

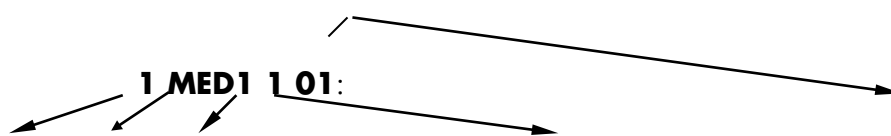
TEACHING PLAN

Explanation of used abbreviations

The abbreviation should reduce paperwork and help the ECTS coordinator by his transcript of records.

First number:	Year of the study
MED:	Medicine
Second number:	1-lecture or 2-seminar or 3-course, practical work ect.
Third number:	0-voluntary, 1-urgent recommended, 2-certification of attendance
Fourth and fifth number:	Consecutive number in the ECTS-book within the year of study

Example:



First year of study, medicine, lecture, participation urgent recommended, consecutive number within year of study

FIRST YEAR - WINTER SEMESTER (01)

ANATOMY

Lectures:	1MED1101
Contents:	General Anatomy and movement apparatus, General Embryology, Histology
Course Histology:	1MED3202
Contents:	Histology of the human organs
Course Macroscopy:	1MED3203
Contents:	anatomical preparations
Seminars:	1MED2204
Contents:	Anatomy with clinical correlations and relevance
Assessment:	Courses/ seminars are necessary for the admission to the preclinical exam

BIOLOGY

-Lectures:	1MED1105
Contents:	Introduction, Cell Biology, Genetics, Evolution, Auto ecology, mutual relations between organisms, parasitism
Seminars:	1MED2206
Contents:	above-mentioned
Assessment:	Practical and theoretical Assessment are necessary for admission to the preclinical exam

CHEMISTRY

Lectures:	1MED1107
Contents:	Basis of Inorganic and Organic Chemistry

Seminars:	1MED2208
Contents:	Exercises to fundamental aspects of Inorganic and General Chemistry
Assessment:	Practical and theoretical Assessment are necessary for admission to the preclinical exam

PHYSICS

Lectures:	1MED1109
Contents:	Physical fundamentals, problems relevant to biological structures and functions and to medical diagnostic and therapeutic technologies, Radiation Physics, flow of fluids, motion of molecules in solution
Practical training:	1MED3210
Contents:	12 experiments: X-ray image, spectroscopic analysis of X-rays, X-ray absorption, radioactive decay, half-life measurement, viscosity coefficient, Poiseuille flow
Assessment:	Practical and theoretical Assessment are necessary for admission to the preclinical exam

MEDICAL TERMINOLOGY

Lectures:	1MED1111
Course:	1MED3212
Contents:	Latin and Greek terms in medical language, physician-patient communication, philosophy of language, history of medical terms
Assessment:	Necessary for admission to the preclinical exam

FIRST YEAR - SUMMER SEMESTER (02)

ANATOMY

Lectures:	1MED1113
Contents:	Special Anatomy, Special Embryology
Course Histology:	1MED3214
Contents:	Normal Histology of the human organs
Course Macroscopy:	1MED3215 Contents: Gross anatomical preparations
Assessment:	Seminars and courses histological and macroscopical anatomy are necessary for admission to the preclinical exam

BIOCHEMISTRY

Lectures:	1MED1116
Contents:	Introduction in the field of biochemistry
Seminars:	1MED2217
Contents:	Selected topics of biochemistry based on the main lecture

CHEMISTRY

Practical training:	1MED3218	<u>credits: -</u>
Contents:	Lab practice in Inorganic and Organic Chemistry	
Assessment:	Practical training is necessary for admission to the preclinical exam	

PHYSIC

Practical training:

1MED3219

Contents:

continuation of the above mentioned experiments (see semester 01)

PHYSIOLOGY

Lectures:

1MED1120

Seminars:

1MED2221

Contents:

Cardiovascular system, blood, respiration, kidney and body fluids, gastrointestinal tract, metabolism and temperature regulation

MEDICAL PSYCHOLOGY / MEDICAL SOCIOLOGY

Lectures:

