZ/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, HIE/VAA12 nebo HIE/VAA21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, CJA/VAB22 nebo CJA/VAB42

IN2/VAB22 **Internal Medicine 1**

Exercise 74 [Hours/Semestr] + Seminar 60 [Hours/Semestr]

MUDr. Diana Hexspoor Bawadekji

The aim is to master diagnosis, therapy and prognosis of internal diseases in the specialities gastroenterology. On the basis of a case history and physical examination, students shoud be able to form the preliminary diagnosis and to develop an adequate strategy of other supporting examinations leading to the definite diagnosis. From the prognostic point of view, the aim is to realistically evaluate the probable duration of the disease and its treatment and the effect of the dissease on the patient's chance for survival. The second part of this education are general principles of nutrition especially of gastrointestinal and hepatobiliary illness.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21, FYZ/VAA11 nebo FYZ/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, HIE/VAA12 nebo HIE/VAA21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, CJA/VAB22 nebo CJA/VAB42

IN2/VAB32 Internal Medicine 1

Exercise 37 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

prof. MUDr. Ondřej Urban, Ph.D.

The aim of the course is to master the diagnosis, treatment and prognostic evaluation of internal diseases in the field of hepatology, haematology, transfusiology, and to master the basic principles of resuscitation. Based on the anamnesis and physical examination, the student is required to make a working diagnosis and develop a strategy for further examination procedures to establish a definitive diagnosis. The student will be asked to develop a treatment plan and a statement of short-term, long-term and survival prognosis. The hematology curriculum focuses on non-cancerous hematologic diseases with an emphasis on anemias and disorders of hemostasis. An introduction to transfusiology is also included. Students must also master the basic principles of resuscitation including advanced resuscitation for patients with emergency diseases of the gastrointestinal tract, including practical implementation.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21, FYZ/VAA11 nebo FYZ/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, HIE/VAA12 nebo HIE/VAA21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, CJA/VAB22 nebo CJA/VAB42

IN2/ZAB13 Internal Medicine 2

Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

MUDr. Diana Hexspoor Bawadekji

The aim is to master principle questions of the etiology and pathogenesis and to diagnosticate and treat internal diseases in the specialities: gastroenterology, hepatology, diabetelogy, nutrition and diseases of respiratory system. Student should be able to master all it in such extent requisite for the dental medicine.

Prerequisite courses IN1/ZAA11, PFY/ZAB11

IN3 - DEPARTMENT OF INTERNAL MEDICINE III - NEPHROLOGY, RHEUMATOLOGY

IN3/VA012 **Internal Medicine 3**

10 [Hours/Semestr] + Exercise 60 [Hours/Semestr] + Seminar 50 [Hours/Semestr]

prof. MUDr. Pavel Horák, CSc.

possible semester ZS/LS

10 cr. Pre-Exam Credit, Exam

5 cr. Pre-Exam Credit

5 cr. Pre-Exam Credit

possible semester LS

possible semester LS

4 cr. Pre-Exam Credit

possible semester LS

The course focuses on providing the theoretical and practical foundations of the fields of hematology, nephrology, rheumatology, endocrinology, diabetology and selected metabolic disorders. The pathophysiology of diseases, their clinical picture, laboratory findings and examination methods leading to the diagnosis of these conditions, modern treatment and prognosis of these diseases are discussed. In the practical part, attention is paid to the expansion of practical skills in clinical examination, the preparation of medical reports, the interpretation of findings, established working and differential diagnoses and designing effective therapy and reducing the risk of their side effects.

Prerequisite courses IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32

IN3/ZAA11 **Internal Medicine 3**

3 cr. Pre-Exam Credit, Exam

Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

prof. MUDr. Pavel Horák, CSc.

possible semester ZS

Differential diagnosis of selected symptoms occurring in internal medicine, especially in orofacial area and neck area faced by a dentist. Diagnosis and therapy of emergency situations in internal medicine occurring in dental practice (acute cardiovascular accidents, including cardiopulmonary resuscitation, respiratory insufficiency, aspiration of a foreign body, bleeding from airways, unconsciousness, most frequent types of intoxication, acute complications of diabetes mellitus, bleeding into the gastrointestinal tract, fever, prophylactic and targeted therapy with antibiotics, problems of patients treated with corticoids, immunosuppressive and cytotoxic therapy). Differential diagnosis of hepatitis, diarrhea, viral hepatitis and other viral infections related to dentists. Examination of patients, elaboration of working diagnosis, diagnostic and therapeutic program, analysis of patients related to specificity of dental practice.

Prerequisite courses IN1/ZAA11, IN2/ZAB11 nebo IN2/ZAB12 nebo IN2/ZAB13

KAR - DEPARTMENT OF ANESTHESIOLOGY, RESUSCITATION AND INTENSIVE CARE KAR/VAB11 First Aid

2 cr. Colloquium

possible semester ZS/LS

12 [Hours/Semestr] + Exercise 10 [Hours/Semestr]

MUDr. Lenka Doubravská, Ph.D.

Students will familiarize themselves with the guidelines for administering Basic Life Support (BLS) and acquire practical proficiency in these procedures. They will become acquainted with the care of unconscious patients and gain knowledge of the principles of initial treatment for injuries involving severe hemorrhage. Furthermore, students will develop competence in diagnosing and performing primary care for fractures, chest and abdominal injuries, as well as initial treatment for conditions resulting from physical and chemical exposures.

KAR/VA023 Anaesthesia and Intensive Care

5 cr. Pre-Exam Credit,Exam

5 [Hours/Semestr] + Exercise 38 [Hours/Semestr] + Seminar 22 [Hours/Semestr] possible semester ZS/LS

MUDr. Lenka Doubravská, Ph.D.

The objectives of the course are:

1. To teach students to provide basic and advanced cardiopulmonary resuscitation, including acquiring the skills to maintain airway patency by using simple devices or performing other life-saving procedures.

2. To instruct students in the assessment of patients and their preparation prior to anesthesia.

3. To familiarize students with fundamental anesthesia management procedures using available anesthetic techniques.

4. To teach students to adequately treat acute and chronic pain.

5. To familiarize students with the organisation of intensive care, the spectrum of care provided and ethical considerations.

6. To introduce students to the fundamentals of mechanical ventilation, infusion therapy, nutritional intervention and other supportive techniques.

7. To teach students to report information about current health status, response to treatment to date and suggest further therapeutic approach or limitation of therapy

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, URG/VA023, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAB32

KIM - DEPARTMENT OF IMMUNOLOGY AND CLINICAL ALLERGOLOGY

KIM/VAA13 Clinical Immunology and Allergology

2 cr. Pre-Exam Credit, Exam

Exercise 6 [Hours/Semestr] + Seminar 9 [Hours/Semestr] possible semester ZS

prof. Mgr. MUDr. Milan Raška, Ph.D.

Students will learn about the immunological mechanisms, clinical manifestations and possibilities of immunologicallymediated therapy and prevention of diseases with an immunological component, especially allergic, autoimmune and malignant diseases and immunodeficiency conditions. Will be acquainted with clinical issues of transplantations. In the field of immunological investigation methods, students will deepen their knowledge of their differential diagnostic significance and interpretive potential.

Prerequisite courses KIM/VAB11 nebo KIM/VAB12, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, PFY/VAA31 nebo PFY/VAB11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11

KIM/VAB12 Medical Immunology

Exercise 12 [Hours/Semestr] + Seminar 14 [Hours/Semestr]

prof. Mgr. MUDr. Milan Raška, Ph.D.

Introduction of principles of functioning of the immune system, inherited and antigen specific humoral and cell-mediated immunity, structure of lymphatic system, mechanisms of immune response induction including participating cell populations and signaling, genetic basis of antigen specific immune response diversity, HLA molecules, central and peripheral tolerance, mechanisms of induction and regulation of inflammatory response. Explanation of the differences in functioning of systemic and mucosal immune responses, mechanisms of immune defense to infection and surveillance of tumor development. Principles of hypersensitivity reactions and clinical examples. Introduction to laboratory immunological investigation, including allergen hypersensitivity investigation, principles of specimens collection from patients, principles of clinical immunology laboratory methods, overview about immunology parameters routinely investigated, indications and interpretation. Further, it will be introduced HLA polymorphism typing and selected molecular biology methods for investigation in patients with autoimmunity disorders, immune efficiencies or malignancies.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21

KIM/VA031 Immunology

prof. Mgr. MUDr. Milan Raška, Ph.D.

Students will learn about the immunological mechanisms, clinical manifestations and possibilities of immunologicallymediated therapy and prevention of diseases with an immunologic mechanisms involved, especially allergic, autoimmune, and oncology diseases and immunodeficiencies. Students will learn about the principles of transplantation. In the field of immunological investigation methods, students will deepen their knowledge of differential diagnostic significance and interpretive potential.

FAR/VAB32, PFY/VAA31 nebo PFY/VAB11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11

KIM/VCA51 **Biological Treatment-Theory and Practice**

prof. Mgr. MUDr. Milan Raška, Ph.D.

Student will get acquainted with basis of new, dynamically-developing discipline, in which immunology meets the clinical aspects of biological therapy, i.e. treatment based on blocking key molecules of immunopathological reactions by antibodies and other antagonists. After introductory review of theoretical aspects, clinical specialists will present case reports and discuss specific applications of biologicals into treatment of medically and socioeconomically important disease from areas from oncology, autoimmune diseases of nervous system or musculoskeletal system and/or asthma, allergy and pulmonary disorders.

Prerequisite courses KIM/VCB11 nebo KIM/VCB12 nebo KIM/ZUA12, CH0/VCA11 nebo CH0/VCA12 nebo CH0/VCB31 nebo IN0/VCA12 nebo IN0/VCA13 nebo IN1/ZUA12

KIM/ZAA11 Immunology

2 cr. Pre-Exam Credit,Exam 15 [Hours/Semestr] + Exercise 15 [Hours/Semestr] possible semester ZS

prof. Mgr. MUDr. Milan Raška, Ph.D.

20 [Hours/Semestr] + Exercise 40 [Hours/Semestr]

Prerequisite courses KIM/VAB11 nebo KIM/VAB12, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo

possible semester LS

3 cr. Pre-Exam Credit

possible semester ZS/LS

6 cr. Pre-Exam Credit, Exam

4 cr. Pre-Exam Credit Seminar 16 [Hours/Semestr]

possible semester LS

Students will acquire basic knowledge of medical immunology and their practical applications. Emphasis will be given to those aspects of immunological theory and practice which link to dental medicine. The course includes also short demonstrations of methods in laboratory immunology.

KMS - DEPARTMENT OF COMMUNICATION

KMS/VA011 Europe: User's Guide

doc. Mgr. Jaroslav Franc, Th.D.

The aim of the subject is the basic introduction into the European values and roots of European culture for the foreign students of the Palacký University; especially on those students from non-European cultural background. It pays particular attention to the context of the Czech culture and the standards of academic education. The subject offers to the students the essential hermeneutical key to understand and to interpret the situation of modern European society.

KOZ - DEPARTMENT OF DERMATOLOGY AND VENEREOLOGY

KOZ/VA012 Dermatology and Venereology

9 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

doc. MUDr. Dagmar Ditrichová, CSc.

Practical knowledge of dermatological and venerological examinations including basic laboratory tests. Identification of the most common dermatological and venerological diseases and basic knowledge of the appropriate therapy. Prerequisite courses IN2/VAA32 nebo IN2/VAB22 nebo IN2/VAB32, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11

KOZ/ZAA11 Dermatology and Venereology

doc. MUDr. Dagmar Ditrichová, CSc.

Students will acquire basic information about the most common skin disesases and sexually transmitted diseases with the accent on the orofacial area.

Prerequisite courses PAT/ZAB11, PAT/ZAA22

LBF - DEPARTMENT OF MEDICAL BIOPHYSICS

LBF/VAA11 Medical Biophysics, Biometrics and Comp.

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

prof. RNDr. Hana Kolářová, CSc.

The main objective is to teach the basic knowledge and skills on the atomic and nuclear physics, thermodynamics, gases and liquid kinetics, molecular constitution of living systems, cells biophysics including biopotencial generation and mechanism of cells excitation, heart function and circulation system biophysics. They obtain skills required for work with technical equipments for biomedical measurement and some diagnostics equipments like ECG recorder and ultrasonograph. The students are also introduced to selected software used in information mining and health care.

LBF/VAB11 Medical Biophysics, Biometrics and Comp.

The main objective is to teach the basic knowledge and skills on the atomic and nuclear physics, thermodynamics, gases and liquid kinetics, molecular constitution of living systems, cells biophysics including biopotencial generation and mechanism of cells excitation, heart function and circulation system biophysics. They obtain skills required for work with technical equipments for biomedical measurement and some diagnostics equipments like ECG recorder and ultrasonograph. The students are also introduced to selected software used in information mining and health care.

Prerequisite courses LBF/VAA11

MUDr. Mgr. Robert Bajgar, Ph.D.

2 cr. Pre-Exam Credit 12 [Hours/Semestr] possible semester ZS/LS

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester LS

2 cr. Pre-Exam Credit, Exam 15 [Hours/Semestr] + Exercise 15 [Hours/Semestr]

3 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

possible semester ZS

possible semester ZS

10 cr. Pre-Exam Credit, Exam

0 cr. Pre-Exam Credit

2 cr Pre-Exam Credit Exercise 4 [Hours/Semestr] + Seminar 3 [Hours/Semestr] possible semester LS

MUDr. Mgr. Robert Bajgar, Ph.D.

LBF/VAB42

The main goal of the subject is to present to students 3D printing technology, possibilities of creation of 3D models and use of 3D printing in medicine. During practical training the students will try to create a simple 3D model, prepare it for 3D printing and print it.

LBF/VA011 Medical Biophysics, Biometrics and Comp.

3D Printing in Medicine

60 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

prof. RNDr. Hana Kolářová, CSc.

The goal of the subject is an explanation of biophysical principles in the physiological processes of the human body (molecular biophysics, biophysics of cell and tissues), its function (biophysics of perception, organ biophysics) and its interaction with the external environment. It explains the basic principles of diagnostic and therapeutic instruments, essentials of biocybernetics, biostatics, computer techniques and informatics focusing on hospital systems. The basic goal of the practical training is to develop in students the general routine needed at work with medical instrumental techniques. A part of the practical training course is a computer work, when the students are familiarized with application software used in medicine.

Prerequisite courses LBF/VAA11

LBF/VA021 **Clinical Biophysics**

MUDr. Mgr. Robert Bajgar, Ph.D.

The course offers an overview of modern diagnostic and therapeutic methods such as X-ray diagnostic methods, radionuclide imaging, magnetic resonance imaging, photodynamic therapy, electrodiagnostic methods, ultrasound in medicine and others. Each topic introduces and explains the physical principle of the method and of course its clinical applications. Specially, the emphasis is placed on such methods, which students meet at the clinics of the University Teaching Hospital.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAA12 nebo SOL/VAB12, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

LBF/ZAB11 **Medical Biophysics**

prof. RNDr. Hana Kolářová, CSc.

prof. RNDr. Hana Kolářová, CSc.

The goal of the subject is explanation of biophysical principles in physiological processes of human body (molecular biophysics, biophysics of cell and tissues), its function (biophysics of perception, organ biophysics) and its interaction with external environment. In the following there will be explained the essentials of biostatistics, basic physical properties of liquids, solids and mainly dental materials. The students will acquire basic physical principles of laboratory methods in dentistry, some diagnostic and therapeutic methods. A part of the practical training course is a computer work, when the students are familiarized with application software used in medicine.

LBF/ZAB21 Software Equipment in Dental Office

Students becomes familiar with basics of informatics, informatics technology and application software oriented to both the general and specialized medical applications. Practical skillness oriented to dentistry and stomatology is emphasized. Another part of their education is oriented to computer network applications with outcome on Internet tools application in their specialization.

3 cr. Pre-Exam Credit, Exam

15 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester ZS

10 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

2 cr. Colloquium 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

possible semester ZS

2 cr. Pre-Exam Credit

possible semester LS

LGE - DEPARTMENT OF MEDICAL GENETICS

LGE/VA012 Medical Genetics

2 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

Exercise 10 [Hours/Semestr] + Seminar 20 [Hours/Semestr]

prof. MUDr. Martin Procházka, Ph.D.

The main focus of this course is to introduce students to the basic principles of medical genetics and the broad application of genetics in modern medicine. Primarily, medical genetics is still a diagnostic and preventive field, but thanks to advances in molecular medicine methods, it is increasingly used as a necessary step in personalized patient treatment. In recent years, there have been advances in the use of gene therapy in the treatment of some previously infaustic, genetically based diseases. Upon completion of this tutorial, the student will have a basic understanding of: genetically based diseases, principles of heredity, genetic counseling, specifics of informed consent, genetically based diseases, DNA analysis and cytogenetics.

Prerequisite courses INO/VAA11 nebo INO/VAA21 nebo INO/VAB11 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB12 nebo CJA/VAB41 nebo CJA/VAB44, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11

LGE/VA021 Rare Diseases-Cases from Genetic Clinic

1 cr. Pre-Exam Credit Seminar 4 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Martin Procházka, Ph.D.

The aim of the course is to expand the knowledge of medical genetics on selected case studies of rare diseases in students who have shown interest in the field. Genetic counseling is very specific in terms of the potential impact of a genetic disease diagnosis on the proband and his/her family. Genetic testing may be performed as diagnostic, familial, predictive, or perhaps also as preconception. These are very different from the perspective of the consulting physician and emphasize close interdisciplinary collaboration, which should be moderated by a medical geneticist.

