

BIO - DEPARTMENT OF BIOLOGY

BIO/VAA11 Biology

0 cr. Pre-Exam Credit

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

doc. RNDr. Vladimír Divoký, Ph.D.

possible semester ZS

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 cellular 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/ZAA11 Biology and Genetics

0 cr. Pre-Exam Credit

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

doc. RNDr. Vladimír Divoký, Ph.D.

possible semester ZS

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 cr. Pre-Exam Credit, Exam

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

doc. RNDr. Vladimír Divoký, Ph.D.

possible semester LS

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/VAA41 Czech I

0 cr. Pre-Exam Credit

Seminar 60 [Hours/Semestr]

Mgr. Dagmar Hrabalová

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.

CJA/VAA42 Czech II

0 cr. Pre-Exam Credit

Seminar 60 [Hours/Semestr]

Mgr. Lenka Podhorná

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

CJA/VAA43 Czech III 0 cr. Pre-Exam Credit
Seminar 30 [Hours/Semestr]
Mgr. Dagmar Hrabalová possible semester ZS

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/VAB42

CJA/VAB41 Czech I 6 cr. Pre-Exam Credit,Exam
Seminar 60 [Hours/Semestr]
Mgr. Dagmar Hrabalová 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/VAA41

CJA/VAB42 Czech II 6 cr. Pre-Exam Credit,Exam
Seminar 60 [Hours/Semestr]
Mgr. Lenka Podhorná 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/VAA42, CJA/VA031, BIO/VAB11, CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, HIE/VAB11, KAR/VAB11, LCH/VAB20, NAN/VAB13, LBF/VAB11, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70

CJA/VAB43 Czech III 6 cr. Pre-Exam Credit,Exam
Seminar 30 [Hours/Semestr]
Mgr. Dagmar Hrabalová possible semester LS

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/VAA43, CJA/VAB42

CJA/VA031 Latin and Medical Terminology 3 cr. Pre-Exam Credit,Exam
Seminar 30 [Hours/Semestr]
Mgr. Petra Nováčková possible semester ZS/LS

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.

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 grammatical structures, making students familiar with the basic dental terminology a with basic examination instructions.

CJA/ZAA42 Czech 2 0 cr. Pre-Exam Credit
Seminar 30 [Hours/Semestr]
Mgr. Veronika Glogarová 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 vocabulary, practising grammatical structures, making students 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. Veronika Glogarová

possible semester LS

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

DET - DEPARTMENT OF PEDIATRICS

DET/VA014 Pediatrics

6 cr. Pre-Exam Credit

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

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

possible semester ZS/LS

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, MIK/VAA12

DET/VA091 Pediatrics

0 cr. State Rigorous Exam

prof. MUDr. Dagmar Pospíšilová, Ph.D.

possible semester ZS/LS

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/VA011 nebo DET/VA012 nebo DET/VA014, DET/VA014 nebo DET/VABP2, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13, MIK/VAA12

DET/ZAA12 Pediatrics

2 cr. Colloquium

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

MUDr. Barbora Ludíková, Ph.D.

possible semester ZS

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., prof. MUDr.

possible semester ZS/LS

Miloš Táborský, CSc., FESC, MBA

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/VAB11, PFY/VAB11

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

DLF/VC051 Student Research - Active Participat. 1

2 cr. Pre-Exam Credit

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

possible semester ZS/LS

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

2 cr. Pre-Exam Credit

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

possible semester ZS/LS

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

2 cr. Pre-Exam Credit

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

possible semester ZS/LS

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

5 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Karel Urbánek, Ph.D.

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, PAT/VAB11, PFY/VAB11, FAR/VAB11

FAR/VAB11 Pharmacology 1

3 cr. Pre-Exam Credit

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

doc. MUDr. Karel Urbánek, Ph.D.

possible semester LS

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/VAB13, HIE/VAA12, FYZ/VAB11 nebo FYZ/VAB12, LCH/VAA20 nebo LCH/VAB21, MIK/VAA12

FAR/VAB21 Clinical Pharmacology

2 cr. Colloquium
Seminar 30 [Hours/Semestr]
possible semester LS

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/VAB11, PFY/VAB11, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13

FAR/VA042 Modern Biologic and Hormonal Pharmac...

2 cr. Colloquium
Seminar 8 [Hours/Semestr]
possible semester ZS

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, FAR/VAB11

FAR/ZAA11 Pharmacology

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

prof. MUDr. Rostislav Večeřa, Ph.D.

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]
possible semester ZS

prof. MUDr. Rostislav Večeřa, Ph.D.

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

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

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**

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

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/VAB11, LBF/VAB11, CJA/VAB41, CJA/VA031, LCH/VAA11, NAN/VAB13, NAN/VAA13, LCH/VAB20, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, BIO/VAA11, CJA/VAA41, LBF/VAA11, HIE/VAB11

FYZ/VAB12 Physiology

16 cr. Pre-Exam Credit,Exam

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

MUDr. PharmDr. Lenka Bartošíková, Ph.D.

possible semester LS

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, CJA/VA031, BIO/VAB11, CJA/VAB41, LBF/VAA11, LCH/VAA11, NAN/VAA13, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70, KAR/VAB11, HIE/VAB11, LCH/VAB20, LBF/VAB11, CJA/VAA41, BIO/VAA11, NAN/VAB13

FYZ/ZAA11 Physiology

0 cr. Pre-Exam Credit

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

MUDr. PharmDr. Lenka Bartošíková, Ph.D.

possible semester ZS

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

9 cr. Pre-Exam Credit,Exam

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

MUDr. PharmDr. Lenka Bartošíková, Ph.D.

possible semester LS

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...**

2 cr. Colloquium

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

prof. MUDr. Vít Procházka, Ph.D.

possible semester ZS/LS

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/VAB21 nebo IN2/VAB22

HEO/VA063 Arts in Medicine

1 cr. Pre-Exam Credit

Seminar 3 [Hours/Semestr]

prof. MUDr. Vít Procházka, Ph.D.

possible semester ZS/LS

The course aims to develop individual creativity and to elevate the role of the arts and humanities in medical education and practice. It follows the current trends in medical sciences which promote diversity and include nurturing curiosity and unleashing creativity, deepening empathy, developing professionalism, and fostering resilience in physicians as well as physicians-in-training.

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

possible semester ZS

Contents of the second part comprise the microscopic anatomy and embryology of organ systems.

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

HIE/VAB11 Histology and Embryology 1

5 cr. Pre-Exam Credit

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

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

HIE/VAB21 Basic Histochemistry

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

doc. Mgr. Kateřina Čížková, Ph.D.

possible semester LS

The course covers basic histochemical methods used for the detection of various chemical substances (e.g. lipids, iron, polysaccharides 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, HIE/VAA12

HIE/ZAA12 Histology and Embryology 2

6 cr. Pre-Exam Credit, Exam

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

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

possible semester ZS

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 45 [Hours/Semestr]

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

CH0 - DEPARTMENTS OF SURGERY

CH0/VAB11 Introduction to Clinical Medicine 2

3 cr. Colloquium

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.