1MED1122

Seminars:

1MED2223

Contents:

Physician-patient-relationship, medical communication training psychological diagnostic procedures, theory of personality, psychoanalytic theory, behavioural medicine, coping

Assessment:

Necessary for admission to the preclinical exam

SECOND YEAR - WINTER SEMESTER (03)

ANATOMY

Lectures:

2MED1101

Contents:

Anatomy of the central nervous system

Seminars:

2MED2202

Contents:

Microscopic and macroscopic anatomy of the central nervous system

Assessment:

Course and practical training are necessary for admission to the preclinical exam

BIOCHEMISTRY

Lectures:

2MED1103

Contents:

Amino acids and proteins, enzymes, bioenergetics and intermediary metabolism including pathobiochemical aspects and nutrition, nucleic acids, expression and transmission of genetic information

Seminars:

2MED2204

Contents:

Selected topics of biochemistry based on the main lecture

Practical training:

2MED3205

Contents:

Methods for the determination of amino acids and proteins, separation of proteins, enzyme kinetics, assays of intracellular enzymes and metabolites, haemoglobin, separation and proof of nucleic acids, constituents of membranes, acid-base homeostasis, analysis of urine, nutrition experiments, glucose load-test

Assessment:

Seminar and practical training are necessary for admission to the preclinical exam

PHYSIOLOGY

:-

Lectures: **2MED1107**

Contents: Cardiovascular system, blood, respiration, kidney and body fluids, gastrointestinal tract, metabolism and temperature regulation

Seminars: **2MED2208**

Contents: Review of main subjects of Organ Physiology

Practical training: **2MED3209**

Contents: Experiments concerning the main subjects of Organ Physiology

Assessment: Practical training and seminars are necessary for admission to the preclinical exam

MEDICAL PSYCHOLOGY / MEDICAL SOCIOLOGY

:-

Lectures: **2MED1110**

Course: **2MED3211**

Contents: Physician-patient-relationship, medical communication training. psychological diagnostic procedures, theory of personality, psychoanalytic theory, behavioural medicine, coping

Assessment: Necessary for admission to the preclinical exam

SECOND YEAR - SUMMER SEMESTER (04)

ANATOMY

:-

Lectures: **2MED1112**

Seminars: **2MED2213**

Contents: Topographical Anatomy, Neuroanatomy

BIOCHEMISTRY

:-

Lectures: **2MED1114**

Contents: Topochemistry of cells, hormones and hormonal regulation of metabolism, blood cells and proteins including acid-base-balance, iron and haem metabolism and basic immunology, specific metabolism of liver including biotransformation, adipose tissues, muscle, nervous tissues, digestive tract and correlations between organs, metabolism of minerals, bones and connective tissue

Seminars: **2MED2215**

Contents: Selected topics of Biochemistry based on the main lecture

Practical training: **2MED3216**

Contents: Students perform experiments under supervision of a member of the academic staff, who introduces basic experimental techniques and the theoretical background: Methods for the determination of amino acids and proteins, separation of proteins, enzyme kinetics, assays of intracellular enzymes metabolites, haemoglobin, separation and proof of nucleic acids, constituents of membranes, acid-base homeostasis, analysis of urine, nutrition experiment, glucose load-test

Assessment: Practical training is necessary for admission to the preclinical exam

INTRODUCTION IN CLINICAL MEDICINE

Practical training:

2MED3206

Contents:

Introduction to Clinical Medicine with patients, providing first contact with elementary abnormalities in the field of Internal Medicine. Students will be given the opportunity to ask both patients and the instructor to train their clinical interviewing skills.