Prerequisite courses LGE/VA011 nebo LGE/VA012 nebo LGE/VA041

LGE/VA041 Medical Genetics

Exercise 12 [Hours/Semestr] + Seminar 20 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Martin Procházka, Ph.D.

The main focus of this course is to introduce students to the basic principles of medical genetics and the broad application of genetics in modern medicine. Primarily, medical genetics is still a diagnostic and preventive field, but thanks to advances in molecular medicine methods, it is increasingly used as a necessary step in personalized patient treatment. In recent years, there have been advances in the use of gene therapy in the treatment of some previously infaustic, genetically based diseases. Upon completion of this tutorial, the student will have a basic understanding of: genetically based diseases, principles of heredity, genetic counseling, specifics of informed consent, genetically based diseases, DNA analysis and cytogenetics.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN0/VAB11 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB12 nebo CJA/VAB41 nebo CJA/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11

LCH - DEPARTMENT OF MEDICAL CHEMISTRY AND BIOCHEMISTRY

LCH/VAA11 Medical Chemistry

7 cr. Pre-Exam Credit, Exam

45 [Hours/Semestr] + Exercise 15 [Hours/Semestr]

possible semester ZS

prof. Mgr. Martin Modrianský, Ph.D.

The aim of medical chemistry is to explain the principles of biophysical, inorganic, bioinorganic, organic and bioorganic chemistry required for the study and understanding of biochemistry. Students will acquire the basics of chemical reasoning and imagination, such as the concepts of molecular shape, intermolecular forces, equilibrium, energy transfer, structure-activity relationships, as well as thorough knowledge of molecules present in biological systems. From the practical point of view, students will master simple calculations in stoichiometry, acid-base and oxidation-reduction equilibria, and energy changes in the course of biochemical reactions.

LCH/VAA12 Basic Biochemical Terms and Calculations

doc. Mgr. Jana Franková, Ph.D.

2 cr. Pre-Exam Credit Seminar 10 [Hours/Semestr] possible semester ZS

2 cr. Pre-Exam Credit, Exam

After completing the course, the student will be familiar with the nomenclature of biochemical compounds, their reactivity and basic biochemical calculations.

LCH/VAA20 **Biochemistry 2**

60 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

prof. RNDr. Jitka Ulrichová, CSc.

The aim of the subject is to explain teoretical principles of biochemistry and the regulatory mechanisms of basic metabolic pathways. This knowledge is essential for interpretation of physiological and pathological events in human organism. Students are also trained in laboratory classes with respect to master simple biochemical analyses and the ability to interpret the results from laboratory tests.

Prerequisite courses LCH/VAB11 nebo LCH/VAB20, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, CJA/VA031, BIO/VA011 nebo BIO/VAB11, LBF/VAA11, LCH/VAA11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11

LCH/VAA22 **Biochemistry 2**

45 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

doc. RNDr. Jitka Vostálová, Ph.D.

The aim of the subject is to explain the principles of biochemical processes in the organism and the mechanisms of regulation of basic metabolic events. This knowledge is a prerequisite for the interpretation of physiological and pathological processes in the human organism. Students are also guided to practical mastery of simple biochemical analyzes and to the interpretation of laboratory test results.

Prerequisite courses LCH/VAB11 nebo LCH/VAB20, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, CJA/VA031, BIO/VA011 nebo BIO/VAB11, LBF/VAA11, LCH/VAA11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11

LCH/VAA62 Laboratory Diagnostics in Clin. Practise

Seminar 25 [Hours/Semestr]

prof. RNDr. David Friedecký, Ph.D.

The aim of the subject is to inform students about the laboratory methods and basic calculations employed in disease diagnostics and monitoring. Emphasis will be put on understanding of the significance of laboratory methods in the context of complex diagnostic procedure (involving history, physical examination, imaging techniques etc.) as well as their specific contribution in selected pathological states. The interactive form of tuition (incl. simulations, solving model situations, the use of case reports and discussion) will assist students in mastering the rational approach to laboratory test indication and the fundamentals of result interpretation.

Prerequisite courses LCH/VAA11, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, PFY/VAA31 nebo PFY/VAB11

LCH/VAB11 **Biochemistry 1**

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

prof. Mgr. Martin Modrianský, Ph.D.

The aim of the subject is to explain the principles of biochemical processes in the organism and the mechanisms of regulation of basic metabolic events. This knowledge is a prerequisite for the interpretation of physiological and pathological processes in the human organism. Students are also guided to practical mastery of simple biochemical analyses and to the interpretation of laboratory test results.

Prerequisite courses LCH/VAA11, BIO/VAA11

LCH/VAB20 **Biochemistry 1**

0 cr. Pre-Exam Credit 30 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester LS

prof. RNDr. Jitka Ulrichová, CSc.

7 cr. Pre-Exam Credit,Exam

2 cr. Colloquium

possible semester LS

5 cr. Pre-Exam Credit

possible semester LS

possible semester ZS

15 cr. Pre-Exam Credit, Exam

possible semester ZS

The aim of the subject is to explain teoretical principles of biochemistry and the regulatory mechanisms of basic metabolic pathways. This knowledge is essential for interpretation of physiological and pathological events in human organism. Students are also trained in laboratory classes with respect to master simple biochemical analyses and the ability to interpret the results from laboratory tests.

Prerequisite courses LCH/VAA11, BIO/VAA11

LCH/VAB23 Introduction to Laboratory Medicine

Seminar 21 [Hours/Semestr]

2 cr. Pre-Exam Credit

possible semester LS

prof. Mgr. Martin Modrianský, Ph.D.

Laboratory medicine is an essential part of a patient's clinical evaluation, and more than 70% of clinical decisions today rely on laboratory results. Laboratory techniques are closely intertwined with various aspects of diagnostics and patient care. The course is structured such, that it allows medical students to acquire basic knowledge along with practical skills necessary for the understanding and utilization of the tests in all medical fields.

The aim of this subject is to strengthen the skills in rational indication of tests and interpretation of biochemical results.

LCH/VAB52 Microbiome and Its Role in the Hum. Body

Mgr. Lenka Jourová, Ph.D.

The aim of the subject is to define the microbiome and explain its role in the human body, especially in pathological processes, from a biochemical point of view. The emphasis is placed on microbial metabolism in the digestive tract and its further impact on the whole organism. The subject builds on knowledge of microbiology and deals with the molecular mechanisms of biochemical processes and their regulation by microbiome and its metabolites.

Prerequisite courses LCH/VCA20, LCH/VAB11 nebo LCH/VAB20 nebo LCH/VAB21 nebo LCH/ZAB21, MIK/ZAA12, MIK/VAA31 nebo MIK/VAB11 nebo MIK/ZAB11

LCH/ZAA11 Medical Chemistry

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

prof. Ing. Jan Vacek, Ph.D.

The aim of the subject is to recall basic terms and to extend knowledge in general, inorganic and organic chemistry. Students will learn the chemical composition of dental tissue and dental materials and the chemical structure and function of other substances present in the buccal cavity (oral hygiene preparations, drugs, etc.). Further, they will acquire an outlay of principles of chemical processes that can occur there. From practical aspect, students will get basic knowledge and skills required for work in a chemical laboratory.

LCH/ZAA21 Biochemistry 1	0 cr. Pre-Exam Credit
	15 [Hours/Semestr] + Exercise 45 [Hours/Semestr]
doc. RNDr. Eva Anzenbacherová, CSc.	possible semester ZS
The aim of the subject is to explain theoretical principle	es of biochemistry and regulation mechanisms of basic metabolic

pathways in eukaryotic cells. The emphasis is given on metabolic reaction in digestive organs and connective tissues, on the biochemistry of saliva and on the effect of diet on selected metabolic processes.

Prerequisite courses LBF/ZAB11, LCH/ZAA11, BIO/ZAA11, NAN/ZAB11, CJA/ZAB41, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

LCH/ZAA41	Calculations in Medical Chemistry	1 cr. Pre-Exam Credit
		Seminar 8 [Hours/Semestr]
Mgr. Martina	Bancířová, Dr.	possible semester ZS
The aim of the subject is to recall basic terms and to extend knowledge in calculations required in medical chemistry.		

Prerequisite courses LCH/ZAA11

Seminar 8 [Hours/Semestr]

possible semester LS

3 cr. Pre-Exam Credit, Exam

possible semester ZS

2 cr. Pre-Exam Credit

6 cr. Pre-Exam Credit, Exam

possible semester ZS

9 cr Pre-Exam Credit,Exam

doc. RNDr. Eva Anzenbacherová, CSc.

The aim of the subject is to explain theoretical principles of biochemistry and regulation mechanisms of basic metabolic pathways in eukaryotic cells. The emphasis is given on metabolic reaction in digestive organs and connective tissues, on the biochemistry of saliva and on the effect of diet on selected metabolic processes.

Prerequisite courses LCH/ZAA11, BIO/ZAB11, NAN/ZAB11, CJA/ZAB41, LBF/ZAB11, LCH/ZAA21, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

MIK - DEPARTMENT OF MICROBIOLOGY

MIK/VAA12 Microbiology 2

prof. MUDr. Milan Kolář, Ph.D.

To gain a basic overview of the most common infections - pathogens, vectors, nature, epidemiology, diagnosis, prevention and treatment. To become familiar with the tools in the pathogenic effect of microbes and defence mechanisms in humans. To get an overview of indications and options for collecting clinical samples for microbiological examination. To acquire general knowledge of sample analyses and identification of aetiological agents, including the time requirements. To be capable of interpreting microbiological results.

Prerequisite courses MIK/VAA31 nebo MIK/VAB11

MIK/VAA31 Microbiology 1

prof. MUDr. Milan Kolář, Ph.D.

To practice basic skills and measures in working with infectious materials. To acquire knowledge of taxonomy, morphology, genetics and physiological properties of microroganisms. To gain an overview of diagnostic methods and microbiology laboratory services. To be capable of selecting the most suitable examinations. To become familiar with antimicrobial agents, their prophylactic and therapeutic use, and with the principles of disinfection and sterilization. Prerequisite courses BIO/VA011 nebo BIO/VAB11, LCH/VAA11, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo

CJA/VAB41, CJA/VA031 nebo CJA/VAB31, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, LCH/VAB11 nebo LCH/VAB20, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11

MIK/VAB11 Microbiology 1

prof. MUDr. Milan Kolář, Ph.D.

3 cr. Pre-Exam Credit

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester LS

To practice basic skills and measures in working with infectious materials. To acquire knowledge of taxonomy, morphology, genetics and physiological properties of microroganisms. To gain an overview of diagnostic methods and microbiology laboratory services. To be capable of selecting the most suitable examinations. To become familiar with antimicrobial agents, their prophylactic and therapeutic use, and with the principles of disinfection and sterilization.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, LCH/VAA11, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo CJA/VAB41, CJA/VA031 nebo CJA/VAB31, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, LCH/VAB11 nebo LCH/VAB20, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11

MIK/VAB31 Microbiology 2

prof. MUDr. Milan Kolář, Ph.D.

To gain a basic overview of the most common infections - pathogens, vectors, nature, epidemiology, diagnosis, prevention and treatment. To become familiar with the tools in the pathogenic effect of microbes and defence mechanisms in humans. To get an overview of indications and options for collecting clinical samples for microbiological examination. To acquire general knowledge of sample analyses and identification of aetiological agents, including the time requirements. To be capable of interpreting microbiological results.

Prerequisite courses MIK/VAA31 nebo MIK/VAB11

0 cr. Pre-Exam Credit 30 [Hours/Semestr] + Exercise 30 [Hours/Semestr] possible semester ZS

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester LS

8 cr. Pre-Exam Credit, Exam

possible semester LS

^{15 [}Hours/Semestr] + Exercise 30 [Hours/Semestr]

Clinical Cases of Antibiotic Therapy

prof. MUDr. Milan Kolář, Ph.D. possible semester ZS/LS The aim is to introduce students to the principles of adequate antibiotic therapy of the most common bacterial

infections in the hospital and community. The principles of identification of the cause of infection and selection of the most appropriate therapy will be presented, including the potential consequences of inadequate therapeutic approach. Prerequisite courses MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11

MIK/VA071 Clinical Cases of Viral Infections	1 cr. Colloquium	
	Seminar 5 [Hours/Semestr]	
prof. MUDr. Milan Kolář, Ph.D. possible semeste		
The aim is to introduce students to the basis of diagnosis and adequate therapy of the principles of identification of the etiological agents and selection of the most apper Prerequisite courses MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB1	propriate therapy will be presented.	

MIK/VA081	Management of ATB Treatment According	3 cr.	Colloquium
	Exercise 2 [We	eeks/Semestr] + Seminar 8 [Ho	ours/Semestr]
prof. MUDr. M	/ilan Kolář, Ph.D.	possible se	mester ZS/LS
patient accordi	course is to inform students with the practical manageme ing to the principles of Antibiotic stewardship. te courses MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 neb		articular

MIK/ZAA12	Microbiology	2 - Oral	Microbiology

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr] possible semester ZS

To gain a basic overview of the most common mouth infections - pathogens, epidemiology, diagnosis, prevention and treatment. To become familiar with the tools in the pathogenic effect of microbes and defence mechanisms in humans. To get an overview of indications and options for collecting clinical samples for microbiological examination. To acquire general knowledge of other microbes and infections, sample analyses and identification of etiological agents, including the time requirements. To be capable of interpreting microbiological results.

Prerequisite courses MIK/ZAB11

MIK/ZAB11 **Microbiology 1**

prof. MUDr. Milan Kolář, Ph.D.

0 cr. Pre-Exam Credit 15 [Hours/Semestr] + Exercise 30 [Hours/Semestr] possible semester LS

prof. MUDr. Milan Kolář, Ph.D.

To practice basic skills and measures in working with infectious materials. To acquire knowledge of taxonomy, morphology, genetics and physiological properties of microorganisms. To gain an overview of diagnostic methods and microbiology laboratory services. To be capable of selecting the most suitable examinations, especially in mouth infections. To become familiar with antimicrobial agents, their prophylactic and therapeutic use, and with the principles of disinfection and sterilization in dentistry.

Prerequisite courses LCH/ZAA11, LBF/ZAB11, NAN/ZAB11, BIO/ZAB11, CJA/ZAB41, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

MTM - INSTITUTE OF MOLECULAR AND TRANSLATIONAL MEDICINE

MTM/VAA21 Animal Models of Human Diseases

2 cr. Pre-Exam Credit Seminar 10 [Hours/Semestr] possible semester ZS

MUDr. Petr Džubák, Ph.D.

Colloquium

1 cr.

Seminar 6 [Hours/Semestr]

5 cr. Pre-Exam Credit, Exam

The aim of the subject is to provide students with a general overview of the methods of care and experimental work with laboratory animals and their use as study models of human diseases.

Prerequisite courses BIO/VA011 nebo BIO/VAB11 nebo BIO/VAB12

MTM/VAB31 DNA Profiling and Its Forensic Interpr..

prof. Mgr. Jiří Drábek, Ph.D.

Students are introduced to probabilistic inferential logic and population genetics to allow for interpretation of kinship testing and analysis of crimescene DNA traces.

Prerequisite courses BIO/VA011 nebo BIO/VAB11 nebo BIO/VAB12 nebo BIO/ZAB11

NAN - DEPARTMENT OF ANATOMY

NAN/VAA12 Anatomy 1

doc. RNDr. Petr Mlejnek, Ph.D.

Based on the basic knowledge of biology and somatology corresponding to the curriculum of a four-year high school, students learn about basic hierarchy of the structure of the human organism in the sequence cell-tissue-organs-systemsorganism. Knowledge of general osteology, arthrology, myology, angiology, neurogenesis is further developed in systematic and topographical relationships with the aim of resulting in practical clinical applications. Terminologia anatomica is used as the basis of all medical terminology. The main content of the subject is the musculoskeletal system, spinal nerves, circulatory system, lymphatic and digestive system.

Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, CJA/VAB31, KAR/VAB11, LCH/VAA11, LBF/VA011 nebo LBF/VAB11, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41

NAN/VAA13 Anatomy 1

60 [Hours/Semestr] + Exercise 60 [Hours/Semestr] possible semester ZS

doc. RNDr. Petr Mlejnek, Ph.D.

Based on the basic knowledge of biology and somatology corresponding to the curriculum of a four-year high school, students learn about basic hierarchy of the structure of the human organism in the sequence cell-tissue-organs-systemsorganism. Knowledge of general osteology, arthrology, myology, angiology, neurogenesis is further developed in systematic and topographical relationships with the aim of resulting in practical clinical applications. Terminologia anatomica is used as the basis of all medical terminology. The main content of the subject is the musculoskeletal system, spinal nerves, circulatory system, lymphatic and digestive system.

Prerequisite courses NAN/VAA14

NAN/VAA14 Anatomy - Dissection Course 1

MUDr. Alžběta Beislová

Dissection of the upper and lower limbs. The aim of the course is to consolidate the knowledge of the musculoskeletal system of the limbs acquired through theoretical study, to learn basic practical skills working with surgical instruments and simple dissection techniques, and theoretically and practically consolidate the knowledge of the regional anatomy of the limbs.

NAN/VAB12 Anatomy 2

8 cr. Pre-Exam Credit,Exam 60 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester LS

doc. RNDr. Petr Mlejnek, Ph.D.

Seminar 8 [Hours/Semestr] possible semester LS

2 cr. Pre-Exam Credit

5 cr. Pre-Exam Credit

60 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

possible semester ZS

four-year birth school

0 cr. Pre-Exam Credit

0 cr. Pre-Exam Credit Exercise 30 [Hours/Semestr]

possible semester ZS

The aim of the course is to continue the teaching and practical application of knowledge of systematic anatomy and the basics of topographical anatomy. The main contents of the subject are respiratory and urogenital systems, central nervous system, cranial nerves, autonomic nervous system, sensory systems, basics of head, neck and trunk topography. Prerequisite courses NAN/VAA11 nebo NAN/VAA13, NAN/VAA14, NAN/VAB14

NAN/VAB13 Anatomy 2

doc. RNDr. Petr Mlejnek, Ph.D.