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/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo

SOL/VAB71, FYZ/VAA11, LCH/VAA20 nebo LCH/VAB21, HIE/VAA12, FYZ/VAB11 nebo FYZ/VAB12, IN0/VAA11

CH0/VA025 Surgery 2

16 cr. Pre-Exam Credit

1 [Weeks/Semestr] + Exercise 2 [Weeks/Semestr] + Practice 2 [Weeks/Semestr]

doc. MUDr. JUDr. Dušan Klos, Ph.D., LL.M., prof. MUDr. Čestmír
Neoral, CSc.

possible semester ZS/LS

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, NCH/VA011

CH1 - DEPARTMENT OF SURGERY I**CH1/VABP2 Surgery-Clinical Training**

1 cr. Pre-Exam Credit

Practice 2 [Weeks/Semestr]

doc. MUDr. JUDr. Dušan Klos, Ph.D., LL.M.

possible semester LS

Basic orientation in practical perioperative care of surgical patients from admission to release. The student will be introduced to the diagnostic process and indications for surgical procedures, assisting at basic operations, postoperative care and determining subsequent care.

Prerequisite courses PAT/VAB11, PFY/VAB11

CH1/VA013 Surgery 1

6 cr. Pre-Exam Credit, Exam

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

doc. MUDr. JUDr. Dušan Klos, Ph.D., LL.M.

possible semester ZS/LS

Introduce the student to the fundamental principles of general surgery; acquire basic theoretical knowledge and the ability to perform basic surgical procedures (treatment of wounds, resuscitation).

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

CH1/VA031 Basics of Surgical Sutures

1 cr. Pre-Exam Credit

Exercise 4 [Hours/Semestr]

MUDr. Josef Chudáček, Ph.D.

possible semester ZS/LS

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

1 cr. Pre-Exam Credit

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

MUDr. Hana Klosová, Ph.D.

possible semester ZS/LS

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

0 cr. State Rigorous Exam

doc. MUDr. JUDr. Dušan Klos, Ph.D., LL.M., prof. MUDr. Čestmír
Neoral, CSc.

possible semester ZS/LS

Passing of the state rigorous exam, i.e. gaining of theoretical and practical basics of general surgery including traumatology, vascular surgery, chest surgery, cardiac surgery, plastic surgery and neurosurgery. A graduate should be able to work independently in the specified line of medicine after passing of the exam.

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

CH2 - DEPARTMENT OF SURGERY II - VASCULAR-TRANSPLANTATION

CH2/ZAA12 Surgery 2

0 cr. Pre-Exam Credit

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

doc. MUDr. Petr Dráč, Ph.D.

possible semester ZS

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

2 cr. Pre-Exam Credit, Exam

Seminar 15 [Hours/Semestr]

doc. MUDr. Petr Dráč, Ph.D.

possible semester ZS

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

2 cr. Pre-Exam Credit

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

doc. MUDr. Petr Dráč, Ph.D.

possible semester LS

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]

doc. MUDr. Petr Dráč, Ph.D.

possible semester 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]

doc. MUDr. Luděk Rožnovský, CSc.

possible semester ZS

Introduction to the problem and relations to the other medicine specializations, transmission of infectious diseases, epidemiologic strategy, clinical manifestation of infectious diseases, differential 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 patients), respiratory infections, herpes viruses infectious diseases and treatment, infectious exanthematous diseases, infectious diseases called by Streptococci and Staphylococci, zoonoses, 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 resistance, antibiotic policy. Antivirals. 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, leishmaniasis, schistosomiasis. Clinical demonstration of the patients.

Prerequisite courses IN1/VA012 nebo IN1/VA022, CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, PAT/VAB11, PFY/VAB11, PSY/VAB11 nebo

INF/VAB11 Infectious Diseases 2

4 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Pavel Chalupa, CSc.

possible semester LS

Introduction to the problem and relations to the other medicine specializations, transmission of 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 patients), respiratory infections, herpes viruses infectious diseases and 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 vaccination. 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, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, IN0/VAA11 nebo IN2/VAA11, CJA/VAB43 nebo CJA/VAB44, PAT/VAB11, PFY/VAB11, PSY/VAB11 nebo PSY/VAB13, FAR/VAB11, IN2/VAB21 nebo IN2/VAB22

INF/ZAA11 Infectious Diseases

2 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Pavel Chalupa, CSc.

possible semester ZS

Introduction to the problem and relations of other medicine specializations, transmission of infectious diseases, epidemiologic strategy, clinical manifestation of infectious diseases, differential 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 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 patients), respiratory infections, herpes viruses infectious diseases and 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 resistance, 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

5 cr. Pre-Exam Credit,Exam

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/VAB13, BIO/VAB11, LBF/VAB11, LCH/VAA11, CJA/VA031 nebo CJA/VAA31, CJA/VAB41, KAR/VAB11, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, FYZ/VAA11, LCH/VAA20, HIE/VAA12, HIE/VAB11, FYZ/VAB11 nebo FYZ/VAB12, CJA/VAB42, PLE/VAA81 nebo SOL/VAA41, PLE/VAB81 nebo SOL/VAB41

INO/VA041 Internal Medicine 4

24 cr. Pre-Exam Credit

1 [Weeks/Semestr] + Practice 7 [Weeks/Semestr] + Practice 1 [Weeks/Semestr]

prof. MUDr. Pavel Horák, CSc., MUDr. Petr Jakubec, Ph.D., doc. MUDr.

possible semester ZS/LS

Dan Marek, Ph.D., prof. MUDr. Bohuslav Melichar, Ph.D., prof. MUDr.

Tomáš Papajík, CSc., prof. MUDr. Ondřej Urban, Ph.D.

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, including injection technique and interpretation of ECG and basic radiographs; mastery of the standard work of a house physician; extended theoretical knowledge and acquisition of "clinical thinking".

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

IN0/VA091 Internal Medicine

0 cr. State Rigorous Exam

prof. MUDr. Pavel Horák, CSc., prof. MUDr. Miloš Táborský, CSc., FESC, MBA, prof. MUDr. Ondřej Urban, Ph.D.

possible semester ZS/LS

The objective of the State Examination is a complex evaluation of acquisition of practical and theoretical knowledge of 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 EKG 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 three questions and a related discussion, or eventually, including a written test.

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

IN1 - DEPARTMENT OF INTERNAL MEDICINE I - CARDIOLOGY

IN1/VA022 Internal Medicine 2

5 cr. Pre-Exam Credit

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

MUDr. Vlastimil Doupal, Ph.D.

possible semester ZS/LS

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 IN2/VAA11, MIK/VAA12, PVL/VAB13 nebo PVL/VAB14 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAB11, PLE/VABP2 nebo TPO/VABP1, PAT/VAB11, PFY/VAB11, PSY/VAB11 nebo PSY/VAB13, IN2/VAB21 nebo IN2/VAB22, CJA/VAB43 nebo CJA/VAB44, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11

IN1/ZAA11 Internal Medicine 1

0 cr. Pre-Exam Credit

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

MUDr. Jan Galuszka, Ph.D.

possible semester ZS

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

IN2 - DEPARTMENT OF INTERNAL MEDICINE II - GASTROENTEROLOGY AND

IN2/VAB22 Internal Medicine 1

5 cr. Pre-Exam Credit

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

MUDr. Diana Hexspoor Bawadekji

possible semester LS

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 should 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 disease 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, FYZ/VAA11, FYZ/VAB11 nebo FYZ/VAB12, HIE/VAA12, LCH/VAA20 nebo LCH/VAB21, CJA/VAB42

IN2/ZAB13 Internal Medicine 2

4 cr. Pre-Exam Credit

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

MUDr. Diana Hexspoor Bawadekji

possible semester LS

The aim is to master principle questions of the etiology and pathogenesis and to diagnosticate and treat internal diseases in the specialities: gastroenterology, hepatology, diabetology, 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 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Pavel Horák, CSc.

possible semester ZS/LS

Theoretical fundamentals of rheumatology, endocrinology and diabetology. Widening of practical skills in clinical examination, elaboration of the reports, and construction of the diagnostic process. Interpretation of laboratory tests and diagnostic methods with the formulation of working and final diagnosis, effective disease management.