Assessment:

Necessary for admission to the preclinical exam

PHYSIOLOGY

Lectures:

2MED1117

Contents:

Muscle, Motor and integrative functions of the nervous system, general and specific sensory physiology, cellular, systemic and behavioural aspects of brain functions

Seminars:

2MED2218

Contents:

Comparative and basic aspects of CNS and sensory organ structure and functions, review of all subjects of Muscle-, Neuro- and Sensory Physiology

Practical training:

2MED3219

Contents:

Practical work on Muscle-, Neuro- and Sensory Physiology

Assessment:

Practical training and seminars are necessary for admission to the preclinical exam

MEDICAL PSYCHOLOGY / MEDICAL SOCIOLOGY

Lectures:

2MED1120

Seminars:

2MED2221

Course:

2MED3222

Contents:

Physician-patient-relationship, medical communication training, psychological diagnosis, theory of personality, psychoanalytical theory, behavioural medicine, coping

Assessment:

Course is necessary for admission to the preclinical exam

ASSESSMENT OF OPPORTUNITIES IN MEDICINE „Berufsfelderkundung“

Course:

2MED3223

Contents:

Assessment of professional opportunities for further specialisation

Assessment:

Course is necessary for the admission to the preclinical exam

ELECTIVE COURSE

Practical training:

2MED24

Selection from different fields of activity

THIRD YEAR - AUTUMN SEMESTER (05), SPRING SEMESTER (06)

CLINICAL CHEMISTRY AND LABORATORY DIAGNOSTICS

Lectures:	3MED1101
Contents:	Hematology and hemostasiology, hemophilia, thrombophilia, disorders of lipid metabolism, atherosclerosis, diagnosis of myocardial infarction and of heart failure, gastrointestinal disorders, molecular diagnostics, allergy testing, renal diseases and hyperuricemia, liver diseases, therapeutic drug monitoring, transplantation monitoring, rheumatological disorders, diabetes and other endocrinological disorders, emergency medicine, point-of-care testing, neurological disorders, acute-phase reaction, malignant transformation and tumor markers, genomics and proteomics, acid-base analysis, gynecology, quality control
Practical training:	3MED3202
Contents:	Modern techniques of clinical-chemical laboratory diagnosis, interpretation of laboratory data, laboratory management
<u>Assessment:</u>	<u>only autumn semester</u>

EPIDEMIOLOGY

Lectures:	3MED1103
Practical training:	3MED3204
Contents:	Basics of epidemiology
<u>Assessment:</u>	<u>only autumn semester</u>

GENERAL PATHOLOGY

Lectures:	3MED1105
Contents:	Cellular adaptation, cell injury and death, tissue responses to damage, inflammation, Immunopathology, genetical diseases, neoplasia, infective, environmental, and nutritional factors of disease, diseases of the cardio-vascular and endocrinal system, metabolic diseases, morphological Basics of diseases of the respiratory, gastrointestinal, urinary, and central nervous system.
Course:	3MED3206
Contents:	Histological course in general and Special Pathology including Neuropathology (75 microscopical slides parallel to the lectures)
<u>Assessment:</u>	<u>only autumn semester</u>

INFECTIOLOGY / MEDICAL IMMUNOLOGY (POL)

Lectures:	3MED1107
Contents:	Functional Anatomy of the lymphatic system, molecular basis of Immunology, Physiology and Pathology of the immune reaction, defence against infections, diseases of the immune system, Immunology of transplantations
Tutorium:	3MED3208
Contents:	Clinical relevant immunological tests and their purpose

Assessment: *only spring semester*

**INTRODUCTION TO CLINICAL MEDICINE
A COURSE IN THE LEARNING CLINIC**

Course: **5MED3209**

Contents:

Assessment: *only autumn semester*

INTERNAL MEDICINE

Lectures: **3MED1110**

Contents: Introduction in the techniques of physical examination. Grand rounds in Internal Medicine. A lecture series held by experienced consultants presenting the main fields in Internal Medicine.

Practical course: **3MED3211**

Contents: Bedside Teaching
Introduction to Clinical Medicine. Case presentations and discussions. Opportunity for direct contacts to patients. Discussion of clinical and laboratory results with the supervisor. Assessment of the case history, methods of physical examination (inspection, palpation, percussion, and auscultation of thorax, heart, vessels, abdomen).