The aim of the course is to continue the teaching and practical application of knowledge of systematic anatomy and the basics of topographical anatomy. The main contents of the subject are respiratory and urogenital systems, central nervous system, cranial nerves, autonomic nervous system, sensory systems, basics of head, neck and trunk topography. Prerequisite courses NAN/VAA11 nebo NAN/VAA13, NAN/VAA14, NAN/VAB14

NAN/VAB14 Anatomy - Dissection Course 2	0 cr. Pre-Exam Credit	
	Exercise 30 [Hours/Semestr]	
MUDr. Alžběta Beislová	possible semester LS	
Dissection of the head, neck and thrunk. The aim of the field is to improve practical skills acquired during the dissection course 1, manage, both theoretically and practically, the topographic anatomy of the head, neck and trunc, to fix the		

knowledge of systematic anatomy of organ systems, vascular system, musculoskeletal system of the trunc, and cranial nerves acquired during previous studies until Dissection Course 2.

Prerequisite courses NAN/VAA11 nebo NAN/VAA13

NAN/VAB21 Clinical and Topographical Anatomy

doc. RNDr. Petr Mlejnek, Ph.D.

The subject aims to intensify knowledge in various domains through topographic anatomy and interconnecting it with detailed systematic, functional and clinical anatomy, with focus on traumatology, surgery, orthopaedics, neurology and other clinical fields. The subject will put emphasis on utilising knowledge of anatomy in clinical work and on clinical and topographic anatomy, in relation to surgical approaches and in the context of correct performance of a surgical procedure with minimum damage to healthy tissues. Even today, anatomy is not a self-contained science; quite to the contrary, due to extensive development in surgical fields, the study of anatomy still remains very important and enjoys the interest of experts, especially from surgical fields.

Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13

NAN/ZAA11 Anatomy

60 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

doc. RNDr. Petr Mlejnek, Ph.D.

General and systematic osteology, arthrology and myology, specially focus on head region (temporomandibular joint's importance, masticatory muscles blood supply and innervation included). General angiology, systematic overview of upper and lower limbs' blood supply. General anatomy of the peripherous nervous system. The heart and system of main vessels. The students gain basic knowledge from systematic and clinic anatomy which are closely linked to consequent pre-clinical and clinical subjects. The extension of subject meets students' needs for future dentistry work.

NAN/ZAA32	Normal Anatomy of the Head and Neck	2 cr. Pre-Exam Credit, Exam
		Seminar 15 [Hours/Semestr]
MUDr. Alžběta	a Beislová, MUDr. Kateřina Kikalová, Ph.D.	possible semester ZS

13 cr. Pre-Exam Credit, Exam

60 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester LS

> 2 cr. Colloquium Exercise 15 [Hours/Semestr] possible semester LS

> > 5 cr. Pre-Exam Credit

possible semester ZS

Superficial and deep structures and spaces of orofacial region in head region together with associated neck regions. Specialized regions necessary for stomatologist are added, e.g. gingivodental region, dentoalveolar topography. The face bones' fractures of the skull and x-ray anatomy are included too. The students gain basic knowledge of clinical anatomy of viscerocranium and neck which is bound to help them in consequent study of dentoalveolar and maxilofacial surgery.

Prerequisite courses NAN/ZAA11, NAN/ZAB11

NAN/ZAB11 Anatomy

8 cr. Pre-Exam Credit, Exam

60 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester LS

doc. RNDr. Petr Mlejnek, Ph.D.

General splanchnology, systematic anatomy of the digestive system with special interest in oral cavity. Systematic anatomy of the respiratory and urogenital systems. General and systematic neuranatomy. Systematic Anatomy of cranial nerves. General Anatomy of senses. The students gain basic knowledge from systematic, topographic and clinic anatomy with link to consequent pre-clinical and clinical subjects. The extension of subject meets students' needs for future dentistry work.

Prerequisite courses NAN/ZAA11

NEU - DEPARTMENT OF NEUROLOGY

NEU/VA013 Neurology

5 cr. Pre-Exam Credit,Exam

possible semester LS

Exercise 72 [Hours/Semestr] + Seminar 18 [Hours/Semestr]

prof. MUDr. Petr Kaňovský, CSc.

The course covers an up-to-date selection of topics in neurology and neurosurgery, including anatomy, physiology, syndromes, pathophysiology, diagnostics and treatment of peripheral and central nervous system disorders. Provides practical training in clinical neurological examination including patient history, diagnosis at the level of syndromes and lesion localization, planning complementary examinations (including the evaluation of laboratory, neuroradiological, neurophysiological and other test results), formulation of aetiological diagnosis, planning therapy in acute and chronic neurological disorders (epilepsy, sleep disorders, cerebrovascular diseases, injuries, infectious diseases, tumours, extrapyramidal disorders, neurodegenerative diseases, headache, demyelinating diseases, paraneoplastic and toxonutritive affections of the nervous system, brain oedema, hydrocephalus, unconsciousness, brain death, disorders of the peripheral nerves, spine and spinal cord, cranial nerves, autonomic nervous system, muscles, disorders of neuromuscular transmission).

Prerequisite courses INÓ/VAA11 nebo INO/VAA21 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

NEU/VA041 Clinical Rehabilitation

1 cr. Colloquium

possible semester ZS/LS

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Exercise 1	IJ	Inours	Jemesu		Seminar	10	linours	/ ວັບເມຣິນ	<u>i 1</u>

MUDr. Petr Kolář, Ph.D., doc. PhDr. Barbora Kolářová, Ph.D.

The aim of the course is to introduce clinical rehabilitation, basic functional tests of motor skills and functional therapy options. After the course the student should be able to basically examine a patient with respect to detection of the most common movement pathologies and should be familiar with the most common compensatory mechanisms resulting from these pathologies. Student becomes familiar with basic principles of clinical rehabilitation programmes in the most common diagnosis with respect to other clinical medical fields.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PFY/VAA31 nebo PFY/VAB11

NEU/VA042	Clinical Rehabilitation		1 cr. Pre-Exam Credit,Exam
		Exercise 10 [Hours/Seme	estr] + Seminar 10 [Hours/Semestr]
MUDr. Petr Ko	olář, Ph.D., doc. PhDr. Barbora Kola	ářová, Ph.D.	possible semester ZS/LS

The aim of the course is to introduce clinical rehabilitation, basic functional tests of motor skills and functional therapy options. The student should examine a patient with respect to detection of the most common functional disorders of motion system and be familiar with possible compensation of these disorders. Student becomes familiar with basic principles of rehabilitation programmes in significant and common diagnosis and realizes connection among other clinical fields. The part of this lessons is to familiarize with the scientific principles of spa medicine including the practical indication of this therapy.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, INO/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PFY/VAA31 nebo PFY/VAB11

NEU/VA051 Neurology

Exercise 72 [Hours/Semestr] + Seminar 18 [Hours/Semestr]

prof. MUDr. Petr Kaňovský, CSc.

The course deals with etiopathogenesis, diagnosis, differential diagnosis, therapy and prevention of neurological disorders. Students will become familiar with an optimal algorithm for:

- diagnosis of neurological diseases in their acute and subacute phase - through clinical examination and different paraclinical investigations (neuroimaging, neurophysiology, laboratory including cerebrospinal fluid analysis and neurogenetics);

- complex therapy of neurological diseases in their acute and subacute phase based on nosological and etiopathogenetic diagnosis, including therapy pharmacological, neurosurgical (including neuromodulation), physical therapy and ergotherapy, behavioural therapy, psychotherapy and other multidisciplinary procedures, including both standard and experimental therapy.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

NEU/ZAA11	Preventive Physiotherapy for Dentistry	1 cr. Colloquium
		Seminar 15 [Hours/Semestr]
MUDr. Petr Ko	olář, Ph.D., doc. PhDr. Barbora Kolářová, Ph.D.	possible semester ZS

Introduction to therapeutic rehabilitation, physical therapy and physiatry. Fundamentals of kinesiotherapy of temporomandibutar joint are explained as well as reflex changes in orofacial and nuchal regions, postisometric relaxation of muscles in orofacial and ventral neck region.

NEU/ZAB11 Neurology

2 cr. Pre-Exam Credit,Exam

possible semester LS

Exercise 15 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

MUDr. Andrea Bártková, Ph.D.

The subject deals with the current issues of neurology, syndromology, pathophysiology, diagnosis, differential diagnosis and treatment of neurological disorders in relationship with dentistry. Cranial nerves affections - inflammations, tumours, neuropathies, traumatic lesions, craniocerebral and orofacial injuries. Differential diagnosis and therapy of headache and orofacial pain (migraine, neuralgia, syndrome of intracranial hypertension). Overview of orofacial presentation of other neurological disorders (i.e. myopathy, amyotrophic lateral sclerosis, extrapyramidal disorders, myasthenia gravis). Overview of the most common neurological emergencies (acute stroke, epilepsy, etc.). Brief survey of other chapters of neurology (disorders of muscles, peripheral nerves, spinal cord, spine and intervertebral discs, neurometabolic, neurodegenerative and demyelinating disorders, tumours and inflammations of the nervous system etc.).

Prerequisite courses FYZ/ZAB11, FYZ/ZAA11, NAN/ZAA11, NAN/ZAB11

NCH - DEPARTMENT OF NEUROSURGERY

NCH/VA011 Neurosurgery

prof. MUDr. Lumír Hrabálek, Ph.D., doc. MUDr. Ondřej Kalita, Ph.D., MBA

2 cr. Colloquium Seminar 18 [Hours/Semestr] possible semester ZS/LS

6 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

Teaching field of neurosurgery, knowledge about the operational diagnoses and surgical treatment, knowledge of pathophysiology of the disease, diagnostic methods and clinical examination of the patient.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, NEU/VA011 nebo NEU/VA012 nebo NEU/VA013 nebo NEU/VA051, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

NCH/VA051 Neurosurgery 2 cr. Colloquium 4 [Hours/Semestr] + Exercise 6 [Hours/Semestr] + Seminar 20 [Hours/Semestr] prof. MUDr. Lumír Hrabálek, Ph.D. possible semester ZS/LS

Teaching field of neurosurgery, knowledge about the diagnoses and surgical treatment, knowledge of pathophysiology of the disease, diagnostic methods and clinical examination of the patient.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, NEU/VA011 nebo NEU/VA012 nebo NEU/VA013 nebo NEU/VA051, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

NUM - DEPARTMENT OF NUCLEAR MEDICINE

NUM/VAB22 Radiopharmacy & Studies of Radiopharmac.

2 cr. Colloquium

possible semester LS

Exercise 4 [Hours/Semestr] + Seminar 4 [Hours/Semestr]

doc. MUDr. Pavel Koranda, Ph.D.

The main aim is to increase the knowledge of basics of radiopharmacy, including new research in the field of nuclear medicine. To familiarize students with practical activity in a pre-clinical research laboratory equipped with a PET / SPECT / CT camera.

Prerequisite courses FYZ/VAB12 nebo FYZ/VAB21, PFY/VAA31 nebo PFY/VAB11 nebo RAD/VA013, RAD/VA011 nebo RAD/VA013

OCC - DEPARTMENT OF OPHTHALMOLOGY

OCC/VA011 Ophthalmology

Exercise 36 [Hours/Semestr] + Seminar 12 [Hours/Semestr] MUDr. Klára Marešová, Ph.D., FEBO, prof. MUDr. Jiří Řehák, CSc., possible semester ZS/LS

FEBO

Student gets familiar with the issue of diseases of the orbit, anterior and posterior segment of the eye. Then they should get familiar with ophthalmological inspection procedures needed to obtain a valid diagnose, they should get acquainted with ophthalmological medicaments and surgical techniques used in ophthlamology as well.

Prerequisite courses MIK/VAA12 nebo MIK/VAB31, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAA32 nebo FAR/VAB11, PLE/VABP1 nebo SOL/VABP1 nebo SOL/VABP2 nebo TPO/VABP2, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21, IN2/VAA32 nebo IN2/VAB22 nebo IN2/VAB32

OCC/VA041 Ophthalmology

Exercise 36 [Hours/Semestr] + Seminar 12 [Hours/Semestr] MUDr. Klára Marešová, Ph.D., FEBO, prof. MUDr. Jiří Řehák, CSc., possible semester ZS/LS **FEBO**

Students get familiar with the issue of diseases of the orbit, anterior and posterior segment of the eye. Then they should get familiar with ophthalmological inspection procedures needed to obtain a valid diagnose, they should get acquainted with ophthalmological medicaments and surgical techniques used in ophthlamology as well.

ONK - DEPARTMENT OF ONCOLOGY

ONK/VAB32 Oncological Emergencies

prof. MUDr. Martin Klabusay, Ph.D.

2 cr. Pre-Exam Credit Seminar 8 [Hours/Semestr] possible semester ZS/LS

4 cr. Pre-Exam Credit, Exam

3 cr. Pre-Exam Credit, Exam

Students are introduced to oncological emergencies including diagnosis and treatment. Case reports will be discussed (including the analysis of laboratory results and imaging methods). Focus on usage of internal medicine and medicial oncology.

Prerequisite courses ONK/VA011, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAA11 nebo IN0/VAA21 nebo IN0/VAB11 nebo IN2/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042

ONK/VA011 Clinical Oncology

3 cr. Pre-Exam Credit,Exam Exercise 24 [Hours/Semestr] possible semester ZS/LS

4 cr. Pre-Exam Credit

possible semester ZS/LS

prof. MUDr. Bohuslav Melichar, Ph.D.

Students will be introduced to the basic diagnosis and treatment of malignant tumors. Emphasis on radiotherapy, chemotherapy, biological targeted therapy, and paliative care will be given. Students will obtain knowledge of the current trends in the management of malignant tumors. They will be introduced to the psychological aspects of cancer patient care.

Prerequisite courses CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAA12 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PLE/VABP2 nebo TPO/VABP1, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, KIM/VAB11 nebo KIM/VAB12

ONK/VA052 Oncology

Exercise 30 [Hours/Semestr] + Seminar 30 [Hours/Semestr]

prof. MUDr. Martin Doležel, Ph.D.

Students will gain a basic overview of the diagnosis and complex treatment of malignant tumours. The course focuses not only on radiotherapy, chemotherapy and targeted biological therapy, but also on supportive and symptomatic treatment. Special attention is also paid to prevention and screening programmes. Students will gain an overview of the trends in the development of oncological treatment of individual cancers and learn about the psychological and ethical aspects of cancer care.

Prerequisite courses MIK/VCA12 nebo MIK/VCB31, FAR/VCA32, IN2/VCB21 nebo IN2/VCB22, PSY/VCA13 nebo PSY/VCA23, PAT/VCA32 nebo PAT/VCB11, PFY/VCA31, PSY/VCB11 nebo PSY/VCB12 nebo PSY/VCB13 nebo PSY/VCB23, PAT/VCA11 nebo PAT/VCB22, IN0/VCB12, PFY/VCB21

ONK/VA053 Consultation for State Exam in Oncology	5 cr. Pre-Exam Credit
	Seminar 30 [Hours/Semestr]
prof. MUDr. Martin Doležel, Ph.D.	possible semester ZS/LS
Students will gain a basic understanding of the diagnosis and complex treatment of students will gain an overview of current trends in the development of oncological tre addition, they will learn about the psychological and ethical aspects of cancer care, in Prerequisite courses ONK/VA052, ONK/VA091 Preclusive courses ONK/VA054	eatment of individual cancers. In
ONK/VA054 Exam in Oncology	0 cr. Exam
prof. MUDr. Martin Doležel, Ph.D.	possible semester ZS/LS

The exam is designed for students who have chosen not to take the state rigorous examination. Prerequisite courses ONK/VA052

Preclusive courses ONK/VA091

ONK/VA091 Oncology

prof. MUDr. Martin Doležel, Ph.D.

possible semester ZS/LS

0 cr.State Rigorous Exam

The State Rigorous Examination is designed for students who perceive the increasing importance of cancer care and who have completed Consultation for the State Rigorous Examination in Oncology.

Prerequisite courses ONK/VA052 nebo ONK/VC052, ONK/VC053

Preclusive courses ONK/VA054,ONK/VC054

ORL - DEPARTMENT OF OTORHINOLARYNGOLOGY AND HEAD AND NECK SURGERY

4 cr. Pre-Exam Credit,Exam

Exercise 24 [Hours/Semestr] + Seminar 24 [Hours/Semestr] prof. MUDr. Ivo Stárek, CSc.

possible semester ZS/LS

The students will acquire complex knowledge in the symptomatology, diagnostics and therapy of all diseases and injuries in the field of otorhinolaryngology.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

ORL/VA041 Otorhinolaryngology

ORL/VA011 Otorhinolaryngology

3 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

Exercise 24 [Hours/Semestr] + Seminar 24 [Hours/Semestr]

doc. MUDr. Richard Salzman, Ph.D.

Anatomy, physiology and pathophysiology of the ear, nose, paranasal sinuses, pharynx, voice box and external neck, basic audiology, head and neck oncological surgery.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

ORL/ZAB11 Otorhinolaryngology

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester LS

prof. MUDr. Ivo Stárek, CSc.

The students will acquire basic knowledge in the symptomatology, diagnostics and therapy of all diseases and injuries in the field of otorhinolaryngology. They will be informed in detail about the diseases at the borders of stomatology and otorhinolaryngology.