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

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

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

MUDr. Lenka Doubravská, Ph.D.

possible semester LS

Skill level enabling to perform the basic resuscitation techniques on accident site, provide first aid to an unconscious person, provide first aid in major bleeding, diagnose and attend to fractures and serious abdominal injury.

KAR/VA023 Anaesthesia and Intensive Care

5 cr. Pre-Exam Credit, Exam

Exercise 43 [Hours/Semestr] + Seminar 22 [Hours/Semestr]

doc. MUDr. Tomáš Gabrhelík, Ph.D.

possible semester ZS/LS

Providing basic and advanced cardiopulmonary resuscitation, including skills to maintain the airway with the help of simple devices or by performing other life-saving procedures. Assessment and preparation of patient for anaesthesia, introduction to basic procedures and anaesthetic techniques, introduction to basics of intensive and resuscitation care, basics of acute and chronic pain treatment and palliative care.

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

KAR/VA051 Advanced First Aid

3 cr. Pre-Exam Credit

Exercise 28 [Hours/Semestr]

MUDr. Pavla Hrnčířiková

possible semester LS

Introduction to basics of acute and chronic pain management on the basis of Evidence-Based medicine and from the multidisciplinary point of view including psychology, physiotherapy, oncology, paediatrics. Introduction to basics of examination and pain assessment with the basics of pharmacotherapy of pain. Introduction to invasive methods of pain management including dealing with acute and perioperative pain. Possibility to complete practical part at department of anaesthetics and resuscitation facilities.

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]

prof. Mgr. MUDr. Milan Raška, Ph.D.

possible semester ZS

Students will learn about the immunological mechanisms, clinical manifestations and possibilities of immunologically-mediated 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, PFY/VAB11, MIK/VAA12, FAR/VAB11

KIM/VAB12 Medical Immunology

3 cr, Pre-Exam Credit

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

prof. Mgr. MUDr. Milan Raška, Ph.D.

possible semester ZS/LS

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/VAB11, FYZ/VAB11 nebo FYZ/VAB12

KIM/ZAA11 Immunology

2 cr, Pre-Exam Credit, Exam

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

prof. Mgr. MUDr. Milan Raška, Ph.D.

possible semester ZS

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.

KOZ - DEPARTMENT OF DERMATOLOGY AND VENEREOLOGY

KOZ/VA012 Dermatology and Venereology

3 cr, Pre-Exam Credit, Exam

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

doc. MUDr. Dagmar Ditrichová, CSc.

possible semester ZS/LS

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/VAB22, MIK/VAA12, FAR/VAB11, PAT/VAB11, PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB43 nebo CJA/VAB44, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13, IN0/VAA11 nebo IN2/VAA11

KOZ/ZAA11 Dermatology and Venereology

2 cr. Pre-Exam Credit,Exam

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

doc. MUDr. Dagmar Ditrichová, CSc.

possible semester ZS

Students will acquire basic information about the most common skin diseases 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 Compu**

0 cr. Pre-Exam Credit

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

prof. RNDr. Hana Kolářová, CSc.

possible semester ZS

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 biopotential 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.

10 cr. Pre-Exam Credit,Exam

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

MUDr. Mgr. Robert Bajgar, Ph.D.

possible semester LS

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 biopotential 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

LBF/VAB42 3D Printing in Medicine

2 cr. Pre-Exam Credit

Exercise 4 [Hours/Semestr] + Seminar 3 [Hours/Semestr]

MUDr. Mgr. Robert Bajgar, Ph.D.

possible semester LS

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/VA021 Clinical Biophysics

2 cr. Colloquium

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

MUDr. Mgr. Robert Bajgar, Ph.D.

possible semester ZS

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 IN2/VAA11, MIK/VAA12, PVL/VAB13 nebo PVL/VAB14 nebo SOL/VAA11 nebo SOL/VAA12 nebo SOL/VAB12, FAR/VAB11, IN2/VAB21 nebo IN2/VAB22, PAT/VAB11, PFY/VAB11, PSY/VAB11 nebo PSY/VAB13, KIM/VAB11 nebo KIM/VAB12, CJA/VAB43 nebo CJA/VAB44

LBF/ZAB11 Medical Biophysics

3 cr. Pre-Exam Credit,Exam

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

prof. RNDr. Hana Kolářová, CSc.

possible semester ZS

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

2 cr. Pre-Exam Credit

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

prof. RNDr. Hana Kolářová, CSc.

possible semester LS

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.

LGE - DEPARTMENT OF MEDICAL GENETICS

LGE/VA012 Medical Genetics

2 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Martin Procházka, Ph.D.

possible semester ZS/LS

Following the course student should be able to explain genetically determined illnesses and interpret results of chromosomal and DNA analysis, He/she should be able to estimate genetic risk of recurrence of an anomaly or a disease in relatives, be able to understand basic findings in prenatal diagnosis and evaluate possible risks of teratogenic factors in a development of a fetus.

Prerequisite courses IN0/VAA11 nebo IN0/VAB11 nebo IN2/VAA11, MIK/VAA12, FAR/VAB11, IN2/VAB21 nebo IN2/VAB22, PAT/VAB11, PFY/VAB11, KIM/VAB11 nebo KIM/VAB12, CJA/VAB41 nebo CJA/VAB44, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11

LGE/VA021 Rare Diseases-Cases from Genetic Clinic

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

prof. MUDr. Martin Procházka, Ph.D.

possible semester ZS/LS

To demonstrate on examples from genetic clinic the specific characteristics of care of rare diseases. Rare diseases are characterized - 1) by the difficulties and sometimes long timespan of the diagnostic process, 2) by the interdisciplinarity of highly specialized care, 3) patients with rare diseases have a specific motivation to exchange information and experience and to collaborate in all aspects of care.

Prerequisite courses LGE/VA011 nebo LGE/VA012

LCH - DEPARTMENT OF MEDICAL CHEMISTRY AND BIOCHEMISTRY

LCH/VAA11 Medical Chemistry

7 cr. Pre-Exam Credit, Exam

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

prof. Mgr. Martin Modrianský, Ph.D.

possible semester ZS

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/VAA20 Biochemistry 2

15 cr. Pre-Exam Credit, Exam

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

prof. RNDr. Jitka Ulrichová, CSc.