Assessment: *only autumn semester*

MEDICAL MICROBIOLOGY/ VIROLOGY/ HYGIENE

Lectures: **3MED1112**

Contents: All aspects of Clinical Microbiology including Virology, Bacteriology, Mycology, Parasitology, Immunology of infectious diseases, diagnostic procedures and infectious disease management.
All aspects of Hygiene Management

Practical training: **3MED3213**

Contents: Medical Microbiology Conventional and molecular methods of isolation and identification of pathogens, detection of antibodies against pathogens employing different assay systems, methods of Assessment of the immune system, susceptibility testing of antimicrobial agents.

Assessment: *only spring semester*

PHARMACOLOGY / TOXICOLOGY

Lectures: **3MED1114**

Contents: General pharmacodynamic and -kinetic, manipulation of the sympathetic, parasympathetic, motoric, sensitive and central nervous system, antiarrhythmics, positive inotropic substances, bronchodilators, relaxants of the vascular muscles, diuretics and antidiuretics, volume- and electrolyte substitution, manipulation of the haematopoietic system and coagulation, tissue hormones and their antagonists, manipulation of gastrointestinal functions and the immune system, agonists and antagonists at opioid receptors, cyclooxygenase inhibitors and antirheumatics, manipulation of the uric ac-

id, lipid and bone metabolism, proteo- and steroid hormones, antibiotics, cytostatics, toxic substances.

Course:

3MED3215

Contents:

General and Systemic Pharmacology, consolidation of knowledge

Assessment:

only spring semester

BASICS OF RADIOLOGY

Lectures:

3MED3216

Contents:

Physical Basics and qualities of X-rays, methods of diagnostic imaging, procedures of interventional radiology, biological effects of radiation, basis Basics of modern radiotherapy, methods of protection from irradiation, Basics of nuclear medicine.

Physics of radiation beams, biological effects of radiation, technical equipments of diagnostic imaging, radiotherapy and nuclear medicine.

Course:

3MED3217

Assessment:

only autumn semester

HISTORY OF MEDICINE/ETHICS (QSB)

Lectures:

5MED1118

Contents:

History of ideas and concepts of medicine, social developments, professionalization, alternative therapies

Assessment:

only spring semester

Course:

5MED3219

Assessment:

Interdisciplinary course in Basics of History of Medicine or Ethics
available in autumn semester

FOURTH YEAR – AUTUMN SEMESTER (07), SPRING SEMESTER (08)

ANAESTHESIOLOGY

Lectures: **4MED1120**
Contents: Basics of anaesthetic techniques
Assessment: only autumn semester

Practical training: **4MED3221**
Contents: Basics of anaesthetic techniques, Bedside teaching
Assessment: available in autumn or spring semester

CLINICAL PHARMACOLOGY

Lectures: **4MED1122**
Contents: Basics of Clinical Pharmacology
Assessment: only spring semester

Course: **4MED3223**
Contents: Drug and haemostasis, drug therapy of anaemias and hyperlipaemias, drug treatment of rheumatoid diseases and gout, diuretic drugs, therapy of fluid and electrolyte disorders. Drug treatment of disorders of the respiratory system (incl. bronchial asthma), chemotherapy of bacterial, viral, protozoal, helminthic infections and neoplastic diseases, pharmacotherapy of gastrointestinal disorders and endocrinopathies, drug therapy of diseases of the central nervous system (incl. addiction, dependence and abuse), pain and analgesics
Assessment: available in autumn or spring semester

CLINICAL RADIOLOGY

Lectures: **4MED1124**
Contents: Basics of Clinical Radiology
Assessment: only spring semester

Course: **4MED3225**
Contents: Demonstration of typical clinical cases of all parts of Diagnostic Radiology. Special problems of Clinical Radiotherapy
Assessment: available in autumn or spring semester

DERMATOLOGY, VENEROLOGY

Lectures: **4MED1126**
Contents: Overview of Dermatology and systemic introduction in the field, presentation and histology of the main diseases in Dermatology, presentation of Dermatology and its subspecialties
Assessment: only spring semester

Practical training: **4MED3227**
Contents: Diagnosis and therapy of dermatological diseases referring to macromorphological and micromorphological examinations, demonstration of patients, visits at out-patient clinic and normal wards

Assessment: available in autumn or spring semester

EMERGENCY MEDICINE / FIRST AID (POL II)

Lectures: **4MED1128**

Tutorial: **4MED3229**

Practical training: **4MED3230**

Contents: Vital functions and death, rescue and transport of injured persons, acute disturbances of respiration, cardio-vascular system, and central nervous system, acute disturbances of glucose metabolism. Reanimation, vascular access, intubation, etc.