ORT - DEPARTMENT OF ORTHOPEDICS

ORT/VA011 Orthopedics

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 20 [Hours/Semestr]

prof. MUDr. Jiří Gallo, Ph.D.

Student will get acquainted with general principles of orthopaedic surgery; they will be introduced into prevention, diagnostics and therapy of the most frequent orthopaedic diseases. Special attention will be given to acute events in orthopaedics.

Prerequisite courses RAD/VA011 nebo RAD/VA013, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PRL/VA011, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, NEU/VA012 nebo NEU/VA013 nebo NEU/VA051, IN1/VA022 nebo IN1/VA042

ORT/VA041 Orthopedics

30 [Hours/Semestr] + Exercise 20 [Hours/Semestr] + Seminar 10 [Hours/Semestr]

prof. MUDr. Jiří Gallo, Ph.D.

Student will get acquainted with general principles of orthopaedic surgery; they will be introduced into prevention, diagnostics and therapy of the most frequent orthopaedic diseases. Special attention will be given to acute events in orthopaedics. The aim is to offer the students basic theoretical overview as well as practical styles, habits appropriate for ambulatory and hospital practices and emergency units.

Prerequisite courses RAD/VA011 nebo RAD/VA013, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PRL/VA011, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, NEU/VA012 nebo NEU/VA013 nebo NEU/VA051, IN1/VA022 nebo IN1/VA042

3 cr. Pre-Exam Credit, Exam

4 cr. Pre-Exam Credit,Exam

3 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

possible semester ZS/LS

PAT - DEPARTMENT OF CLINICAL AND MOLECULAR PATHOLOGY

PAT/VAA11 Pathology

prof. MUDr. Zdeněk Kolář, CSc.

The main aim of pathology is study of causes, pathogenesis and morphology of diseases. Moreover, with relation to these general aspects of diseases, the students learn basic medical terminology.

Prerequisite courses NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, CJA/VAB22 nebo CJA/VAB42

PAT/VAA32 Pathology 2

prof. MUDr. Zdeněk Kolář, CSc.

Special (systemic) pathology summarizes current knowledge about pathomorphological changes of cancerous and noncancerous origin in organs and tissues. The basic mission is the diagnosis of these disease changes in the context of possible complications and the effect on the overall condition of the patients.

Prerequisite courses PAT/VAA11 nebo PAT/VAB22, NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, CJA/VAB22 nebo CJA/VAB42

PAT/VAB11 Pathology

prof. MUDr. Zdeněk Kolář, CSc.

The main aim of pathology is study of causes, pathogenesis and morphology of diseases. Moreover, with relation to these general aspects of diseases, the students learn basic medical terminology.

Prerequisite courses PAT/VAA11 nebo PAT/VAB22, NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, CJA/VAB22 nebo CJA/VAB42

PAT/VAB22 Pathology 1

6 cr. Pre-Exam Credit 45 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

prof. MUDr. Zdeněk Kolář, CSc.

The main aim of pathology is study of causes, pathogenesis and morphology of diseases. Moreover, with relation to these general aspects of diseases, the students learns basic medical termi- and tissues that underlie disease. The aim of the course is to acquaint students with basic structural and functional changes in cells and tissues during the development of diseases.

Prerequisite courses NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, CJA/VAB22 nebo CJA/VAB42

PAT/VAB31 **Molecular Pathology**

doc. Mgr. Jan Bouchal, Ph.D.

Molecular pathology (MP) is the study of the etiology and pathogenesis of disease through the analysis of molecular modifications of cells and tissues, and as a profession it involves using the knowledge of the etiopathogenesis of the disease to make a diagnosis and give prognostical and therapeutical information.

Prerequisite courses PAT/VAA11 nebo PAT/VAB22, NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, HIE/VAA12 nebo HIE/VAA21, CJA/VAB22 nebo CJA/VAB42

PAT/ZAA22	Pathology - Oral Pathology	7 cr. Pre-Exam Credit,Exam
		30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]
prof. MUDr. Z	deněk Kolář, CSc.	possible semester ZS

0 cr. Pre-Exam Credit

45 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

60 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

possible semester ZS

14 cr. Pre-Exam Credit, Exam

60 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

possible semester LS

possible semester LS

3 cr. Pre-Exam Credit Seminar 15 [Hours/Semestr]

possible semester LS

possible semester ZS

9 cr. Pre-Exam Credit, Exam

The main aim is basic orientation in special pathology focused on oral pathology in the range essential for stomatologists. Acquaintance with morphological correlates of organ and histological changes. Prerequisite courses PAT/ZAB11, HIE/ZAA12

PAT/ZAB11 Pathology

prof. MUDr. Zdeněk Kolář, CSc.

The main aim is basic orientation in pathology focused on pathology of inflammation, oncological pathology and etiological pathology. Acquaintance with morphological correlates of organ and histological changes. Prerequisite courses LBF/ZAB11, NAN/ZAB11, BIO/ZAB11, CJA/ZAB41, LCH/ZAA11, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

PFY - DEPARTMENT OF PATHOLOGICAL PHYSIOLOGY

PFY/VAA11 Pathological Physiology

prof. MUDr. Martin Petřek, CSc.

During the course of students acquire knowledge about causes of pathological states, molecular, cellular, organ and systemic mechanisms of pathogenesis of major medical syndromes, symptoms, and diseases. Students study the basic clinical terminology, role of genetic and environmental factors in development of the diseases, general mechanisms of disease development. The course starts with studying the typical pathological processes: cell damage, inflammation, fever, disorders of nutrition macro- and microelements' balance, water and acid-base balance. Later on students acquire knowledge about typical disorders in the blood system and hemostasis. Pathophysiology of digestive system and main neurologic disorders is also taught during the course.

Prerequisite courses HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, CJA/VAB22 nebo CJA/VAB42

PFY/VAA31 Pathological Physiology 2

30 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

prof. MUDr. Martin Petřek, CSc.

During the course of study students study common principles of the pathogenesis of the most important disorders of respiratory, cardiovascular, endocrine systems and kidneys, provided with interpretation of typical clinical case studies. Student learn to analyse role of different risk factors in pathogenesis of atherosclerosis, arterial hypertension, bronchial asthma, COPD, diabetes mellitus, kidney failure and other important medical states, comparing common and different pathways in pathogenesis of these states. Etiology, pathogenesis and clinical manifestations of life-threatening states (shock, coma, heart/respiratory/kidney failures) are explained together with main principles of diagnostics, treatment and prophylaxis of the disorders. The students are taught to consider the complex relations between causes, dynamics and progress of diseases and to perceive the integrative essence of medicine.

Prerequisite courses PFY/VAA11 nebo PFY/VAB21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, CJA/VAB22 nebo CJA/VAB42, HIE/VAA12 nebo HIE/VAA21

PFY/VAB11 Pathological Physiology

prof. MUDr. Martin Petřek, CSc.

During the course of study students study common principles of the pathogenesis of the most important disorders of respiratory, cardiovascular, endocrine systems and kidneys, provided with interpretation of typical clinical case studies. Student learn to analyse role of different risk factors in pathogenesis of atherosclerosis, arterial hypertension, bronchial asthma, COPD, diabetes mellitus, kidney failure and other important medical states, comparing common and different pathways in pathogenesis of these states. Etiology, pathogenesis and clinical manifestations of life-threatening states (shock, coma, heart/respiratory/kidney failures) are explained together with main principles of diagnostics, treatment and prophylaxis of the disorders. The students are taught to consider the complex relations between causes, dynamics and progress of diseases and to perceive the integrative essence of medicine.

Prerequisite courses PFY/VAA11 nebo PFY/VAB21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, CJA/VAB22 nebo CJA/VAB42, HIE/VAA12 nebo HIE/VAA21

30 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester LS

4 cr. Pre-Exam Credit

0 cr. Pre-Exam Credit

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester ZS

possible semester ZS

10 cr. Pre-Exam Credit, Exam

30 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

possible semester LS

8 cr. Pre-Exam Credit,Exam

PFY/VAB21 Pathological Physiology 1

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

prof. MUDr. Martin Petřek, CSc.

During the course of students acquire knowledge about causes of pathological states, molecular, cellular, organ and systemic mechanisms of pathogenesis of major medical syndromes, symptoms, and diseases. Students study the basic clinical terminology, role of genetic and environmental factors in development of the diseases, general mechanisms of disease development. The course starts with studying the typical pathological processes: cell damage, inflammation, fever, disorders of nutrition macro- and microelements' balance, water and acid-base balance. Later on students acquire knowledge about typical disorders in the blood system and hemostasis. Pathophysiology of digestive system and main neurologic disorders is also taught during the course.

Prerequisite courses HIE/VAA12 nebo HIE/VAA21, FYZ/VAB11 nebo FYZ/VAB12 nebo FYZ/VAB21, LCH/VAA20 nebo LCH/VAA22 nebo LCH/VAB21, NAN/VAA12 nebo NAN/VAB12 nebo NAN/VAB13, CJA/VAB22 nebo CJA/VAB42

PFY/VA021 Seminars in Pathophysiology

prof. MUDr. Martin Petřek, CSc.

The course extends the subject of Pathophysiology at a period when students have already gained their first experience at the clinical departments and therefore they can better develop logical links between theory and practice, between causes and signs or symptoms, the disease and its diagnostics and/or between diagnosis and its treatment. The topic proposal reflects students' interest incl. evaluation and students also actively contributed to formulation of this proposal, in particular as to which areas put emphasis and focus, i.e. to medicine, namely cardiology, pneumology or endocrinology. The planned teachers' assignments and their specialisations are in agreement with the topic outline.

Prerequisite courses PFY/VAA31 nebo PFY/VAB11 nebo PFY/ZAA12

PFY/ZAA12 Pathological Physiology 2

15 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

prof. MUDr. Martin Petřek, CSc.

During the course dentistry students of acquire knowledge about molecular, cellular, organ and systemic mechanisms of pathogenesis of disorders of nutrition, gastrointestinal tract, kidneys, endocrine and nervous system. Pathophysiology of disorders of connective tissues and bones is also discussed. Students study systemic manifestations of abovementioned disorders and emphasis is made on pathogenesis of orofacial changes. Students learn to analyze typical clinical case studies related to dentistry praxis with reference to common principles of etiology and pathogenesis of diseases.

Prerequisite courses PFY/ZAB11, BIO/ZAB11, NAN/ZAB11, CJA/ZAB41, FYZ/ZAB11, PAT/ZAB11, LCH/ZAB21, LCH/ZAA21, HIE/ZAA12

PFY/ZAB11 Pathological Physiology 1

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester LS

0 cr. Pre-Exam Credit

8 cr. Pre-Exam Credit, Exam

possible semester ZS

prof. MUDr. Martin Petřek, CSc.

The major objective of the course is to provide students of dentistry with knowledge that enables them to understand the causes of pathological states and the molecular, cellular, organ and systemic mechanisms of development of medical syndromes, symptoms, and major diseases.

The course starts with studying the typical pathological processes: cell damage, inflammation, fever, disorders of water, ion and acid-base balance. Further on during the course students study pathophysiology of respiratory, cardiovascular system, blood and coagulation. Special attention is provided to manifestations of the systemic diseases in oral cavity, and role of the disorders of oral cavity in etiology and pathogenesis of the systemic diseases.

Prerequisite courses NAN/ZAB11, BIO/ZAB11, LCH/ZAA11, LBF/ZAB11, CJA/ZAB41, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, HIE/ZAB11, KAR/VAB11, ST1/ZAB01

PGY - DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

PGY/VABP2 Gynecology and Obstetrics-Clinical Tr.

MUDr. Veronika Šromová, Ph.D.

1 cr. Pre-Exam Credit Practice 2 [Weeks/Semestr] possible semester LS

possible semester ZS/LS

Seminar 10 [Hours/Semestr]

2 cr. Pre-Exam Credit

possible semester LS

6 cr Pre-Exam Credit

The goal of the internship in hospitals is to gain exposure to the daily operations in gynecology and obstetrics. The student should be assigned to a doctor at the respective hospital and become familiar with the workflow, primarily in the delivery rooms, gynecological outpatient clinics, prenatal care clinics, and assist in gynecological surgeries and cesarean sections.

Prerequisite courses PGY/VA011, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

PGY/VA011 Gynecology and Obstetrics 1

6 cr. Colloquium Practice 70 [Hours/Semestr] + Seminar 20 [Hours/Semestr] possible semester ZS/LS

doc. MUDr. Jaroslav Klát, Ph.D.

The course consists of a theoretical part, which introduces students to the basic knowledge necessary for practical training. The theoretical part is divided into several thematic blocks ? general gynecology, reproduction and sexuality, oncogynecology, urogynecology, perinatology, and fetal medicine. The practical part includes the interpretation of ultrasound findings in gynecology and obstetrics, cardiotocogram analysis, video presentations of surgical procedures, assisting in these procedures, differential diagnostics, participation in a multidisciplinary oncogynecological seminar, and practical training on ultrasound, laparoscopic, hysteroscopic, and obstetric simulators.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44

PGY/VA013 Gynecology and Obstetrics 2

Exercise 4 [Weeks/Semestr] + Seminar 16 [Hours/Semestr]

doc. MUDr. Jaroslav Klát, Ph.D.

The course builds on the subject Gynecology and Obstetrics 1. Students are introduced to the basic pathologies of the various stages of a woman's life (childhood, reproductive age, postmenopause, senium), as well as those occurring during pregnancy, childbirth, and the postpartum period. Practically, the course focuses on student interaction with specialized centers at the Department of Obstetrics and Gynecology, deepening their skills in taking a comprehensive gynecological history, performing gynecological examinations, conducting basic gynecological ultrasound examinations, performing basic fetal ultrasound examinations, assisting in gynecological surgeries, and managing a physiological birth. The students will be taught neonatal resuscitation both theoretically and practically. The course provides fundamental knowledge that every graduate of the general medicine program should master and forms an essential foundation for postgraduate education in gynecology and obstetrics.

Prerequisite courses PGY/VA011, PGY/VABP1 nebo PGY/VABP2

PGY/VA061 **Gynecology and Obstetrics** 14 cr. Pre-Exam Credit

possible semester ZS/LS

30 [Hours/Semestr] + Exercise 60 [Hours/Semestr] + 90 [Hours/Semestr]

prof. MUDr. Radovan Pilka, Ph.D.

The aim of the course is to provide students with both theoretical and practical knowledge in the prevention, diagnostics, and treatment of diseases of the female reproductive system, care for pregnant women, and childbirth management. Special emphasis is placed on the practical application of this knowledge, particularly in the areas of differential diagnosis, interpretation of basic ultrasound findings, assistance in gynecological surgeries, and the management of physiological childbirth. The course fosters a comprehensive view of a woman as a whole and promotes an empathetic approach to the patient and her family.

Prerequisite courses PGY/VA011, PGY/VABP1 nebo PGY/VABP2

PGY/VA062 Exam in Gynecology and Obstetrics

prof. MUDr. Radovan Pilka, Ph.D.

Examination and evaluation of the level of knowledge in gynecology, obstetrics and early neonatal care in the form of an oral exam.

Prerequisite courses PGY/VC061 Preclusive courses PGY/VC091

Exam

possible semester ZS/LS

0 cr.

10 cr. Pre-Exam Credit

possible semester ZS/LS

doc. MUDr. Jaroslav Klát, Ph.D.

Examination and evaluation of the level of knowledge in gynecology, obstetrics and early neonatal care in the form of a practical and an oral exam.

Prerequisite courses PGY/VA011, PGY/VABP1 nebo PGY/VABP2, PGY/VA012 nebo PGY/VA013 nebo PGY/VA061

PLE - CENTER FOR TELEMEDICINE, SIMULATION AND CLINICAL SKILLS

PLE/VAA11 **Basic Procedures in Healthcare 1**

Exercise 16 [Hours/Semestr] + Seminar 8 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

The aim of this subject is: a) to teach students of general medice the knowledge of the safe execution of basic medical exercises in a vocational classroom; b) to learn how to perform the relevant performance in accordance with valid standards and practically practice the independent performance of performances on models under professional supervision; c) to prepare students of general medicine for the practical implementation of basic clinical practice compliance with applicable standards.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, NAN/VAA13, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, LCH/VAA11

PLE/VAA81 **Basic Procedures in Healthcare 1**

Exercise 16 [Hours/Semestr] + Seminar 8 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

The aim of this subject is: a) to teach students of general medice the knowledge of the safe execution of basic medical exercises in a vocational classroom; b) to learn how to perform the relevant performance in accordance with valid standards and practically practice the independent performance of performances on models under professional supervision; c) to prepare students of general medicine for the practical implementation of basic clinical practice compliance with applicable standards.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, NAN/VAA13, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, LCH/VAA11

PLE/VAA83 **Basic Procedures 3 - Clinical Practice**

Practice 56 [Hours/Semestr] + Seminar 12 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

Incorporate the student into the medical team, enable him to make maximum use of knowledge and skills in caring for patients in the real environment of the medical facility. To enable the student to apply and develop communication skills in practice not only in relation to patients, but also to members of the medical team.

Prerequisite courses PLE/VAA11 nebo PLE/VAA81, PLE/VAB11 nebo PLE/VAB81, PLE/VABP1, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72

PLE/VABP1 **Basic Procedures - Clinical Practice**

The aim of the subject is: a) to include the student in the medical team, where s/he will be able to apply theoretical knowledge and practical skills in the real environment of the hospital facility, will get to know the system of work of the medical team and the patient medical record management; b) enable the student to perform basic nursing care and procedures, under the guidance and professional supervision of healthcare professionals in clinical practice; c) enable the student to apply appropriate forms of communication with the patient/client before, during and after procedure, with a focus on educating the client and supporting her/his activities in the healing process.