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

LCH/VAA62 Laboratory Diagnostics in Clin. Practise

2 cr. Colloquium

Seminar 25 [Hours/Semestr]

prof. RNDr. David Friedecký, Ph.D.

possible semester LS

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/VAB21, PFY/VAB11

LCH/VAB20 Biochemistry 1

0 cr. Pre-Exam Credit

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

prof. RNDr. Jitka Ulrichová, CSc.

possible semester LS

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/VAB52 Microbiome and Its Role in the Hum. Body

2 cr. Pre-Exam Credit

Seminar 8 [Hours/Semestr]

Mgr. Lenka Jourová, Ph.D.

possible semester LS

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/VAB20 nebo LCH/VAB21 nebo LCH/ZAB21, MIK/ZAA12, MIK/VAB11 nebo MIK/ZAB11

LCH/ZAA11 Medical Chemistry

3 cr. Pre-Exam Credit, Exam

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

prof. Ing. Jan Vacek, Ph.D.

possible semester ZS

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 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 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

LCH/ZAB21 Biochemistry 2

9 cr. Pre-Exam Credit, Exam

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

doc. RNDr. Eva Anzenbacherová, CSc.

possible semester LS

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

6 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Milan Kolář, Ph.D.

possible semester ZS

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/VAB11

MIK/VAB11 Microbiology 1

3 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kolář, Ph.D.

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

MIK/VA051 Clinical Cases of Antibiotic Therapy

1 cr. Colloquium

Seminar 6 [Hours/Semestr]

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, FAR/VAB11

MIK/VA071 Clinical Cases of Viral Infections

1 cr. Colloquium

Seminar 5 [Hours/Semestr]

prof. MUDr. Milan Kolář, Ph.D.

possible semester ZS/LS

The aim is to introduce students to the basis of diagnosis and adequate therapy of the most common viral infections. The principles of identification of the etiological agents and selection of the most appropriate therapy will be presented.

Prerequisite courses MIK/VAA12, FAR/VAB11

MIK/VA081 Management of ATB Treatment According...

3 cr. Colloquium

Seminar 10 [Hours/Semestr]

prof. MUDr. Milan Kolář, Ph.D.

possible semester ZS/LS

The aim of the course is to inform students with the practical management of antibiotic treatment for a particular patient according to the principles of Antibiotic stewardship.

Prerequisite courses MIK/VAA12, FAR/VAB11

MIK/ZAA12 Microbiology 2 - Oral Microbiology

5 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Milan Kolář, Ph.D.

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

0 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kolář, Ph.D.

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 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]

MUDr. Petr Džubák, Ph.D.

possible semester ZS

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/VAB11 nebo BIO/VAB12

MTM/VAB31 DNA Profiling and Its Forensic Interpr..

2 cr. Pre-Exam Credit

Seminar 8 [Hours/Semestr]

prof. Mgr. Jiří Drábek, Ph.D.

possible semester LS

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/VAB11 nebo BIO/VAB12 nebo BIO/ZAB11

NAN - DEPARTMENT OF ANATOMY**NAN/VAA13 Anatomy 1**

0 cr. Pre-Exam Credit

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

doc. RNDr. Petr Mlejnek, Ph.D.

possible semester ZS

Building on secondary school level of knowledge, the aim of this subject is to introduce main hierarchy of the human body description. Relations cell - tissue - organ - system - organism will be discovered. These interconnections will be further expanding using the Anatomical Terminology as the base of the Medical Terminology. In the preliminary stages we work on the principals of the general osteology, arthrology, myology, angiology and neurogenesis. This knowledge will be developed in systematic and topographical relations as the objective to the practical and clinical usage.

Prerequisite courses NAN/VAA14

NAN/VAA14 Anatomy - Dissection Course 1

0 cr. null

Exercise 30 [Hours/Semestr]

MUDr. Alžběta Beislová

possible semester ZS

General and systematic osteology, arthrology and myology. Peripheral nervous and vessels systems of limbs. Topography of the upper and lower limbs. Practical dissection week - dissection of limbs. The heart and large vessels. Digestive, respiratory, urogenital systems including its blood supply, innervations and lymphatic drainage. Peripheral parts of the cranial nerves (V., VII., IX., X., XI., XII.). Topography of body regions. Practical dissection week - dissection of the cadaver. The students gain detailed knowledge from systematic anatomy of studied organ's systems, its main function and topographical relations.

NAN/VAB13 Anatomy 2

13 cr. Pre-Exam Credit, Exam

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

doc. RNDr. Petr Mlejnek, Ph.D.

possible semester LS

The aim of the subject is to continue in theory and practical application of the systematic anatomy and basics of topographical anatomy knowledge obtained in the subject Anatomy 1. Further interconnection to other subjects with the functional specialization is essential too. It is focused on the ability of analysis of the basic macroscopic structure of human body in relation to the microscopic structures. The main principals of the elemental structures related to the functional understanding of central and peripheral nervous system, system of the cranial nerves and autonomic nervous system, structure of the sensory organs, respiratory, urinary and genital systems.

Prerequisite courses NAN/VAA11 nebo NAN/VAA13, NAN/VAA14, NAN/VAB14

NAN/VAB14 Anatomy - Dissection Course 2

0 cr. null

Exercise 30 [Hours/Semestr]

MUDr. Alžběta Beislová

possible semester LS

General and systematic osteology, arthrology and myology. Peripheral nervous and vessels systems of limbs. Topography of the upper and lower limbs. Practical dissection week - dissection of limbs. The heart and large vessels. Digestive, respiratory, urogenital systems including its blood supply, innervations and lymphatic drainage. Peripheral parts of the cranial nerves (V., VII., IX., X., XI., XII.). Topography of body regions. Practical dissection week - dissection of the cadaver. The students gain detailed knowledge from systematic anatomy of studied organ's systems, its main function and topographical relations.

Prerequisite courses NAN/VAA11 nebo NAN/VAA13

NAN/VAB21 Clinical and Topographical Anatomy

2 cr. Colloquium

Exercise 15 [Hours/Semestr]

doc. RNDr. Petr Mlejnek, Ph.D.

possible semester LS

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/VAB13, NAN/VAA11 nebo NAN/VAA13

NAN/ZAA11 Anatomy

0 cr. Pre-Exam Credit

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

doc. RNDr. Petr Mlejnek, Ph.D.

possible semester ZS

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 Beislová, MUDr. Kateřina Kikalová, Ph.D.

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 maxillofacial surgery.

Prerequisite courses NAN/ZAA11, NAN/ZAB11

NAN/ZAB11 Anatomy

13 cr. Pre-Exam Credit,Exam

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

doc. RNDr. Petr Mlejnek, Ph.D.

possible semester LS

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

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

prof. MUDr. Petr Kaňovský, CSc.

possible semester LS

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 IN0/VAA11 nebo IN2/VAA11, MIK/VAA12, FAR/VAB11, PAT/VAB11, PFY/VAB11, IN2/VAB21 nebo IN2/VAB22, KIM/VAB11 nebo KIM/VAB12, CJA/VAB43 nebo CJA/VAB44

NEU/VA042 Clinical Rehabilitation

1 cr. Pre-Exam Credit,Exam

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

MUDr. Petr Kolář, Ph.D., PhDr. Barbora Kolářová, 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/VAB11, CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAB21 nebo IN2/VAB22, PFY/VAB11

NEU/ZAA11 Preventive Physiotherapy for Dentistry

1 cr. Colloquium

Seminar 15 [Hours/Semestr]

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

possible semester ZS

Introduction to therapeutic rehabilitation, physical therapy and physiatry. Fundamentals of kinesiotherapy of temporomandibular 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

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

MUDr. Andrea Bártková, Ph.D.

possible semester LS

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

2 cr. Colloquium

Seminar 18 [Hours/Semestr]

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

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 IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, NEU/VA011 nebo NEU/VA012 nebo NEU/VA013, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013

NUM - DEPARTMENT OF NUCLEAR MEDICINE

NUM/VAB22 Radiopharmacy & Studies of Radiopharmac.