Assessment: the whole subject only autumn semester

ENVIRONMENTAL MEDICINE

Lectures: **4MED1131**

Assessment: only autumn semester

Course: **4MED3232**

Contents: Basics of environmental medicine

Assessment: available in autumn or spring semester

GENERAL MEDICINE

Lectures: **4MED1133**

Contents: Organisation of office practice, Health Education, spectrum of diseases in General Medicine, Family Medicine, case presentations in Geriatrics, multimorbidity, terminal care, prevention of cancer and after-care

Assessment: only spring semester

Practical training: **4MED3234**

Contents: Practical knowledge about daily demands in the General Medicine office

Assessment: available in autumn or spring semester

GYNAECOLOGY AND OBSTETRIC

Lectures: **4MED1135**

Contents: All relevant topics of Gynaecology (Gynaecological Endocrinology, the female hormonal cycle, hypothalamic-hypophysial axis, disturbances in ovarian function, puberty, menopause, climacteric disturbances. Fertility control: contraceptives, infertility, artificial reproductive technology. Infections: discharge, vulvitis, vaginitis, ascending genital infections)

Normal and high risk pregnancy, prenatal care. Normal and risk delivery, birth mechanism, puerperium, premature birth, gemini, abnormal presentation of the foetus, obstetrics operations: forceps, vacuum extractor, Caesarean section, gynaecological Physiology and Pathology, congenital malformations, examination techniques

Assessment: only autumn semester

Practical training: **4MED3236** (Gynaecology I + II)
Contents: Practical work at the delivery room, Bedside teaching, Practical work at the gynaecological outpatient department, case presentations, participation in ambulatory and ward care, small group teaching in subspecialties
Assessment: available in autumn or spring semester

HEALTH ECONOMICS (QSB)

Practical Course: **4MED3237**
Contents: Interdisciplinary course in Basics of Health Economics
Assessment: available in autumn or spring semester

HUMAN GENETICS as part of Paediatrics

Lectures: **4MED1138**
Assessment: only spring semester

Course: **4MED3237**
Contents: Biochemical basis, mutations of the human genome, human chromosomes, chromosome aberrations, formal genetics (Mendel), multifactorial (polygene) inheritance, twins in genetical research, population genetics, metabolic disturbances, genetic diagnostics.
Assessment: available in autumn or spring semester

IMMUNOLOGY, IMMUNOLOGY (QSB)

Practical Course: **4MED3239**
Contents: Interdisciplinary course in Basics of Immunology
Assessment: available in autumn or spring semester

INTERNAL MEDICINE

Lectures: **4MED1141**
(Cardiology (14), Pulmology (14), Gastroenterology (14), Endocrinology (14), Angiology (4))
Contents: Grand rounds in Internal Medicine. A lecture series held by experienced consultants who present the main fields in Internal Medicine: Cardiology, Pulmology, Gastroenterology, and Endocrinology
Assessment: only autumn semester

Practical training: **4MED3242**
(Cardiology, Pulmology, Gastroenterology, Endocrinology, 10 h each)
Contents: Cardiology: Management of stable and unstable angina pectoris and myocardial infarction, chronic and acute heart failure, arrhythmias, valvular heart disease, Bedside teaching, visit at the normal wards, ICU, heart catheter lab, and diagnostic unit.
Pulmology: Bedside teaching on basics of pulmology, visit at the out-patient clinic and normal wards.

Gastroenterology: Bedside teaching on basics of gastroenterology, Basics of endoscopy, visit at the out-patient clinic and normal wards.