Prerequisite courses PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, NAN/VAB12 nebo NAN/VAB13, NAN/VAA13, CJA/VA031, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, LBF/VA011 nebo LBF/VAB11, KAR/VAB11, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20

PhDr. Zlata Brachová, MBA

PGY/VA091 Gynecology and Obstetrics

possible semester ZS/LS

0 cr. Pre-Exam Credit

possible semester ZS

2 cr. Pre-Exam Credit

possible semester ZS

3 cr. Pre-Exam Credit

1 cr. Pre-Exam Credit

possible semester LS

Practice 150 [Hours/Semestr]

doc. MUDr. Eva Klásková, Ph.D.

In order to increase their practical skills, students will spend five days at an office of a general practitioner, and gain practical experience with providing primary health care.

Prerequisite courses IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11

PLE/VABP3 **Basic Procedures - Clinical Practice**

PhDr. Zlata Brachová, MBA

The aim of the subject is: a) to include the student in the medical team, where s/he will be able to apply theoretical knowledge and practical skills in the real environment of the hospital facility, will get to know the system of work of the medical team and the patient medical record management; b) enable the student to perform basic nursing care and procedures, under the guidance and professional supervision of healthcare professionals in clinical practice; c) enable the student to apply appropriate forms of communication with the patient/client before, during and after procedure, with a focus on educating the client and supporting her/his activities in the healing process.

PLE/VAB11 **Basic Procedures in Healthcare 2**

Exercise 16 [Hours/Semestr] + Seminar 8 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

The aim of this subject is: a) to teach students of general medice the knowledge of the safe execution of basic medical exercises in a vocational classroom; b) to learn how to perform the relevant performance in accordance with valid standards and practically practice the independent performance of performances on models under professional supervision; c) to prepare students of general medicine for the practical implementation of basic clinical practice compliance with applicable standards.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, PLE/VAA11 nebo PLE/VAA81 nebo SOL/VAA41, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, NAN/VAA13

PLE/VAB81 **Basic Procedures in Healthcare 2**

Exercise 16 [Hours/Semestr] + Seminar 8 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

The aim of this subject is: a) to teach students of general medice the knowledge of the safe execution of basic medical exercises in a vocational classroom; b) to learn how to perform the relevant performance in accordance with valid standards and practically practice the independent performance of performances on models under professional supervision; c) to prepare students of general medicine for the practical implementation of basic clinical practice compliance with applicable standards.

Prerequisite courses BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LBF/VA011 nebo LBF/VAB11, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, PLE/VAA11 nebo PLE/VAA81 nebo SOL/VAA41, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, NAN/VAA13

PLE/VA031 **Acute Conditions in Medicine**

Exercise 48 [Hours/Semestr] + Seminar 48 [Hours/Semestr]

doc. MUDr. Eva Klásková, Ph.D.

Acquaint students with the principles of emergency medicine. Teach students to behave rationally (examination, treatment and management) when confronted with acute conditions. Explain serious diseases, which can be the cause of acute conditions. Teaching will be realised with the help of simulator and extend of clinical biochemistry and radiology.

Prerequisite courses IN3/VA012 nebo IN3/VAA12 nebo IN3/VAA13, IN3/VA012 nebo IN3/VAB12 nebo IN3/VAB13, NEU/VA012 nebo NEU/VA013 nebo NEU/VA051, KAR/VA022 nebo KAR/VA023, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, RAD/VA011 nebo RAD/VA013, MIK/VAA12 nebo MIK/VAB31, DET/VA091

PLE/VABP2 **Obligatory Practice in General Pract...**

2 cr. Pre-Exam Credit, Exam

Colloquium

possible semester LS

6 cr.

possible semester ZS/LS

4 cr. Pre-Exam Credit, Exam

possible semester LS

possible semester LS

2 cr. Pre-Exam Credit

possible semester LS

Practice 150 [Hours/Semestr]

Practice 1 [Weeks/Semestr]

Seminar 5 [Hours/Semestr] possible semester ZS/LS

2 cr Pre-Exam Credit

prof. Mgr. MUDr. Milan Raška, Ph.D.

The aim of this course is to introduce to students following: adult general practitioner's work, methodology of primary care, to show differences between nationals health care systems. The most attention is dedicated to general practitioner's work organization with focus to health care quality, ambulance management, health and social aspects, expert's opinions, dispenzarization, primary prevention including vaccination and law aspects of health care providing in settings of general practitioner's office.

Prerequisite courses IN3/VA012 nebo IN3/VAB12 nebo IN3/VAB13, IN3/VA012 nebo IN3/VAA12 nebo IN3/VAA13, CH1/VABP1 nebo CH1/VABP2, PGY/VABP1 nebo PGY/VABP2

PLE/VA052 Mandatory Clinical Training in Selec...

Practice 19 [Days/Semestr] + Seminar 2 [Hours/Semestr] prof. Mgr. MUDr. Milan Raška, Ph.D. possible semester ZS/LS Because of increasement of graduates practical skills, students will spend 19 days on department with specialization,

which student would like to practice in the future. During final seminar, logbook of performed tasks and practical contribution of this practice with requirement fulfillment will be evaluated.

Prerequisite courses CH1/VABP1 nebo CH1/VABP2, PGY/VABP1 nebo PGY/VABP2

PLE/VA053 Mandatory Clinical Training in Selec... 8 cr. Pre-Exam Credit 240 [Hours/Semestr] prof. Mgr. MUDr. Milan Raška, Ph.D. possible semester ZS/LS

Because of increasement of graduates' practical skills, students will spend 8 weeks in a department with that specialization, which the student would like to practice in the future.

PLE/VA062 Primary Care

2 cr. Pre-Exam Credit 55 [Hours/Semestr] + Seminar 5 [Hours/Semestr]

doc. MUDr. Eva Klásková, Ph.D.

The aim of this course is to introduce to students following: primary care for adults and/or children in the outpatient setting, methodology of primary care, to show differences between nationals health care systems. The most attention is dedicated to general practitioner's ambulance management, health and social aspects, expert's opinions, dispenzarization, primary prevention including vaccination and law aspects of health care providing in settings of general practitioner's office.

PLE/ZA011 **Emergency Medicine in Dentistry 1** Colloquium 1 cr. Exercise 3 [Hours/Semestr] + Seminar 2 [Hours/Semestr] doc. MUDr. Eva Klásková, Ph.D., MUDr. Vladislav Kutěj, doc. MUDr. et possible semester LS MUDr. Peter Tvrdý, Ph.D., MDDr. Iva Voborná, Ph.D.

Acquaint students with the principles of emergency medicine. Teach students to behave rationally (examination, treatment and management) when confronted with acute conditions. Explain serious diseases, which can be the cause of acute conditions. Teaching will be realised with the help of simulator and extend of clinical biochemistry and radiology.

PLE/ZA021 Emergency Medicine in Dentistry 2

Exercise 4 [Hours/Semestr] + Seminar 2 [Hours/Semestr] doc. MUDr. Eva Klásková, Ph.D., MUDr. Vladislav Kutěj, doc. MUDr. et possible semester ZS MUDr. Peter Tvrdý, Ph.D., MDDr. Iva Voborná, Ph.D.

General Practical Medicine PLE/VA042

2 cr. Pre-Exam Credit

possible semester ZS/LS

1 cr.

Colloguium

Acquaint students with the principles of emergency medicine. Teach students to behave rationally (examination, treatment and management) when confronted with acute conditions. Explain serious diseases, which can be the cause of acute conditions. Teaching will be realised with the help of simulator.

PRL - DEPARTMENT OF OCCUPATIONAL MEDICINE

PRL/VA011 Occupational Medicine

2 cr. Colloquium Exercise 8 [Hours/Semestr] + Seminar 22 [Hours/Semestr] possible semester ZS/LS

doc. MUDr. Marie Nakládalová, Ph.D.

Knowledge of the basics of the interdisciplinary field that deals with the impact of the work environment on the health of individuals and populations and the ability to apply the knowledge in practice. Familiarizing students with health hazards in the work environment and their consequences - work-related health impairment, occupational health service principles, preventive measures in workplaces, occupational health assessments and fitness for work assessments. Introducing students to the basic procedures for the diagnosis, assessment, recognition, monitoring and prevention of occupational diseases; familiarizing students with the duties and procedures of the physician in charge.

Prerequisite courses PFY/VAA31 nebo PFY/VAB11, PAT/VAA32 nebo PAT/VAB11

PSY - DEPARTMENT OF PSYCHIATRY

PSY/VAA13 Medical Psychology 1

0 cr. Pre-Exam Credit 15 [Hours/Semestr] + Exercise 15 [Hours/Semestr] possible semester ZS

prof. MUDr. Klára Látalová, Ph.D.

Established succesfull contact between patient and physician like important komplement of treatment. Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo CJA/VAB41, BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71

PSY/VAA23 Medical Psychology 1 0 cr. Pre-Exam Credit

2 cr. Pre-Exam Credit

possible semester LS

Seminar 16 [Hours/Semestr]

15 [Hours/Semestr] + Exercise 15 [Hours/Semestr]

prof. MUDr. Klára Látalová, Ph.D.

To establish a favorable contact with the patient as an important part of therapy and the optimal care of patients. Prerequisite courses NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, LBF/VA011 nebo LBF/VAB11, CJA/VAB12 nebo CJA/VAB41, BIO/VA011 nebo BIO/VAB11, CJA/VA031 nebo CJA/VAB31, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71

PSY/VAA31 **Psychiatry and Psychother. in the Movies**

prof. MUDr. Klára Látalová, Ph.D.

Using examples from the Czech and world cinematography, students will deepen their knowledge of basic psychopathology and symptoms of mental disorders, social and cultural influences, psychological care, psychotherapeutic approaches, discussions following each presentation will also focus on ethical issues in psychiatry. Psychotherapeutic techniques will be practiced during seminars.

Prerequisite courses PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23 nebo PSY/VCB13 nebo PSY/VCB23 nebo PSY/ZAB21 nebo PSY/ZUB21, PSY/VA022 nebo PSY/VA023 nebo PSY/VA051 nebo PSY/VC022 nebo PSY/VC051 nebo PSY/ZAB11 nebo PSY/ZUB11

PSY/VAB13	Medical Psychology 2	4 cr. Pre-Exam Credit, Exam
		15 [Hours/Semestr] + Exercise 15 [Hours/Semestr]
prof. MUDr. K	lára Látalová, Ph.D.	possible semester LS

Established succesfull contact between patient and physician which is important for the complex care of the patient. Prerequisite courses PSY/VAA11 nebo PSY/VAA13 nebo PSY/VAA23, NAN/VAB12 nebo NAN/VAB13, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, LBF/VA011 nebo LBF/VAB11, BIO/VA011 nebo BIO/VAB11, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71

PSY/VAB23 Medical Psychology 2

Pre-Exam 3 cr. Credit,Colloquium

prof. MUDr. Klára Látalová, Ph.D.

15 [Hours/Semestr] + Exercise 15 [Hours/Semestr]

possible semester LS

To establish a favorable contact with the patient as an important part of therapy and the optimal care of patients.

Prerequisite courses PSY/VAA11 nebo PSY/VAA13 nebo PSY/VAA23, NAN/VAB12 nebo NAN/VAB13, CJA/VA031 nebo CJA/VAB31, CJA/VAB12 nebo CJA/VAB41, LBF/VA011 nebo LBF/VAB11, BIO/VA011 nebo BIO/VAB11, LCH/VAA11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12, NAN/VAA11 nebo NAN/VAA13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71

PSY/VA023 Psychiatry

18 [Hours/Semestr] + Exercise 48 [Hours/Semestr] + Seminar 24 [Hours/Semestr]

prof. MUDr. Klára Látalová, Ph.D.

Provide base overview psychiatric diagnosis, their treatment and maitenance. Prerequisite courses CH0/VAB11 nebo CH0/VAB31 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11

PSY/VA051 Psychiatry

18 [Hours/Semestr] + Exercise 48 [Hours/Semestr] + Seminar 24 [Hours/Semestr]

prof. MUDr. Klára Látalová, Ph.D.

Provide basic overview of psychiatric diagnoses, their treatment and maintenance.

Prerequisite courses CH0/VAB11 nebo CH0/VAB31 nebo IN2/VAA11, MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11

PSY/ZAB11 Psychiatry

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Exercise 15 [Hours/Semestr]		
possible semester LS	1	null

Provide base overview psychiatric diagnosis, their treatment and maitenance.

PSY/ZAB21 **Psychology in Dental Practice**

1 cr. Pre-Exam Credit Seminar 15 [Hours/Semestr] possible semester LS

PhDr. Petra Kasalová

Provide the basic psychological approaches which are essential for every physician. Provide knowledge of psychoterapeutics methods.

Prerequisite courses LCH/ZAA11, NAN/ZAB11, BIO/ZAB11, LBF/ZAB11, CJA/ZAB41, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

PVL - DEPARTMENT OF PUBLIC HEALTH

PVL/VAA11 Epidemiological Methodology; EBM 1 cr. Pre-Exam Credit Seminar 12 [Hours/Semestr] prof. MUDr. Dagmar Horáková, Ph.D., Ing. Michal Menšík, Ph.D. possible semester ZS

5 cr. Pre-Exam Credit, Exam

possible semester LS

6 cr. Pre-Exam Credit, Exam

possible semester ZS/LS

2 cr. Pre-Exam Credit, Exam

The course is designed as both theoretical and practical. Student gets familiar with epidemiological method of work, which is used to study the development of the disease and the identification of the factors which affect or determine the disease. The aim of the epidemiological methodology is to identify these factors, to objectively prove their role in disease development, and to design and verify appropriate preventive measures. Student gets familiar with the designs of epidemiological descriptive and analytical studies. He will practice their recognition, analysis, and results interpretation on practical examples. Student gets familiar with basics of evidence-based medicine as an integration of the best scientific evidence with clinical expertise and patients values.

Prerequisite courses PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAB12, MIK/VAA12 nebo MIK/VAB31, PAT/VAA11 nebo PAT/VAB22

PVL/VAB12	Communication with a Patient in Praxis	1 cr. Pre-Exam Credit
		Seminar 15 [Hours/Semestr]
MUDr. Ladisla	v Štěpánek, Ph.D.	possible semester ZS

The aim of the course is:

1) to familiarize students with the basic rules of verbal and non-verbal communication, to teach students how to address staff in an academic setting and medical practice, to know the rules of written communication, to practice the principles of courtesy, to understand the ethical principles of communication in medicine, to show how ethics and law can be linked in medical practice based on knowledge of codes and standards;

2) understanding student ego defence mechanisms, working with self-knowledge methods, explaining and practicing an assertive approach in medical practice, explaining the concepts of harassment, bossing and mobbing and showing case studies of such situations and possible solutions, knowledge of the Palacký University Code of Ethics, which addresses ethical behaviour of academic staff and students in education, science and research;

3) to familiarize students with the SPIKES communication algorithm, and the importance of professional communication between doctor and patient, to show students different types of communication strategies suitable for communication in medicine and to teach them to use these strategies in time-limited situations using examples from practice.

Prerequisite courses KAR/VAB11, CJA/VA031 nebo CJA/VAB31, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, NAN/VAA11 nebo NAN/VAA13, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, LBF/VA011 nebo LBF/VAB11, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12

PVL/VAB13 Social Medicine and Medical Ethics

2 cr. Pre-Exam Credit Seminar 14 [Hours/Semestr]

possible semester LS

prof. MUDr. Dagmar Horáková, Ph.D.

The aim of the subject is to present the (social, economic) determinants of health and disease in a national and European/international context using group interactive teaching methods, to show the importance of demographic indicators for assessing the health status of the population at the national and international level; to provide students with information on national, European and global health strategies; emphasize the importance of the social responsibility of medicine, including the accentuation of basic ethical principles; to present general ethical dilemmas in medicine and specifically to practice ethically questionable situations of contemporary medicine in the context of the Czech Republic and the whole world and to introduce students to the process of digitization of healthcare.

Prerequisite courses CJA/VA031 nebo CJA/VAB31, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13, LBF/VA011 nebo LBF/VAB11, LCH/VAA11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20

PVL/VAB21	Basic Communication Ethics for Praxis	1 cr.	Colloquium
	Exercise 10 [Hours/Semestr]	+ Seminar 5 [Ho	urs/Semestr]
MUDr. Ladisla	av Štěpánek, Ph.D.	possible	semester LS

The aim of the course is:

1) to familiarize students with the role of the physician according to Talcott Parsons (professionalism, affective neutrality, collective orientation, universalism), to present Hippocrates as a model for physicians of Western medicine, including an explanation of the ethical principles arising from the Hippocratic Oath, to show the role of the physician according to the Code of Ethics of the Czech Medical Association and Act No. 372/2011 Coll, on health services, to practice with students the ethical principles of the first decision according to Beauchamp and Childress and the ethical principles of procedure, to explain the role of the patient according to the type of compliance with the doctor, to demonstrate approaches to patients with different multicultural characteristics;

2) to familiarize students with the importance of professional doctor-patient communication, including communication with patients with special needs, b) to familiarize students with methods and strategies for communicating with a blind patient, c) to familiarize students with methods and strategies for communicating with a deaf patient, d) to familiarize students with the methods and strategies of communication with a mentally disabled patient, e) to familiarize students with the necessary principles when communicating important information, including communication with a patient in palliative care, f) to familiarize students with the specifics of communication with the patient's family, g) to include

practical training in various communication methods and techniques; training in specific intercultural communication between linguistically and/or culturally different members of ethnic, national, racial and religious communities. Emphasis will be placed on culturally sensitive specific national and ethnic customs in the context of health care and explaining the issue of racism and its specific form of antigypsyism to ensure equal access of Roma to quality health care and social services.