2 cr. Colloquium

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

doc. MUDr. Pavel Koranda, Ph.D.

possible semester LS

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, PFY/VAB11 nebo RAD/VA013, RAD/VA011 nebo RAD/VA013

OCC - DEPARTMENT OF OPHTHALMOLOGY

OCC/VA011 Ophthalmology

4 cr. Pre-Exam Credit,Exam

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

MUDr. Klára Marešová, Ph.D., FEBO, prof. MUDr. Jiří Řehák, CSc.,
FEBO

possible semester ZS/LS

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 ophthalmology as well.

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

ONK - DEPARTMENT OF ONCOLOGY

ONK/VAB32 Oncological Emergencies

2 cr. Pre-Exam Credit

Seminar 8 [Hours/Semestr]

prof. MUDr. Martin Klabusay, Ph.D.

possible semester ZS/LS

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 medical oncology.

Prerequisite courses ONK/VA011, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAA11 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAB21 nebo IN2/VAB22, IN1/VA012 nebo IN1/VA022

ONK/VA011 Clinical Oncology

3 cr. Pre-Exam Credit,Exam

Exercise 24 [Hours/Semestr]

prof. MUDr. Bohuslav Melichar, Ph.D.

possible semester ZS/LS

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 IN0/VAA12 nebo IN2/VAA11, MIK/VAA12, PVL/VAB13 nebo PVL/VAB14 nebo SOL/VAA11 nebo SOL/VAB12, FAR/VAB11, IN2/VAB21 nebo IN2/VAB22, PLE/VABP2 nebo TPO/VABP1, PAT/VAB11, PFY/VAB11, PSY/VAB11 nebo PSY/VAB13, CJA/VAB43 nebo CJA/VAB44, KIM/VAB11 nebo KIM/VAB12

ORL - DEPARTMENT OF OTORHINOLARYNGOLOGY AND HEAD AND NECK SURGERY

ORL/VA011 Otorhinolaryngology

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/VAB11, PFY/VAB11, CJA/VAB43 nebo CJA/VAB44

ORL/ZAB11 Otorhinolaryngology

3 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Ivo Stárek, CSc.

possible semester LS

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

4 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Jiří Gallo, Ph.D.

possible semester ZS/LS

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 IN2/VAA11, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, PRL/VA011, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13, NEU/VA012 nebo NEU/VA013, IN1/VA022

PAT - DEPARTMENT OF CLINICAL AND MOLECULAR PATHOLOGY

PAT/VAA11 Pathology

0 cr. Pre-Exam Credit

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

prof. MUDr. Jiří Ehrmann, Ph.D.

possible semester ZS

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/VAB13, HIE/VAA12, CJA/VAB42

PAT/VAB11 Pathology

14 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Jiří Ehrmann, Ph.D.

possible semester LS

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, NAN/VAA12 nebo NAN/VAB13, HIE/VAA12, CJA/VAB42

PAT/VAB31 Molecular Pathology

3 cr. Pre-Exam Credit

Seminar 15 [Hours/Semestr]

doc. Mgr. Jan Bouchal, Ph.D.

possible semester LS

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, NAN/VAA12 nebo NAN/VAB13, HIE/VAA12, CJA/VAB42

PAT/ZAA22 Pathology - Oral Pathology

7 cr. Pre-Exam Credit,Exam

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

prof. MUDr. Jiří Ehrmann, Ph.D.

possible semester ZS

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

4 cr. Pre-Exam Credit

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

prof. MUDr. Jiří Ehrmann, Ph.D.

possible semester LS

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

0 cr. Pre-Exam Credit

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

prof. MUDr. Martin Petřek, CSc.

possible semester ZS

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, FYZ/VAB11 nebo FYZ/VAB12, LCH/VAA20 nebo LCH/VAB21, NAN/VAA12 nebo NAN/VAB13, CJA/VAB42

PFY/VAB11 Pathological Physiology

10 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Martin Petřek, CSc.

possible semester LS

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, FYZ/VAB11 nebo FYZ/VAB12, LCH/VAA20 nebo LCH/VAB21, CJA/VAB42, HIE/VAA12

PFY/VA021 Seminars in Pathophysiology

2 cr. Pre-Exam Credit

Seminar 10 [Hours/Semestr]

prof. MUDr. Martin Petřek, CSc.

possible semester ZS/LS

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/VAB11 nebo PFY/ZAA12

PFY/ZAA12 Pathological Physiology 2

8 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Martin Petřek, CSc.

possible semester ZS

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

0 cr. Pre-Exam Credit

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

prof. MUDr. Martin Petřek, CSc.

possible semester LS

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.**

1 cr. Pre-Exam Credit

Practice 2 [Weeks/Semestr]

MUDr. Veronika Šromová, Ph.D.

possible semester LS

During the clerkship students should perfect gynecological examinations including colposcopy and sonography. They should improve their skills in prevention, screening and diagnosis, treatment of emergencies. They should participate on family planning, pre-conception and pre-natal consultation, low risk labour assistance, sexually transmitted diseases and menopause. They should also assist at gynecological procedures performed at operating theatres.

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

PGY/VA011 Gynecology and Obstetrics 1

6 cr. Colloquium

Practice 70 [Hours/Semestr] + Seminar 20 [Hours/Semestr]

prof. MUDr. Radovan Pilka, Ph.D.

possible semester ZS/LS

The general objective of the discipline is to acquire the basic theoretical as well as practical knowledge in the field of Obstetrics including spontaneous deliveries and possible alternatives, pharmacotherapy in pregnancy, pathologies in pregnancy, physiologic changes during puerperium and possible pathologies. They also should obtain basic theoretical as well as practical knowledge in the field of Gynecology, particularly gynecologic examination, therapy of inflammation, gynecologic operations. They will deepen their theoretical knowledge in the field of family planning, infertility, developmental anomalies, endometriosis and tumours of reproductive organs. An integral part of the training are also emergencies.

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

PGY/VA013 Gynecology and Obstetrics 2

10 cr. Pre-Exam Credit

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

prof. MUDr. Radovan Pilka, Ph.D.

possible semester ZS/LS

The course is based on practical training. Students will participate under guidance in Labour ward, Gynaecological ward, Out-patient clinics and Operating theatre. The student will be informed about ethical issues regarding the care of obstetric and gynecological patients. The course is based on the following clinical situations:

Normal pregnancy and common pregnancy complications,

hypertensive disorders in pregnancy, preeclampsia, gestational diabetes, tromboembolic complications in pregnancy, fetal diagnosis with ultrasound, the use of ultrasound in clinical gynecology and obstetrics, miscarriage and ectopic pregnancy

therapeutic abortion, ethical issues, normal labour, common complications during labour, the normal and complicated puerperium, reproductive medicine including infertility and contraception, gynecological infections including sexually transmitted diseases, menstrual disorders in the adolescent and fertile period, benign and malignant gynecological tumors

abdominal pain, urinary incontinence, climacteric and postmenopausal problems.

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

prof. MUDr. Radovan Pilka, Ph.D.

possible semester ZS/LS

Verification and evaluation of the level of knowledge of Gynecology, Obstetrics and early neonatal care by examination of the patient, MCQ test and interview.

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

PLE - CENTER FOR TELEMEDICINE, SIMULATION AND CLINICAL SKILLS**PLE/VAA81 Basic Procedures in Healthcare 1**

2 cr. Pre-Exam Credit

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

PhDr. Zlata Brachová, MBA

possible semester ZS

The aim of this subject is: a) to teach students of general medicine 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/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB41, HIE/VAB11, KAR/VAB11, LBF/VAB11, NAN/VAB11 nebo NAN/VAB13, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, NAN/VAA13, LCH/VAA21 nebo LCH/VAB20, LCH/VAA11

PLE/VAA83 Basic Procedures in Healthcare 3-CI. Pr.

3 cr. Pre-Exam Credit

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

PhDr. Zlata Brachová, MBA

possible semester ZS

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/VAA81, PLE/VAB81, PLE/VABP1, PVL/VAB71 nebo PVL/VAB72

PLE/VABP1 Basic Procedures in Healthcare-Clin. Pr.

1 cr. Pre-Exam Credit

Practice 150 [Hours/Semestr]

PhDr. Zlata Brachová, MBA

possible semester LS

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

PLE/VABP2 Obligatory Practice in General Pract...

1 cr. Pre-Exam Credit

Practice 1 [Weeks/Semestr]

doc. MUDr. Eva Klásková, Ph.D.

possible semester LS

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 IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11

PLE/VAB81 Basic Procedures in Healthcare 2

2 cr. Pre-Exam Credit, Exam

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

PhDr. Zlata Brachová, MBA

possible semester LS

The aim of this subject is: a) to teach students of general medicine 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/VAB11, CJA/VA031 nebo CJA/VAB31, CJA/VAB41, HIE/VAB11, KAR/VAB11, LBF/VAB11, NAN/VAB11 nebo NAN/VAB13, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, PLE/VAA81 nebo SOL/VAA41, LCH/VAA11, LCH/VAA21 nebo LCH/VAB20, NAN/VAA13

PLE/VA031 Acute Conditions in Medicine

6 cr. Colloquium

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

MUDr. Samuel Genzor, Ph.D., prof. MUDr. Miroslav Heřman, Ph.D.,
prof. MUDr. Pavel Horák, CSc., doc. MUDr. Eva Klásková, Ph.D., MUDr.
Vladislav Kutěj, prof. MUDr. Tomáš Papajík, CSc., doc. MUDr. Vlastimil
Procházka, Ph.D., prof. MUDr. Miloš Táborský, CSc., FESC, MBA, prof.
RNDr. Jitka Ulrichová, CSc., prof. MUDr. Ondřej Urban, Ph.D.

possible semester ZS/LS

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, KAR/VA022 nebo KAR/VA023, CH1/VA011 nebo CH1/VA012 nebo CH1/VA013, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13, RAD/VA011 nebo RAD/VA013, MIK/VAA12, DET/VA091

PLE/VA042 General Practical Medicine

2 cr. Pre-Exam Credit

Seminar 5 [Hours/Semestr]

prof. Mgr. MUDr. Milan Raška, Ph.D.

possible semester ZS/LS

The aim of this course is to introduce to students following: adult general practitioner's work, methodology of primary care, to show differences between national 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...

2 cr. Pre-Exam Credit

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/ZA011 Emergency Medicine in Dentistry 1

1 cr. Colloquium

Exercise 3 [Hours/Semestr] + Seminar 2 [Hours/Semestr]

doc. MUDr. Eva Klásková, Ph.D., MUDr. Vladislav Kutěj, doc. MUDr. et
MUDr. Peter Tvrdý, Ph.D., MDDr. Iva Voborná, Ph.D.

possible semester LS

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

1 cr. Colloquium

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.

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]

doc. MUDr. Marie Nakládalová, Ph.D.

possible semester ZS/LS

Aim of this subject is to master interdisciplinary branch of knowledge, which deals with impact of occupational environment on individual and population health. The object of the study is also prevention, diagnostics, treatment and advisory aspects of diseases caused or made worse by work.

Prerequisite courses PFY/VAB11, PAT/VAB11

PSY - DEPARTMENT OF PSYCHIATRY

PSY/VAA13 Medical Psychology 1

0 cr. Pre-Exam Credit

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

prof. MUDr. Klára Látalová, Ph.D.

possible semester ZS

Established successful contact between patient and physician like important complement of treatment.

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

PSY/VAA31 Psychiatry and Psychother. in the Movies

2 cr. Pre-Exam Credit

Seminar 16 [Hours/Semestr]

prof. MUDr. Ján Praško Pavlov, CSc.

possible semester LS

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/VCB13 nebo PSY/ZAB21 nebo PSY/ZUB21, PSY/VA022 nebo PSY/VA023 nebo PSY/VCO22 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. Klára Látalová, Ph.D.

possible semester LS

Established successful contact between patient and physician which is important for the complex care of the patient.

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

PSY/VA023 Psychiatry

5 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Klára Látalová, Ph.D.

possible semester LS

Provide base overview psychiatric diagnosis, their treatment and maintenance.

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

PSY/ZAB11 Psychiatry

2 cr. Pre-Exam Credit,Exam

Exercise 15 [Hours/Semestr]

null

possible semester LS

Provide base overview psychiatric diagnosis, their treatment and maintenance.

PSY/ZAB21 Psychology in Dental Practice

1 cr. Pre-Exam Credit

Seminar 15 [Hours/Semestr]

PhDr. Petra Kasalová

possible semester LS

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

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 SOL/VAA11 nebo SOL/VAB12, MIK/VAA12, PAT/VAA11

PVL/VAA51 Instruments of Evidence-Based Healthcare

2 cr. Colloquium

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

PaedDr. Mgr. Dagmar Tučková, Ph.D. et Ph.D.

possible semester ZS

EBHC as it is contemporarily conceived is based on the view that health care related decisions should be based on the high individual professional skills of the health workforce together with the best scientific evidence, and recognizing patient's preferences and values as well. During this course, the students will be practicing EBP (Evidence-Based Practice) basic skills to be able to formulate review questions, search for the best available evidence, read and recognize results of scientific articles, and critically appraise and use the best evidence and quality of sources for medical praxis. As part of the course, students will also be introduced to the issue of predatory publishers.