PVL/VAB23 Social Determinants of Health & Ethics

1 cr. Pre-Exam Credit Seminar 14 [Hours/Semestr] possible semester LS

doc. MUDr. Jana Janoutová, Ph.D.

The aim of the course is to open a gateway to understanding public health, the health care system and health care administration.

The seminars will explain the social determinants of health and disease, including the importance of health literacy, in a national and international context using interactive group learning methods; the importance of demographic indicators for assessing population health will be demonstrated; the importance of the social responsibility of medicine will be emphasised, including emphasis on basic ethical principles; general ethical dilemmas in medicine will be presented and ethical controversies in contemporary medicine (at the beginning of life and in relation to children; in relation to the elderly and other social groups) will be practiced.

Prerequisite courses CJA/VA031 nebo CJA/VAB31, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13, LBF/VA011 nebo LBF/VAB11, LCH/VAA11, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, HIE/VAB11 nebo HIE/VAB12, KAR/VAB11, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20

PVL/VAB31	Actual Epidemiological Situation in	1 cr. Pre-Exam Credit
		Seminar 6 [Hours/Semestr]
MUDr. Ladisla	av Štěpánek, Ph.D.	possible semester LS
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Training of practical skills in the epidemiology of communicable and non-communicable diseases. Prerequisite courses MIK/VAA12 nebo MIK/VAB31, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

PVL/VAB32	Communication with a Patient in Praxis	1 cr. Pre-Exam Credit
		Seminar 7 [Hours/Semestr]
prof. MUDr. E	Dagmar Horáková, Ph.D.	possible semester LS

The aim of this course is: a) to familiarize students with the importance of professional communication between physicians and other healthcare professionals with patients and their families; b) to emphasize the importance of mutual communication of healthcare workers within working teams in their day-to-day work and cooperation; and c) to discuss with students specific examples and professional communication experiences obtained during the provision of health care (both outpatient and hospital).

Prerequisite courses KAR/VAB11, CJA/VA031 nebo CJA/VAB31, BIO/VA011 nebo BIO/VAB11, CJA/VAB12 nebo CJA/VAB41, NAN/VAA11 nebo NAN/VAA13, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13, PVL/VAB21 nebo PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, LCH/VAA21 nebo LCH/VAB11 nebo LCH/VAB20, LBF/VA011 nebo LBF/VAB11, KAR/VAB11, HIE/VAB11 nebo HIE/VAB12

PVL/VAB71 **Basic Communication Ethics for Praxis**

Exercise 10 [Hours/Semestr] + Seminar 5 [Hours/Semestr]

prof. MUDr. Dagmar Horáková, Ph.D.

Content of this subject is: a) to introduce to the students the basic principles of oral communication, including formal written communication formalities, to teach students how to address health professionals working in the health care system by their titles as stated in the university law; b) to practice the principles of good behaviour, assertive approach in health care, familiarize with different types of people seeking health care, including multicultural aspects; c) to describe the historical development of medicine in an ethical context, including the explanation of symbols in medicine as well as detailed information on life and work of physician Hippocrates, including his ethical oath, and to show the development of ethical principles and explain their importance for communication in current professional medical practice.

1 cr. Colloquium

PVL/VA011 Public Health 1

3 cr. Pre-Exam Credit Seminar 60 [Hours/Semestr] possible semester ZS/LS

doc. MUDr. Jana Janoutová, Ph.D.

The course consists of two parts, which form an integral part of the state rigorous examination - Epidemiology, organization and financing of health care, forming the basis of the Public Health System. The student will learn about the epidemiological characteristics of important infectious and non-infectious diseases. The process of spread of disease in a population/epidemic process and its laws will be discussed in detail. The student will learn to construct an epidemic curve, evaluate epidemiological trends in disease incidence, navigate databases and ISIN reporting. Model situations of epidemic outbreaks and algorithms for their management will be presented. The aim of the course is to learn the implementation of epidemiological investigation in case of epidemic occurrences in the population and to propose antiepidemic/preventive measures. In the second part of the course, the aim is to explain to students the importance of public health care, which includes health policy and the principles and strategies of health care management and health care. Students will learn about health care systems with emphasis on the health care system, health care provision, types of health care facilities, health care management, health care economics and financing, health care reimbursement, get an insight into health and social insurance, basic health care legislation.

Prerequisite courses IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, IN2/VAB21 nebo IN2/VAB22, IN0/VAA11 nebo IN2/VAA11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, FAR/VAA32 nebo FAR/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44 nebo PVL/VAA11

PVL/VA023 Public Health 2

Seminar 34 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Dagmar Horáková, Ph.D., MUDr. Ladislav Štěpánek, Ph.D.

The subject covers all elements of the state rigorous exam from public health, particularly epidemiology, social medicine and management of healthcare systems. Based on Public health 1, the student deepens his knowledge of general and special epidemiology, social determinants of health and organization along with financing of healthcare. The subject consists of both theoretical preparation and practical training. Attention is paid to public health sectors that touch all medical disciplines, to the most prevalent health conditions but also some minor issues of exceptional importance. Special emphasis is placed on the actual epidemiological situation and public health burdens posing a future threat. The student gets familiar with the role of a physician in disease prevention and with the activities of regional hygienic stations in solving current public health problems. The social medicine part aims to acquaint students with actual issues in healthcare with priorities at both global and European health strategies focusing on international healthcare recommendations.

Prerequisite courses SLP/VA011 nebo SLP/VA041, PVL/VA041 nebo PVL/VA044, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32

PVL/VA036 Epidemiology

doc. MUDr. Jana Janoutová, Ph.D.

Students will learn about the epidemiological method of work, the types and design of epidemiological studies and the basics of general epidemiology.

Prerequisite courses PSY/VCB11

PVL/VA042 Public Health

doc. MUDr. Jana Janoutová, Ph.D.

The student gets to know the essence of public healthcare. The main topics are epidemiology, organization and financing of healthcare and disease prevention (vaccination of the population and surveillance of infectious diseases). The aim of the course is also to get the students familiar with epidemiological investigation in case of epidemics and with proposal of epidemiological measures.

Prerequisite courses PVL/VA041 nebo PVL/VA044 nebo SOL/VA020 nebo SOL/VA021, PVL/VA011 nebo PVL/VA012 nebo PVL/VA013, SLP/VA011 nebo SLP/VA041, IN3/VAA12 nebo IN3/VAA13, IN3/VA012 nebo IN3/VAB12 nebo IN3/VAB13

3 cr. Pre-Exam Credit Seminar 42 [Hours/Semestr] possible semester ZS/LS

3 cr. Pre-Exam Credit

4 cr. Pre-Exam Credit

Seminar 64 [Hours/Semestr]

prof. MUDr. Dagmar Horáková, Ph.D.

Evaluation of the level of knowledge of epidemiology, organization along with financing of healthcare, preventive medicine and medical law.

Prerequisite courses PVL/VA021 nebo PVL/VA022 nebo PVL/VA023, SLP/VA021 nebo SLP/VA022, PVL/VA023 nebo PVL/VA042 nebo PVL/VA043 nebo SOL/VA022, PVL/VA011 nebo PVL/VA012 nebo PVL/VA013, SLP/VA011 nebo SLP/VA041, PVL/VA041 nebo PVL/VA044 nebo SOL/VA020 nebo SOL/VA021, PVL/VAB13 nebo PVL/VAB14 nebo PVL/VAB23 nebo SOL/VAA11 nebo SOL/VAA12 nebo SOL/VAB12

PVL/ZAA51 **Public Health**

doc. MUDr. Jana Janoutová, Ph.D.

The aim of the course is to introduce students to the multidisciplinary field of Public Health in order to understand the phenomena that take place between society and health in practice. The course will cover the basic areas of public health, namely epidemiology, organisation and financing of health care, law and legislation of health service provision.

RAD - DEPARTMENT OF RADIOLOGY

RAD/VAA31 Radiolog. Images of Normal Structures 2

prof. MUDr. Miroslav Heřman, Ph.D.

The main aim of lessons is to familiarize students with normal structures of cranium, spine, brain and spinal cord in different types of imaging methods and practically demonstrate clinical utility of knowledge which students are familiarized in theoretical principles.

Prerequisite courses NAN/VAA11 nebo NAN/VAA13, NAN/VAB11 nebo NAN/VAB12 nebo NAN/VAB13

RAD/VAB30 **Radiolog.** Images of Normal Structures 1

prof. MUDr. Miroslav Heřman, Ph.D.

The main aim of lessons is to familiarize students with normal structures noticed in different types of imaging methods and practically demonstrate clinical utility of knowledge which students are familiarized in theoretical principles. Prerequisite courses NAN/VAA13

RAD/VA013	Radiology and Nuclear Medicine	4 cr. Pre-Exam Credit,Exam
		Exercise 46 [Hours/Semestr] + Seminar 24 [Hours/Semestr]
prof. MUDr. N	liroslav Heřman, Ph.D.	possible semester ZS/LS
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The aim of the course is to familiarize students with basic imaging methods used in radiology and nuclear medicine, their principles, indications and evaluation.

Prerequisite courses MIK/VAA12 nebo MIK/VAB31, FAR/VAA32 nebo FAR/VAB11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, KIM/VAB11 nebo KIM/VAB12, IN0/VAA11 nebo IN0/VAA21

RAD/VA021 Practical Sonography

prof. MUDr. Miroslav Heřman, Ph.D.

To familiarize students with potentials and indications of sonography in clinical practise and enable students to practically perform the most common examinations.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

possible semester ZS/LS

7 cr. Pre-Exam Credit, Exam

Seminar 80 [Hours/Semestr]

possible semester ZS

Colloquium Seminar 12 [Hours/Semestr]

2 cr.

2 cr.

Seminar 12 [Hours/Semestr]

possible semester ZS/LS

possible semester ZS/LS

2 cr. Pre-Exam Credit

Exercise 8 [Hours/Semestr] possible semester ZS/LS

Colloquium

RAD/VA041 Interpretation of Imaging Methods Find.

prof. MUDr. Miroslav Heřman, Ph.D.

Building on the theoretical knowledge gained in subject Radiology and Nuclear Medicine to further practical experience in interpretation of images of all imaging methods used in medicine.

Prerequisite courses RAD/VA011 nebo RAD/VA013, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11

SLP - DEPARTMENT OF FORENSIC MEDICINE AND MEDICAL LAW

SLP/VA011 **Forensic Medicine**

Exercise 28 [Hours/Semestr] + Seminar 14 [Hours/Semestr]

doc. RNDr. Peter Ondra, CSc.

The students are to be able ro perform the examination of the dead person and get acquinted with the problems of violent and sudden death, to know significant judical code and administrative routine; to examine samples of blood and body fluid; to define the level of alcohol; to take material for serological and toxicological examination, to know how to proceed in accordance with the law at compensation of following pains and aggravation of social assertion.

Prerequisite courses IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, FAR/VAA32 nebo FAR/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

SLP/VA022 **Medical Law**

MUDr. Martin Dobiáš, Ph.D.

The aim of the subject is to to get acquinted the student with statutory norms modifying the activity and competence of professional organization ČLK (CM CH), to get acquinted him with the basic conditions of the birth of legal responsibility of the doctor and other health worker and other legal norms concerning the pursuance of the profession.

Prerequisite courses SLP/VA011 nebo SLP/VA041, PVL/VA011 nebo PVL/VA012 nebo PVL/VA013, PVL/VA041 nebo PVL/VA044 nebo SOL/VA020 nebo SOL/VA021, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13 nebo FAR/VAB32, IN1/VA012 nebo IN1/VA022 nebo IN1/VA042

SLP/VA041 Forensic Medicine and Medical Law

Exercise 28 [Hours/Semestr] + Seminar 16 [Hours/Semestr]

MUDr. Martin Dobiáš, Ph.D.

The student should be able to perform an examination of the body of a deceased person, get acquainted with the problems of accidental and sudden deaths, get to know the basics of forensic traumatology, be able to collect material for laboratory examination, know the principles of examination of blood samples and other biological material; know the principles and legislative requirements for determining the level of ethanol.

Know the legal provisions and administrative procedures. Furthermore, the aim of the course is to familiarize the student with the legal norms regulating the activities and competences of the Czech Medical Chamber, state organizations, to get acquainted with the basic conditions for the emergence of legal liability of physicians, other healthcare providers and other legal norms related to the performing of the medical profession.

Prerequisite courses IN1/VA012 nebo IN1/VA022 nebo IN1/VA042, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, PAT/VAA32 nebo PAT/VAB11, PFY/VAA31 nebo PFY/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, FAR/VAA32 nebo FAR/VAB11, PSY/VAB11 nebo PSY/VAB13 nebo PSY/VAB23, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

SLP/ZAA11 Forensic Problem in Dentistry

15 [Hours/Semestr] + Exercise 15 [Hours/Semestr] possible semester ZS

MUDr. Martin Dobiáš, Ph.D.

1 cr. Pre-Exam Credit Exercise 4 [Hours/Semestr] possible semester ZS/LS

possible semester ZS/LS

1 cr. Pre-Exam Credit

3 cr. Pre-Exam Credit, Exam

Seminar 2 [Hours/Semestr]

possible semester ZS/LS

2 cr. Colloquium

3 cr. Pre-Exam Credit, Exam

Students get the basic information about forensic medicine as a branch which explains medical pieces of knowledge and from them extrapolated conclusion for needs of other medical disciplines and rights with special concetration on dental surgery.

ST1 - INSTITUTE OF DENTISTRY AND ORAL SCIENCES

ST1/VAA11 **Basic of Dentistry 1**

doc. MUDr. Miloš Špidlen, Ph.D.

Inform students of general medicine about basic problems related to dentistry, problems of dental caries, diseases of oral cavity, possible complications of these diseases and basic procedures for their treatment.

ST1/VAB11 **Basic of Dentistry 2**

doc. MUDr. Miloš Špidlen, Ph.D.

ractical training of students of general medicine in partial mastering of basic procedures of hard dental tissue treatment by preparation and modeling using simulators. Practical training and practice of the oral hygiene process and the prevention of diseases of the oral cavity as a whole.

Prerequisite courses ST1/VAA11

ST1/VAB21 **Basic of Dentistry**

doc. MUDr. Miloš Špidlen, Ph.D.

Students will be introduced during seminars with anatomy and morphology of soft tissues and hard dental tissues in the oral cavity, disorders of the development of these tissues and their basic diseases such as tooth decay and its possible complications, periodontal disease and problems of focal infections in the oral cavity. They will get acquainted with the basic disagreements in dentoalveolar surgery, dental extractions and their complications, or combinations of inflammation in the oral cavity. Students will be acquainted not only with the basic possibilities of treatment in dentistry, such as fillings, root canal system treatment and indirect reconstructions, but also with problems of dental anomalies and their solution with orthodontic appliances.

ST1/ZAA03	Preventive Dentistry and Cariology 2	0 cr. Pre-Exam
		30 [Hours/Semestr] + Exercise 45 [Hours/Ser
doc. MUDr. M	1iloš Špidlen, Ph.D.	possible semest

Principal issues in prevention and prophylaxis in dentistry. Oral health and its relation to the overall health state, the most frequent pathological changes in mouth cavity, caries and periodontal diseases. Lectures are focused on the dental caries diagnosis and its treatment. In practical trainings students learn about examination and professional oral hygiene. Prerequisite courses ST1/ZAB01, LBF/ZAB11, NAN/ZAB11, CJA/ZAB41, LCH/ZAA11, BIO/ZAB11, ST1/ZAB40, ST1/ZAA40, HIE/ZAB11, CJA/ZAA41, KAR/VAB11

ST1/ZAA20 Dental Radiology

doc. MUDr. Miloš Špidlen, Ph.D.

Physical principles of RTG radiation and operation of an RTG department. Intraoral and extraoral methods of x-ray in dentistry and maxillofacial surgery, individual types of projection, making and interpretation of x-ray. Practical training in intraoral RTG as well as OPG.

ST1/ZAA24 **Pediatric Dentistry 2**

doc. MUDr. Miloš Špidlen, Ph.D.

0 cr. Pre-Exam Credit Seminar 10 [Hours/Semestr] possible semester ZS

1 cr. Pre-Exam Credit Exercise 4 [Hours/Semestr] possible semester LS

1 cr. Pre-Exam Credit Exercise 4 [Hours/Semestr] + 10 [Hours/Week]

possible semester LS

Credit

nestr]

possible semester ZS

3 cr. Pre-Exam Credit, Exam

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr]

possible semester ZS

0 cr. Pre-Exam Credit

The aim of the subject is to communicate with children patients and their attendance in the office, familiarization with diagnostics, treatment and consequences of tooth injury in children, principles of prosthetic treatment in different age groups of children, exchange of temporary dentition and the basics of anesthesia, sedation and care of individuals with disabilities. After graduation students will be able to apply the knowledge of prevention and preservation, prosthetic and surgical care of children. The course includes diagnostic procedures and treatment of acute conditions dental emergency.

Prerequisite courses ST1/ZAB23, ST1/ZAA20

ST1/ZAA25 **Pediatric Dentistry 3**

0 cr. Pre-Exam Credit Exercise 35 [Hours/Semestr] possible semester ZS

doc. MUDr. Miloš Špidlen, Ph.D.

Students demonstrate their preparation for postgraduate practice by using the application of psychological approach to children's patients, choosing optimal diagnostic procedures and justifying the option not only of therapeutic procedures but also knowledge of possible complications.

The course includes diagnostic procedures and treatment of acute conditions dental emergency. Prerequisite courses ST1/ZAB03, ST1/ZAB23, ST1/ZAB24, ST1/ZAA24, ST1/ZAA19 nebo ST1/ZAA20, ST1/ZAA36

ST1/ZAA33 **Orthodontics 2**

15 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

prof. MUDr. Milan Kamínek, DrSc.

Removable orthodontic appliances, their indications and application. Fixed orthodontics appliances, their parts and indications for their use. Principles and methods of making of the orthodontic treatment plan. Use of serial extraction. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB31

ST1/ZAA35 **Operative Dentistry 1**

0 cr. Pre-Exam Credit 15 [Hours/Semestr] + Exercise 42 [Hours/Semestr] possible semester ZS

doc. MUDr. Miloš Špidlen, Ph.D.

The content of the subject are clinical principles of diagnostics and treatment of carious and non-carious lesions and their consequences, preservation of dental pulp vitality as well as treatment of dentin wound, current filling materials, their properties and indications for the treatment of hard dental tissues. During the practical trainings the students practice their ability to independently provide the patients examination, including the making and interpretation of X-ray images, use of DIFOTI technology, oral hygiene adjustment, determination of the treatment plan, and subsequent treatment of carious and non-carious lesions of hard dental tissues. During the practical trainings the magnification technique will be also used. The training will also include the practice of diagnostic treatment procedures of acute conditions realized at the Dental Emergency at the Department of Oral and Maxillofacial Surgery. This part of the practical trainings will be supervised by doctors of the Department of Oral and Maxillofacial Surgery.

Prerequisite courses ST1/ZAB21, ST1/ZAB13, MIK/ZAA12, NAN/ZAA32, PAT/ZAA22, ST1/ZAA20, FAR/ZAB12, ST1/ZAB11, PFY/ZAA12

ST1/ZAA36 **Operative Dentistry 2**

0 cr. Pre-Exam Credit 15 [Hours/Semestr] + Exercise 63 [Hours/Semestr] possible semester ZS

doc. MUDr. Miloš Špidlen, Ph.D.

The content of the subject is deepening of the knowledge of cariology and endodontic diseases. The students will receive the knowledge about aesthetic reconstructions and treatment using veneers. During the trainings tooth bleaching as well as miniinvasive treatment of tooth decay have been discussed. The patients treatment using surgical microscope will be demonstrated. The student is acquainted with the specifics of operative dentistry in seniors and patients with health risks. Furthermore the issue of endodontic periodontal lesions as well as cooperation with other dental disciplines will be discussed. During the practical trainings the students practise their skills in examination and treatment of dental caries and their consequences, establish a treatment plan and adjust the oral hygiene. Modern technologies such as the use of intraoral scanners and photos, used for communication with the laboratory in the making of small indirect reconstructions, are also used during the trainings. The concept of teaching is divided to the effect, that it allows to gradually treat complicated cases using magnifying technique. The training will also include the practice of diagnostic treatment procedures of acute conditions realized at the Dental Emergency at the Department of Oral and Maxillofacial

0 cr. Pre-Exam Credit

Surgery. This part of the practical trainings will be supervised by doctors of the Department of Oral and Maxillofacial Surgery.

Prerequisite courses ST1/ZAA35, ST1/ZAB35, INF/ZAA11, IN3/ZAA11, KIM/ZAA11, KOZ/ZAA11, UCH/ZAB24, NEU/ZAB11, ORL/ZAB11, ST1/ZAB24, ST1/ZAB53, ST1/ZAB61

ST1/ZAA38 Orthodontics 3

Pre-Exam 4 cr. Credit,Colloquium Exercise 15 [Hours/Semestr] possible semester ZS

prof. MUDr. Milan Kamínek, DrSc.

Main factors influencing the treatment plan. Main biomechanic principles of the therapy with orthodontic appliances. Classification of orthodontic anomalies with the focus on Angle Class II and III. Principles of orthodontic treatment of anomalies in the number of teeth, impacted teeth solution. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB31, ST1/ZAB33, ST1/ZAB33 nebo ST1/ZAB37

ST1/ZAA40 **Pre-Clinical Dentistry 1**

30 [Hours/Semestr] + Exercise 75 [Hours/Semestr] possible semester ZS

doc. MUDr. Miloš Špidlen, Ph.D.

Introduction into the study of Dental medicine, dental anatomy, management of caries with filling, techniques of preparation, characteristics and indications of filling materials, facilities and instruments. The subject focuses on the practical application of theoretical background. Skills are trained in a simulator.

ST1/ZAA43 Pre-Clinical Dentistry 2

doc. MUDr. Miloš Špidlen, Ph.D.

Theoretical background and practical skills in making removable dental prostheses. Prerequisite courses ST1/ZAA40, BIO/ZAB11, CJA/ZAB41, LBF/ZAB11, LCH/ZAA11, NAN/ZAB11, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11, CJA/ZAA41

ST1/ZAA45 Oral Medicine

22 [Hours/Semestr] + Exercise 15 [Hours/Semestr] + Seminar 8 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

The most frequent diseases of oral cavity mucosa, manifestations of some diseases in oral cavity mucosa, their etiology, differential diagnostics, and therapy. Specific problems of dental care in persons with complex diseases. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

ST1/ZAA52 Periodontology 2

5 [Hours/Semestr] + Exercise 25 [Hours/Semestr] + Seminar 10 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

Periodontitis and periodontium atrophy - diagnostics and clinical treatment. Making of treatment plan and conservative phase of therapy. Practical training in patients' examination, diagnostics of periodontopathy, instruments, professional oral hygiene. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB51

0 cr. Pre-Exam Credit, Exam

possible semester ZS

30 [Hours/Semestr] + Exercise 75 [Hours/Semestr]

possible semester ZS

8 cr. Pre-Exam Credit, Exam

0 cr. Pre-Exam Credit

0 cr. Pre-Exam Credit

doc. MUDr. Miloš Špidlen, Ph.D.

Detailed information on clinical diagnostics of dentition defects, row of teeth, and on synoptic concept of the defects treatment and documentation. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB11

ST1/ZAA62 Prosthodontics 2

doc. MUDr. Miloš Špidlen, Ph.D.

Detailed clinical information on indications and clinical techniques of making partial and completes dentures, combined prostheses and prostheses supported by implants. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAA61, ST1/ZAB61

ST1/ZAA72 Preparation for Restorative and Prosth.

doc. MUDr. Miloš Špidlen, Ph.D.

Skills improvement in restorative preparation according to the Black classification, plastic filling procedure, preparation for prosthodontic retorations, impressions and CAD/CAM system.

Prerequisite courses ST1/ZAA40, ST1/ZAB40, ST1/ZAA43

ST1/ZAB01	Preventive Dentistry and Cariology 1	2 cr. Pre-Exam Credi
		Seminar 30 [Hours/Semesti

doc. MUDr. Miloš Špidlen, Ph.D.

Principal issues in prevention and prophylaxis in dentistry. Oral health and its relation to the overall health state, the most frequent pathological changes in mouth cavity, caries and periodontal diseases. Lectures are focused on the main etiological factors of these pathologies and possibilities of their prevention.

ST1/ZAB03 Preventive Dentistry and Cariology 2

doc. MUDr. Miloš Špidlen, Ph.D.

Principal issues in prevention and prophylaxis in dentistry. Oral health and its relation to the overall health state, the most frequent pathological changes in mouth cavity, caries and periodontal diseases. Lectures are focused on prevention in individual fields of dentistry. In practical trainings students learn about examination, professional oral hygiene and treatment of dental caries.

Prerequisite courses ST1/ZAB01, ST1/ZAA03, LBF/ZAB11, NAN/ZAB11, BIO/ZAB11, CJA/ZAB41, LCH/ZAA11, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, HIE/ZAB11, KAR/VAB11

ST1/ZAB11	Gnathology, Basic of Prosthodontics	3 cr. Pre-Exam Credit, Exam
	15 [Hours/Semestr] + Exercise 22 [Hours/Semestr] + Seminar	10 [Hours/Semestr]
doc. MUDr.	Miloš Špidlen, Ph.D.	oossible semester LS

ST1/ZAA61 Prosthodontics 1

possible semester ZS

dit str] possible semester LS

11 cr. Pre-Exam Credit, Exam

30 [Hours/Semestr] + Exercise 45 [Hours/Semestr]

possible semester LS

0 cr Pre-Exam Credit 30 [Hours/Semestr] + Exercise 53 [Hours/Semestr]

possible semester ZS

0 cr. Pre-Exam Credit

possible semester ZS

15 [Hours/Semestr] + Exercise 60 [Hours/Semestr]

2 cr. Pre-Exam Credit

Exercise 24 [Hours/Semestr]

Survey of dental arches occlusion including their functional, morphological and partially clinical aspects.

ST1/ZAB13 **Microscopic Endodontics** 1 cr. Pre-Exam Credit Exercise 6 [Hours/Semestr] + Seminar 4 [Hours/Semestr] doc. MUDr. Miloš Špidlen, Ph.D. possible semester LS Introducing the students with magnifying technologies used in operative dentistry and endodontics, acquiring the basic knowledge and skills of examination and treatment in the indirect view of the working area. Prerequisite courses ST1/ZAB03, ST1/ZAA03, HIE/ZAA12, ST1/ZAA43, FYZ/ZAB11, LCH/ZAB21, ST1/ZAB71 ST1/ZAB14 **Orthodontic Treatment Planning**

Exercise 14 [Hours/Semestr] + Seminar 14 [Hours/Semestr]

prof. MUDr. Milan Kamínek, DrSc.

Orthodontic diagnostics and records. Treatment procedure planning. Interdisciplinary cooperation in treatment procedure planning. Teaching content includes orthodontic model analysis, segmental analysis made by tradiditional way as well as by digital way with the use of new software. Relocation of lower incisors, incl. digital simulation of individual tooth movement, movement of groups of teeth a jaws. Procedure how to perform photo records for orthodontics, prosthodontics and orthognathic surgery. Treatment planning for orthodontic treatment and for interdisciplinary orthodontic-periodontic-prosthodontic treatment. Knowledge of orthodontic-surgical treatment planning in orthognathic surgery operation.

ST1/ZAB21 Endodontics

Exercise 39 [Hours/Semestr] + Seminar 26 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

The content of the subject is to acquire basic knowledge and skills in the field of endodontics. The students will be acquainted with the content of the discipline, pulp chamber topography, histology and physiology of the dental pulp and pulp-periodontal organ. Furthermore, during the trainings the students will be acquainted with the endodontic equipment, instruments and devices for root canal treatment, techniques and methods of root canal shaping, disinfectants, temporary filling in endodontics as well as filling of root canals (theoretically and practically on root canal models). Theoretically, the issue of caries near the pulp, caries penetrating into the pulp as well as reversible and irreversible diseases of the dental pulp is discussed. The students will be theoretically acquainted with the issue of inflammation of dental pulp, infected root canal, inflammation of the apical periodontitis, acute conditions and complications in endodontics as well as use of magnifying tools (magnifying glasses, surgical microscope). The students will learn the examination algorithm and treatment options, basic principles of postendodontic treatment as well as root canal retreatment. The students will also receive the information about endodontics in temporary dentition, treatment procedure of exposed dental pulp in permanent immature teeth, apexification, revitalization of immature teeth as well as indications of surgical endodontics and extraction of permanent immature teeth. In the final practical trainings the tutor will demonstrate the diagnostic and practical procedures used in endodontics, including X-ray techniques and local anesthesia on the patients.

Prerequisite courses ST1/ZAB03, ST1/ZAA03, HIE/ZAA12, FYZ/ZAB11, LCH/ZAB21, ST1/ZAB71, ST1/ZAA43

ST1/ZAB23 **Pediatric Dentistry 1**

doc. MUDr. Miloš Špidlen, Ph.D.

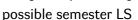
The subject follows the knowledge of preventive dentistry and cariology with a theoretical overview of the development of dental crowns and tooth root teeth, their disorders, the principles of tooth eruption, numerous anomalies of teeth and morphological differences between temporary and permanent dentition. Students will be introduced to extraction indications in children and will receive an introductory note on tooth injuries.

ST1/ZAB24 **Pediatric Dentistry 2**

Exercise 30 [Hours/Semestr] + Seminar 15 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.





1 cr. Pre-Exam Credit

possible semester LS

6 cr. Pre-Exam Credit, Exam

Seminar 15 [Hours/Semestr]

2 cr. Pre-Exam Credit

4 cr. Pre-Exam Credit Exercise 20 [Hours/Semestr]

possible semester LS

4 cr. Pre-Exam Credit

6 cr. Pre-Exam Credit

The student is capable of comprehensive treatment of a child's patient, that is, application of current knowledge and recommended methods in psychology, prevention, diagnostics and therapy, including manual skills. Prerequisite courses ST1/ZAB03, ST1/ZAB23, ST1/ZAB24, ST1/ZAA24, ST1/ZAA19 nebo ST1/ZAA20,

The course is focused on the deepening and synthesis of basic knowledge in children's dentistry to the extent that enables independent decision making in the prevention, diagnosis and therapy of the most common dental diseases in children including the necessary manual skills. Students acquire knowledge and skills in endodontic treatment in children, in mucogingival and dentoalveolar surgery and become acquainted with oral mucosal disease in children, indications for radiological examination of children and injuries of temporary teeth. The course includes diagnostic

ST1/ZAB31 **Orthodontics 1**

15 [Hours/Semestr] + Exercise 16 [Hours/Semestr] + Seminar 16 [Hours/Semestr] prof. MUDr. Milan Kamínek, DrSc. possible semester LS

Removable orthodontic appliances, indications for their application, usage. Fixed orthodontic appliances, their parts and indications for their use. Principles and making of the orthodontic treatment plan. Use of serial extraction.

ST1/ZAB33 **Orthodontics 2**

prof. MUDr. Milan Kamínek, DrSc.

Exercise 15 [Hours/Semestr] + Seminar 30 [Hours/Semestr] possible semester LS

Main factors influencing the treatment plan. Main biomechanic principles of the therapy with orthodontic appliances. Classification of orthodontic anomalies with the focus on Angle Class II. Orthodontic anomalies of class III, open and deep bite. Focus on the main treatment principles. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB31, ST1/ZAA33

ST1/ZAB34 **Orthodontics 3**

prof. MUDr. Milan Kamínek, DrSc.

Principles of cooperation with a pediatric dentist, dentoalveolar surgeon, prosthetist, and periodontologist. Information on the cooperation with ortho-gnathic surgeon, orthodontic pretreatment prior to surgical management of a disorder. Prerequisite courses ST1/ZAA33, ST1/ZAB33 nebo ST1/ZAB37, ST1/ZAB31, ST1/ZAA34 nebo ST1/ZAA38

ST1/ZAB35 Operative Dentistry 1

doc. MUDr. Miloš Špidlen, Ph.D.

During the training the students' acquired knowledge and skills in the area of diagnosis and treatment of carious and non-carious defects of hard dental tissues are repeated and improved. During the training the issue of treatment of caries near the dental pulp as well as caries penetrating into the dental pulp is discussed. The students will also receive the knowledge in the field of diagnosis and treatment of common acute and chronic pathological conditions in endodontics as well as the basic principles of differential diagnosis of pain of odontogenic origin. During the practical trainings the student independently performs the examination and treatment of the patient with dentin pain, pulpalgia as well as acute and chronic inflammation of apical periodontium. During the practical trainings the magnifying technique will be also used. The training will also include the practice of diagnostic and treatment procedures of acute conditions realized at the Dental Emergency at the Department of Oral and Maxillofacial Surgery. This part of the practical trainings will be supervised by doctors of the Department of Oral and Maxillofacial Surgery.

ST1/ZAB25 **Pediatric Dentistry 3**

procedures and treatment of acute conditions dental emergency.

Prerequisite courses ST1/ZAB23, ST1/ZAA24

doc. MUDr. Miloš Špidlen, Ph.D.

ST1/ZAA36, ST1/ZAA25

3 cr. Pre-Exam Credit

Exercise 24 [Hours/Semestr] + Seminar 12 [Hours/Semestr]

possible semester LS

6 cr. Pre-Exam Credit, Exam

15 [Hours/Semestr] + Exercise 52 [Hours/Semestr] possible semester LS Prerequisite courses ST1/ZAB21, ST1/ZAB35, ST1/ZAB13, MIK/ZAA12, NAN/ZAA32, PAT/ZAA22, PFY/ZAA12, ST1/ZAA20, FAR/ZAB11 nebo FAR/ZAB12, ST1/ZAB11, PFY/ZAA12

ST1/ZAB36 **Operative Dentistry 2**

Exercise 58 [Hours/Semestr] + Seminar 15 [Hours/Semestr]

possible semester LS

8 cr. Pre-Exam Credit

doc. MUDr. Miloš Špidlen, Ph.D.

Continuation and consolidation of knowledge in the area of prevention, diagnosis and treatment of dental caries. Deepening of the knowledge in the field of diagnosis and treatment of inflammatory diseases of dental pulp and apical periodontium. Emphasis of the recommended methods and the modern treatment of patients. During practical trainings acquired knowledge and skills are consolidated that prepares the students for the final state exam.

Prerequisite courses ST1/ZAA35, ST1/ZAB35, ST1/ZAA36, INF/ZAA11, KOZ/ZAA11, KIM/ZAA11, UCH/ZAB24, NEU/ZAB11, ORL/ZAB11, ST1/ZAB24, ST1/ZAB53, ST1/ZAB61

ST1/ZAB40 Pre-Clinical Dentistry 1

doc. MUDr. Miloš Špidlen, Ph.D.