PVL/VAB13 Social Medicine and Medical Ethics

2 cr. Pre-Exam Credit

Seminar 14 [Hours/Semestr]

prof. MUDr. Dagmar Horáková, Ph.D.

possible semester LS

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/VAB11, CJA/VAB41, NAN/VAB11 nebo NAN/VAB13, NAN/VAA11 nebo NAN/VAA13, LBF/VAB11, LCH/VAA11, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, HIE/VAB11, KAR/VAB11, LCH/VAA21 nebo LCH/VAB20

PVL/VAB31 Actual Epidemiological Situation in... 1 cr. Pre-Exam Credit
Seminar 6 [Hours/Semestr]
Mgr. Simona Zatloukalová, Ph.D. possible semester LS

Training of practical skills in the epidemiology of communicable and non-communicable diseases.
Prerequisite courses MIK/VAA12, IN2/VAB21 nebo IN2/VAB22

PVL/VAB32 Communication with a Patient in Praxis 1 cr. Pre-Exam Credit
Seminar 7 [Hours/Semestr]
prof. MUDr. 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/VAB11, CJA/VAB41, NAN/VAA11 nebo NAN/VAA13, NAN/VAB11 nebo NAN/VAB13, PVL/VAB71 nebo PVL/VAB72 nebo SOL/VAB70 nebo SOL/VAB71, LCH/VAA21 nebo LCH/VAB20, LBF/VAB11, KAR/VAB11, HIE/VAB11

PVL/VAB52 Importance of Systematic Reviews... 2 cr. Colloquium
Exercise 10 [Hours/Semestr] + Seminar 10 [Hours/Semestr]
PaedDr. Mgr. Dagmar Tučková, Ph.D. et Ph.D. possible semester ZS/LS

The main purpose of this subject is to develop a comprehensive understanding of the purposes and principles of systematic reviews and their importance for praxis in students. The objectives are to describe origins and development of systematic reviews, critically evaluate the role of scientific evidence in contemporary healthcare practice, describe and discuss primary and particularly secondary outcomes of the research.

PVL/VAB71 Basic Communication Ethics for Praxis 1 cr. Colloquium
Exercise 10 [Hours/Semestr] + Seminar 5 [Hours/Semestr]
prof. MUDr. Dagmar Horáková, Ph.D. possible semester ZS

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.

PVL/VA011 Public Health 1 3 cr. Pre-Exam Credit
Seminar 60 [Hours/Semestr]
doc. MUDr. Jana Janoutová, Ph.D. possible semester ZS/LS

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 anti-epidemic/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, IN2/VAB21, IN2/VAA11, PSY/VAB11 nebo PSY/VAB13, PAT/VAB11, PFY/VAB11, FAR/VAB11, CJA/VAB43 nebo CJA/VAB44 nebo PVL/VAA11

PVL/VA023 Public Health 2

3 cr. Pre-Exam Credit

Seminar 34 [Hours/Semestr]

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

possible semester ZS/LS

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, PVL/VA041 nebo PVL/VA044, IN1/VA012 nebo IN1/VA022, FAR/VAA11 nebo FAR/VAA12 nebo FAR/VAA13

PVL/VA091 Public Health

0 cr. State Rigorous Exam

prof. MUDr. Dagmar Horáková, Ph.D.

possible semester ZS/LS

Evaluation of the level of knowledge of Epidemiology, Medical Law and Organization along with Financing of Healthcare.

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, PVL/VA041 nebo PVL/VA044 nebo SOL/VA020 nebo SOL/VA021, PVL/VAB13 nebo PVL/VAB14 nebo SOL/VAA11 nebo SOL/VAA12 nebo SOL/VAB12

PVL/ZAA11 Epidemiology

4 cr. Pre-Exam Credit, Exam

Seminar 60 [Hours/Semestr]

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

possible semester ZS

Students become acquainted with the basic principles of epidemiological methodology as the basis for evidence based medicine. Moreover, they will learn the essential epidemiological aspects of infectious and non-communicable diseases, with respect to dental medicine problems.

PVL/ZAA12 Management, Ethics, Law and Social Aspects

3 cr. Pre-Exam Credit, Exam

Seminar 30 [Hours/Semestr]

prof. MUDr. Dagmar Horáková, Ph.D., PaedDr. Mgr. Dagmar Tučková, Ph.D. et Ph.D.

possible semester ZS

Cílem předmětu je seznámit studenty se základy zdravotnického a stomatologického managementu, s ekonomikou, legislativou, etikou a sociálními aspekty souvisejícími s poskytováním zdravotních služeb se zaměřením na zubní lékařství. Obsahem předmětu jsou základní principy zdravotnických systémů v mezinárodním srovnání (v ČR a vybraných zemích světa), globální zdraví, mezinárodní spolupráce v oblasti zdraví a stomatologické péče a metody organizace a řízení zdravotní a stomatologické péče, včetně základů zdravotní politiky, legislativy a ekonomiky s důrazem na zubní praxi včetně soukromé praxe. V rámci předmětu jsou rovněž prezentovány základní principy epidemiologického výzkumu s důrazem na Evidence-Based Dentistry, včetně implementace nejlepšího dostupného vědeckého důkazu do klinické stomatologické praxe a jeho využití i v preventivní péči. Procvičení základů efektivní komunikace zahrnuje také etické principy v práci zubních lékařů a dalších zdravotnických pracovníků ve stomatologické praxi. Studenti jsou vedeni k multikulturnímu přístupu k lidem s odlišnými kulturními a sociálními zkušenostmi.

RAD - DEPARTMENT OF RADIOLOGY**RAD/VAA31 Radiolog. Images of Normal Structures 2**

2 cr. Colloquium

Seminar 12 [Hours/Semestr]

prof. MUDr. Miroslav Heřman, Ph.D.

possible semester ZS/LS

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/VAB13

RAD/VAB30 Radiolog. Images of Normal Structures 1

2 cr. Colloquium

Seminar 12 [Hours/Semestr]

prof. MUDr. Miroslav Heřman, Ph.D.

possible semester ZS/LS

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. Miroslav Heřman, Ph.D.

possible semester ZS/LS

To familiarize students with basic imaging methods used in radiology and nuclear medicine, their principles, indications and evaluation.

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

RAD/VA021 Practical Sonography

2 cr. Pre-Exam Credit

Exercise 8 [Hours/Semestr]

prof. MUDr. Miroslav Heřman, Ph.D.

possible semester ZS/LS

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/VAB11, PFY/VAB11

RAD/VA041 Interpretation of Imaging Methods Find.

1 cr. Pre-Exam Credit

Exercise 4 [Hours/Semestr]

prof. MUDr. Miroslav Heřman, Ph.D.

possible semester ZS/LS

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/VAB11, PFY/VAB11

SLP - DEPARTMENT OF FORENSIC MEDICINE AND MEDICAL LAW

SLP/VA011 Forensic Medicine

3 cr. Pre-Exam Credit,Exam

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

MUDr. Martin Dobiáš, Ph.D.

possible semester ZS/LS

The students are to be able to perform the examination of the dead person and get acquainted with the problems of violent and sudden death, to know significant judicial 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, IN0/VAA11 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, PAT/VAB11, PFY/VAB11, CJA/VAB43 nebo CJA/VAB44, FAR/VAB11, PSY/VAB11 nebo PSY/VAB13, IN2/VAB21 nebo IN2/VAB22

SLP/VA022 Medical Law

1 cr. Pre-Exam Credit

Seminar 2 [Hours/Semestr]

MUDr. Martin Dobiáš, Ph.D.

possible semester ZS/LS

The aim of the subject is to get acquainted the student with statutory norms modifying the activity and competence of professional organization ČLK (CM CH), to get acquainted 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, 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, IN1/VA012 nebo IN1/VA022

SLP/ZAA11 Forensic Problem in Dentistry

2 cr. Colloquium

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

MUDr. Martin Dobiáš, Ph.D.

possible semester ZS

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 concentration on dental surgery.