Technological principles of fixed prosthesis production. Crowns and fixed bridgeworks. Taking of impressions, making of casts, and their mounting in articulator. Students make 3 singles crowns and 1 fixed bridgework during the course. Prerequisite courses ST1/ZAA40

ST1/7AB45 **Oral Medicine**

	Exercise 20 [Hours/Semestr]
doc. MUDr. Miloš Špidlen, Ph.D.	possible semester LS
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The most frequent diseases of oral cavity mucosa, manifestations of some diseases in oral cavity mucosa, their etiology, differential diagnostics, and therapy. Specific problems of dental care in persons with complex diseases.

Periodontology 1 ST1/ZAB51

doc. MUDr. Miloš Špidlen, Ph.D.

Etiology and pathogenesis of periodontopathia, clinical examination in periodontics, classification and diagnostics of diseases of gingiva.

Periodontology 2 ST1/ZAB53

8 [Hours/Semestr] + Exercise 25 [Hours/Semestr] + Seminar 7 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.

Indications, contraindications and surgical management in periodontology, including guided tissue regeneration and use of implants. Indications for orthodontic treatment in dentition with periodontal diseases. Recall. Practical part include examination, diagnostics and treatment plan in patients with periodontopathia. All kinds of conservative therapy of periodontitis, and simple surgical management of periodontium. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAB51, ST1/ZAA52

ST1/ZAB61 **Prosthodontics 1**

6 cr. Pre-Exam Credit, Exam 15 [Hours/Semestr] + Exercise 45 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.

12 cr. Pre-Exam Credit

4 cr Pre-Exam Credit

2 cr. Pre-Exam Credit Seminar 30 [Hours/Semestr] possible semester LS

5 cr. Pre-Exam Credit, Exam

30 [Hours/Semestr] + Exercise 75 [Hours/Semestr] possible semester LS Detailed information on clinical diagnostics of dentition defects, row of teeth, and on synoptic concept of the defects treatment and documentation. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

Prerequisite courses ST1/ZAA61, ST1/ZAB11

ST1/ZAB62 **Prosthodontics 2**

10 cr. Pre-Exam Credit Exercise 75 [Hours/Semestr] + Seminar 15 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.

Detailed clinical information on indications and clinical techniques of making partial and completes dentures, combined prostheses and prostheses supported by implants.

Prerequisite courses ST1/ZAA61, ST1/ZAB61, ST1/ZAA62

ST1/ZAB71 Prosthetic Technology

15 [Hours/Semestr] + Exercise 60 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.

The subject is a follow-up of pre-clinical dentistry in the field of prosthetics. More theoretical information and practical training in dental materials and fundamental technologies used in a prosthetic laboratory. Prerequisite courses CJA/ZAB41, BIO/ZAB11, LBF/ZAB11, NAN/ZAB11, LCH/ZAA11, CJA/ZAA41, ST1/ZAA40, ST1/ZAB40, ST1/ZAB01, HIE/ZAB11, KAR/VAB11

ST1/ZAB72 Profess. Practice in Medical Emergency..

MDDr. Iva Voborná, Ph.D.

Practicing diagnostic procedures and practical interventions in the treatment of acute conditions on emergency medical service.

Prerequisite courses ST1/ZAB21

ST1/ZAB81 Dentistry - Clinical Training 1

doc. MUDr. Miloš Špidlen, Ph.D.

A week in the dental office of a practising dentist. Students get acquainted with documentation, preparation of dental materials, and improve synchronization of instrumentation with the needs of an attending physician.

ST1/ZAB82 Dentistry - Clinical Training 2

doc. MUDr. Miloš Špidlen, Ph.D.

Summer practical training in the private dental office. Familiarization students with operation of dental office. Students will be cooperationg with dentist and dental asistence during filling procedure, dental impressions and fixed indirect restorations.

Prerequisite courses ST1/ZAB31, BIO/ZAB11, LCH/ZAA11, NAN/ZAB11, LBF/ZAB11, CJA/ZAB41

ST1/ZAB83 Dentistry - Clinical Training 3

doc. MUDr. Miloš Špidlen, Ph.D.

2 cr. Pre-Exam Credit Practice 30 [Hours/Semestr] possible semester LS

Practice 30 [Hours/Semestr] possible semester LS

2 cr. Pre-Exam Credit

Practice 30 [Hours/Semestr]

possible semester LS

possible semester LS

1 cr. Pre-Exam Credit

6 cr. Pre-Exam Credit,Exam

Practice 6 [Hours/Semestr]

2 cr. Pre-Exam Credit

One week practice in a dentist's office. Students are practically involved in examinations, X-ray examination and diagnostics, making of simple fillings, taking of impressions in prosthetics and professional hygiene of oral cavity. Students are encouraged to attend part of the holiday practice at the morning Dental Emergency at the Department of Oral and Mxillofacial Surgery at Faculty Hospital in Olomouc. Students will be able to take out liability insurance during out-of-school practice.

Prerequisite courses ST1/ZAB82

ST1/ZAB84 Dentistry - Clinical Training 4

6 cr. Pre-Exam Credit Practice 90 [Hours/Semestr] possible semester LS

doc. MUDr. Miloš Špidlen, Ph.D.

Three week practice in a dentist's office. Students provide examination and treatment of dental caries by the fillings, takes part in the all types of endodontic treatment including making and evaluation of X-ray images, provides professional hygiene of oral cavity as well as therapeutical treatment of periodontal diseases using modern methods with doctor supervision. If it is possible students provide the simple extraction of the teeth, improve their skills in impressions making. Students are encouraged to attend part of the holiday practice at the morning Dental Emergency at the Department of Oral and Maxillofacial Surgery at Faculty Hospital in Olomouc. Students will be able to take out liability insurance during out-of-school practice.

Prerequisite courses ST1/ZAB83

Exercise 20 [Ho	urs/Semestr]	
doc. MUDr. Miloš Špidlen, Ph.D. possible ser	mester ZS/LS	
Practicing the process of the total reconstruction of the crown of the upper central incisor. Modeling of different types of		
effects on the dentin core and the incisal edges.		

Prerequisite courses ST1/ZAB21

ST1/ZA073 Internship at the Med. Emergency Service

MDDr. Iva Voborná, Ph.D.

Theoretical and practical introduction in to the diagnostic procedures and practical achievements in the treatment of acute conditions on the dental emergency service.

Prerequisite courses ST1/ZAB21

Operative Dentistry, Pediat.Dentistry... ST1/ZA091

doc. MUDr. Miloš Špidlen, Ph.D.

State Rigorous Examination from Restorative Dentistry, Pediatric Dentistry and Periodontology lasts one day. Prerequisite courses ST1/ZAB81, ST1/ZAB82, ST1/ZAB83, ST1/ZAB84, ST1/ZAA35, ST1/ZAB35, ST1/ZAA36, ST1/ZAB36, ST1/ZAB52 nebo ST1/ZAB53, ST1/ZAA52, ST1/ZAA24, ST1/ZAB24, ST1/ZAB51

ST1/ZA092 **Prosthodontics and Orthodontics**

doc. MUDr. Miloš Špidlen, Ph.D.

State rigorous examination in Prosthodontics and Orthodontics is held within one day. It consists of a practical and theoretical part.

Prerequisite courses ST1/ZAB81, ST1/ZAB82, ST1/ZAB83, ST1/ZAB84, ST1/ZAA61, ST1/ZAB61, ST1/ZAA34 nebo ST1/ZAA38, ST1/ZAB31, ST1/ZAA33, ST1/ZAA62, ST1/ZAB62

1 cr. Pre-Exam Credit Practice 6 [Hours/Semestr]

0 cr.State Rigorous Exam

0 cr.State Rigorous Exam

possible semester LS

possible semester ZS/LS

TRA - DEPARTMENT OF TRAUMATOLOGY

TRA/VA021 Hand and Wrist Surgery

doc. MUDr. Pavel Dráč, Ph.D.

Present the particularity of the hand and wrist surgery. Demonstrate tha basic content of theorethical knowledge etiology, diagnostics, possibilities of conservative and surgical treatment.

Prerequisite courses CH1/VA012 nebo CH1/VA013

TRA/VA031 Advanced Trauma Life Support Principles

doc. MUDr. Pavel Dráč, Ph.D.

Present the algorithm of primary care of polytraumatized patients. Demonstrate of particular steps of ATLS algorithm. Facilitate practical training of selcted procedures and techniques usable for the management of polytraumatized patients.

Prerequisite courses CH1/VA012 nebo CH1/VA013

TRA/VA041 Fractures in Children

doc. MUDr. Pavel Dráč, Ph.D.

Present the particularity of the pediatric trauma surgery regard to injuries of growing skeleton. Demonstrate tha basic content of theorethical knowledge - etiology, diagnostics, possibilities of conservative and surgical treatment of these injuries.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11 nebo PAT/ZAA22, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32 nebo IN2/ZAB11 nebo IN2/ZAB12 nebo IN2/ZAB13, MIK/VAA12 nebo MIK/VAB31 nebo MIK/ZAA12, PFY/VAA31 nebo PFY/VAB11 nebo PFY/ZAA12, FAR/VAA32 nebo FAR/VAB11 nebo FAR/ZAB12

TRA/VA042 Traumatology

2 cr. Colloquium 15 [Hours/Semestr] + Exercise 15 [Hours/Semestr] possible semester ZS/LS

doc. MUDr. Pavel Dráč, Ph.D.

To introduce students to the specifics of traumatology. Demonstrate the basic volume of theoretical knowledge etiology, diagnosis, options for conservative and surgical therapy.

TVL - DEPARTMENT EXERCISE MEDICINE AND CARDIOVASCULAR REHABILITATION

TVL/VAA21 **Selected Chapters from Sports Medicine**

prof. MUDr. Eliška Sovová, Ph.D., MBA possible semester ZS Knowledge of sport's population problems with increased accent to practical solvent of the most often health problems rised at physical activity.

TVL/VA041 Exercise Medicine

Exercise 12 [Hours/Semestr] + Seminar 18 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Eliška Sovová, Ph.D., MBA

Knowledge of theoretical principles of exercise physiology and pathophysiology including risks of possible complications, and knowledge of clinical application of results. The student should examine a patient with respect to detection of the most common functional disorders of motion and cardiovascular system and be familiar with possible compensation of these disorders. Student becomes familiar with basic principles of prescription of exercise in significant and common diagnosis and realizes connection among other clinical fields. Student becomes more familiar with the basic principles of healthy nutrition and antidoping rules. The part of this lessons is to familiarize with the scientific principles of spa medicine including the practical indication of this therapy.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, INO/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

possible semester ZS/LS

2 cr. Pre-Exam Credit

1 cr.

Exercise 4 [Hours/Semestr] + Seminar 12 [Hours/Semestr]

Colloquium

Seminar 4 [Hours/Semestr] possible semester ZS/LS

1 cr. Pre-Exam Credit

1 cr. Pre-Exam Credit Seminar 4 [Hours/Semestr] possible semester ZS/LS

TVL/VA042

Exercise 13 [Hours/Semestr] + Seminar 18 [Hours/Semestr]

prof. MUDr. Eliška Sovová, Ph.D., MBA

Knowledge of theoretical principles of exercise physiology and pathophysiology including risks of possible complications, and knowledge of clinical application of results. The student should examine a patient with respect to detection of the most common functional disorders of motion and cardiovascular system and be familiar with possible compensation of these disorders. Student becomes familiar with basic principles of prescription of exercise in significant and common diagnosis and realizes connection among other clinical fields. Student becomes more familiar with the basic principles of healthy nutrition and antidoping rules. The part of this lessons is to familiarize with the scientific principles of spa medicine including the practical indication of this therapy.

Prerequisite courses PAT/VAA32 nebo PAT/VAB11, CJA/VAB32 nebo CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN0/VAA21 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo CH0/VAB31 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAA32 nebo IN2/VAB21 nebo IN2/VAB22 nebo IN2/VAB32, PFY/VAA31 nebo PFY/VAB11

UCH - DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

UCH/ZAA23 Dental Implantology

4 cr. Colloquium Seminar 20 [Hours/Semestr]

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Indications and contraindications in dental implantology. Principles of osseointegration, classification of dental implants. Augmentation in dental implantology. Technique of implantation, prosthodontic treatment after implantation, prevention and treatment of complications in dental implantology. Part of the course will be the practice of diagnostic procedures and treatment of acute conditions to medical first-aid service in the premises of the Department of Oral and Maxillofacial Surgery. Classes will be held under the supervision of Institute of Dentistry and Oral Sciences and Department of Oral and Maxillofacial Surgery lecturers.

UCH/ZAA24 **Oral Surgery 2**

16 [Hours/Semestr] + Exercise 48 [Hours/Semestr] + Practice 9 [Hours/Semestr]

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Preprosthetic surgery, temporomandibular joint disorders (non-surgical and surgical treatment), essentials of orthognathic surgery, principles of management of orofacial cleft, syndromes of the head and neck, differential diagnosis and management of the orofacial pain, diagnostic and treatment of salivary gland disorders (excluding tumors), head and neck lymphadenopathy, specific infectious diseases.

Prerequisite courses UCH/ZAB11 nebo UCH/ZAB14

UCH/ZAA34 **Oral Surgery 3**

15 [Hours/Semestr] + Exercise 56 [Hours/Semestr]

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Teeth and alveolar bone injuries (first aid, treatment), fracture of the mandible, fracture of the middle face floor, the pecularities of the mandibular and maxillary fracture treatment in children and the elderly, first aid treatment of head and neck injuries, war facial injuries.

Prerequisite courses UCH/ZAB13 nebo UCH/ZAB24, UCH/ZAA12 nebo UCH/ZAA24

UCH/ZAB14 Oral Surgery 1

1 cr. Pre-Exam Credit Exercise 10 [Hours/Semestr] + Seminar 16 [Hours/Semestr] possible semester ZS/LS

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Exercise Medicine

possible semester ZS

0 cr. Pre-Exam Credit

possible semester ZS

4 cr. Pre-Exam Credit,Exam

possible semester ZS

Oral and maxillofacial surgery - description of subject, examination of patient, diagnostic and treatment plan, local anaesthesia, tooth extraction, removal of unerupted teeth, surgical extraction, surgical endodontics, pericoronitis, treatment of the patient with hemocoagulation disorders, pathological cavities in the orofacial area, orofacial inflammatory processes.

Prerequisite courses FAR/ZAA11, IN1/ZAA11, MIK/ZAA12, NAN/ZAA31, PAT/ZAA21, PFY/ZAA12, ST1/ZAA20, PFY/ZAB11, MIK/ZAB11, PAT/ZAB11

UCH/ZAB24 Oral Surgery 2

5 cr. Pre-Exam Credit 16 [Hours/Semestr] + Exercise 48 [Hours/Semestr] possible semester LS

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Introduction to oral and maxillofacial onkology, benign tumors, malignant epithelial tumors, malignant mesenchymal tumors, odontogenic tumors, tumors of the salivary glands, oncologic prevention and dispenzarization (follow-up) in dentistry.

Prerequisite courses UCH/ZAB11 nebo UCH/ZAB14, UCH/ZAA12 nebo UCH/ZAA24

UCH/ZAB34 Oral Surgery 3

15 [Hours/Semestr] + Exercise 64 [Hours/Semestr]

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

Systemic complication of dental treatment, dry socket, reconstructive operation in maxillofacial surgery, disinfection and sterilization in oral and maxillofacial surgery, the role of viruses in the epidemiology of oropharyngeal carcinomas, bleeding in dentoalveolar surgery.

Prerequisite courses UCH/ZAA12 nebo UCH/ZAA24, UCH/ZAB13 nebo UCH/ZAB24, UCH/ZAA21 nebo UCH/ZAA34

UCH/ZA091 Oral Surgery

doc. MUDr. et MUDr. Peter Tvrdý, Ph.D.

A practical part of State Examination is to be sat for during the last week of practical training. It is focused on the clinical examination of the patient (incl. anamnesis, clinical examination, treatment planning), performing of tooth extraction or a simple oral operation and X-ray scan evaluation. The oral part of the State Examination is focused on knowledge of oral surgery, maxillofacial oncology and traumatology.

Prerequisite courses ST1/ZAB81, ST1/ZAB82, ST1/ZAB83, ST1/ZAB84, UCH/ZAB11 nebo UCH/ZAB14, UCH/ZAA12 nebo UCH/ZAA24, UCH/ZAA21 nebo UCH/ZAA34, UCH/ZAB21 nebo UCH/ZAB34

URG - CENTER FOR EMERGENCY MEDICINE

URG/VA023 Emergency Medicine

5 [Hours/Semestr] + Exercise 24 [Hours/Semestr] + Seminar 10 [Hours/Semestr]

MUDr. Vladislav Kutěj

Providing basic and advanced cardiopulmonary resuscitation, including basic life-saving procedures. Familiarization with basic acute conditions and their solutions. Organization of emergency department and medical rescue services. Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

URO - DEPARTMENT OF UROLOGY

URO/VA011 Urology

27 [Hours/Semestr] + Exercise 42 [Hours/Semestr] + Seminar 21 [Hours/Semestr]

prof. MUDr. Vladimír Študent, Ph.D.

Presentation of urology for students, description of fundamental diagnostics and treatment procedures, urological diseases and its treatment.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

possible semester LS

0 cr.State Rigorous Exam

3 cr. Pre-Exam Credit,Exam

4 cr. Pre-Exam Credit,Exam

possible semester ZS/LS

possible semester ZS/LS

3 cr. Pre-Exam Credit

URO/VA041 Urology

20 [Hours/Semestr] + Exercise 30 [Hours/Semestr] + Seminar 10 [Hours/Semestr] possible semester ZS/LS

prof. MUDr. Vladimír Študent, Ph.D.

Presentation of urology to students, description of fundamental diagnostics and treatment procedures, urological diseases and its treatment.

Prerequisite courses CH1/VA011 nebo CH1/VA012 nebo CH1/VA013