ST1 - INSTITUTE OF DENTISTRY AND ORAL SCIENCES

ST1/VAA11 Basic of Dentistry 1

0 cr. Pre-Exam Credit

Seminar 10 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

1 cr. Pre-Exam Credit

Exercise 4 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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/ZAA03 Preventive Dentistry and Cariology 2

0 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

3 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kamínek, DrSc.

possible semester ZS

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]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

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

4 cr. Pre-Exam Credit, Exam

Exercise 15 [Hours/Semestr]

prof. MUDr. Milan Kamínek, DrSc.

possible semester ZS

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/ZAA33, ST1/ZAB33 nebo ST1/ZAB37

ST1/ZAA40 Pre-Clinical Dentistry 1

0 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

8 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

ST1/ZAA61 Prosthodontics 1

0 cr. Pre-Exam Credit

30 [Hours/Semestr] + Exercise 53 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

Detailed clinical information on indications and clinical techniques of making partial and complete 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.

2 cr. Pre-Exam Credit

Exercise 24 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester ZS

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

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

ST1/ZAB01 Preventive Dentistry and Cariology 1

2 cr. Pre-Exam Credit

Seminar 30 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

11 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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.

possible semester LS

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

2 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kamínek, DrSc.

possible semester LS

Orthodontic diagnostics and records. Treatment procedure planning. Interdisciplinary cooperation in treatment procedure planning. Teaching content includes orthodontic model analysis, segmental analysis made by traditional 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

5 cr. Pre-Exam Credit,Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

1 cr. Pre-Exam Credit

Seminar 15 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

6 cr. Pre-Exam Credit,Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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 procedures and treatment of acute conditions dental emergency.

Prerequisite courses ST1/ZAB23, ST1/ZAA24

ST1/ZAB25 Pediatric Dentistry 3

4 cr. Pre-Exam Credit

Exercise 20 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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, ST1/ZAA36, ST1/ZAA25

ST1/ZAB31 Orthodontics 1

4 cr. Pre-Exam Credit

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

6 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kamínek, DrSc.

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

3 cr. Pre-Exam Credit

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

prof. MUDr. Milan Kamínek, DrSc.

possible semester LS

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

6 Cr. Pre-Exam Credit, Exam

15 [Hours/Semestr] + Exercise 52 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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.

Prerequisite courses ST1/ZAB21, ST1/ZAA35, 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

8 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

12 cr. Pre-Exam Credit

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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/ZAB45 Oral Medicine

4 cr. Pre-Exam Credit

Exercise 20 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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.

ST1/ZAB51 Periodontology 1

2 cr. Pre-Exam Credit

Seminar 30 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

ST1/ZAB53 Periodontology 2

5 cr. Pre-Exam Credit, Exam

8 [Hours/Semestr] + Exercise 25 [Hours/Semestr] + Seminar 7 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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]

doc. MUDr. Miloš Špidlen, Ph.D.

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]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

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

ST1/ZAB71 Prosthetic Technology

6 cr. Pre-Exam Credit, Exam

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

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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..

1 cr. Pre-Exam Credit

Practice 6 [Hours/Semestr]

MDDr. Iva Voborná, Ph.D.

possible semester LS

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

2 cr. Pre-Exam Credit

Practice 30 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

2 cr. Pre-Exam Credit

Practice 30 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

Prerequisite courses ST1/ZAB81, BIO/ZAB11, LCH/ZAA11, NAN/ZAB11, LBF/ZAB11, CJA/ZAB41

ST1/ZAB83 Dentistry - Clinical Training 3

2 cr. Pre-Exam Credit

Practice 30 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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 Maxillofacial 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]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

ST1/ZA062 Incisors Modeling Using the Vanini's...

4 cr. Pre-Exam Credit

Exercise 20 [Hours/Semestr]

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester 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

1 cr. Pre-Exam Credit

Practice 6 [Hours/Semestr]

MDDr. Iva Voborná, Ph.D.

possible semester ZS/LS

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

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

0 cr.State Rigorous Exam

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

0 cr.State Rigorous Exam

doc. MUDr. Miloš Špidlen, Ph.D.

possible semester LS

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

TRA - DEPARTMENT OF TRAUMATOLOGY

TRA/VA021 Hand and Wrist Surgery

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

doc. MUDr. Pavel Dráč, Ph.D., MUDr. Ján Palčák

possible semester ZS/LS

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

Prerequisite courses CH1/VA012 nebo CH1/VA013

TRA/VA031 Advanced Trauma Life Support Principles

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

doc. MUDr. Pavel Dráč, Ph.D., MUDr. Ján Palčák

possible semester ZS/LS

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

Prerequisite courses CH1/VA012 nebo CH1/VA013

TRA/VA041 Fractures in Children

1 cr. Pre-Exam Credit

Seminar 4 [Hours/Semestr]

doc. MUDr. Pavel Dráč, Ph.D., MUDr. Ján Palčák

possible semester ZS/LS

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

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

TVL - DEPARTMENT EXERCISE MEDICINE AND CARDIOVASCULAR REHABILITATION

TVL/VAA21 Selected Chapters from Sports Medicine

2 cr. Pre-Exam Credit

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

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 raised at physical activity.

TVL/VA042 Exercise Medicine

1 cr. Pre-Exam Credit, Exam

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

prof. MUDr. Eliška Sovová, Ph.D., MBA

possible semester ZS/LS

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/VAB11, CJA/VAB43 nebo CJA/VAB44, IN0/VAA11 nebo IN2/VAA11, CH0/VAB11 nebo CH0/VAB12 nebo IN0/VAB11 nebo IN2/VAA11, IN2/VAB21 nebo IN2/VAB22, 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 Tvrđý, Ph.D.

possible semester ZS

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

0 cr. Pre-Exam Credit

16 [Hours/Semestr] + Exercise 57 [Hours/Semestr]

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

possible semester ZS

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

4 cr. Pre-Exam Credit,Exam

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

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

possible semester ZS

Teeth and alveolar bone injuries (first aid, treatment), fracture of the mandible, fracture of the middle face floor, the peculiarities 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]

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

possible semester ZS/LS

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]

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

possible semester LS

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

3 cr. Pre-Exam Credit

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

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

possible semester LS

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

0 cr., State Rigorous Exam

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

possible semester LS

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**

3 cr., Pre-Exam Credit, Exam

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

MUDr. Vladislav Kutěj

possible semester ZS/LS

Providing basic and advanced cardiopulmonary resuscitation, including performing other life-saving procedures, introduction of emergency medical system and emergency departments.

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

URO - DEPARTMENT OF UROLOGY**URO/VA011 Urology**

4 cr., Pre-Exam Credit, Exam

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

prof. MUDr. Vladimír Študent, Ph.D.

possible semester ZS/LS

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