Endocrinology: Bedside teaching on basics of endocrinology, e-learning, case presentations, visit at the out-patient clinic and normal wards.

Assessment:

available in autumn or spring semester

PAEDIATRICS

Lectures:

4MED1143

Contents:

Neonatology, nutrition, Gastroenterology, infectious diseases, respiratory infections, growth, development, Endocrinology, inborn endocrinological disorders, perinatal infections, Social Paediatrics, infant mortality, Haematology, Haemostaseology, Neuropaediatrics, Cardiology, Cardiac Emergency, metabolic disorders, Allergology, Immunology., antimicrobial chemotherapy, Oncology, child abuse, intoxications/poisoning, early human development and developmental disabilities in infancy,

Assessment:

only spring semester

Practical training:

4MED3244

Contents:

Small group bed side teaching, guided attendance in the outpatient department or neonatal intensive care
Paediatrics I: Management of the wards.
Paediatrics II: From hospital admission to clinical follow up after discharge
Paediatrics III: Special fields of Paediatrics (Oncology, Haematology, ICU, Cardiology, Psychiatry, Haemodialysis Paediatrics IV: Neonatology and Human Genetics

Assessment:

available in autumn or spring semester

Prevention

Course:

4MED3245

Contents:

Interdisciplinary course in Basics of Prevention

Assessment:

available in autumn or spring semester

SPECIAL PATHOLOGY/ CLINICAL-PATHOLOGICAL CONFERENCE

Lectures:

4MED1146

Assessment:

only spring semester

Course:

4MED3247

Contents:

Demonstration and discussion of autopsy cases with clinicopathological correlation, demonstration of instructive and relevant biopsy and surgical specimens from the main histological laboratory
Clinical Pathology of heart and vessels, lung and mediastinum, female and male genital organs, urinary tract, breast, pregnancy, gastrointestinal tract,

liver, pancreas, haematopoietic and lymphatic system, endocrine organs, tissues and bones, articulations, skin

Assessment:

available in autumn or spring semester

TRAUMATOLOGY as part of Surgery I

Lectures:

4MED1148

Contents:

General Traumatology, Out-patient Surgery,

Assessment:

only autumn semester

Practical training:

4MED3249

Contents:

Practical training of simple surgical procedures, Bedside teaching

Assessment:

available in autumn or spring semester

UROLOGY

Lectures:

4MED1150

Contents:

Selected questions of Urology

Assessment:

only spring semester

Practical training:

4MED3251

Contents:

Bedside teaching in small groups, physical examination, main urological procedures, interpretation of laboratory data and imaging techniques

Assessment:

available in autumn or spring semester

VISCERAL SURGERY

Lectures:

4MED1152

Contents:

(Visceral Surgery I + II

General Surgery, Out-patient Surgery, Special (visceral + thoracical) Surgery

Assessment:

only autumn semester

Practical training:

4MED3253

Contents:

Practical training of simple surgical procedures, Bedside teaching

Assessment:

available in autumn or spring semester

FIFTH YEAR - AUTUMN SEMESTER (09), SPRING SEMESTER (10)

CARDIAC SURGERY

Lectures: **5MED1154**
Contents: Basics of aortocoronary bypass surgery, valve replacement and reconstruction, HTX/ LTX, surgery of congenital diseases, assist devices, minimal-invasive surgery
Assessment: only autumn semester

Practical Training: **5MED3255**
Contents: Bedside Teaching, see above mentioned topics
Assessment: available in autumn or spring semester

CLINICAL PHARMACOLOGY (QSB)

Lectures: **5MED1156**
Contents: drug therapies in different diseases of internal medicine, see above mentioned topics
Assessment: only autumn semester

Practical Training: **5MED3257**
Interdisciplinary course in Basics of Clinical Pharmacology
Assessment: available in autumn or spring semester

ELECTIVE COURSE

Practical Course: **5 MED3258**
Contents: Selection of various medical topics
Assessment: available in autumn or spring semester

ENVIRONMENTAL MEDICINE

Course: **5MED3259**
Contents: Basics of environmental medicine
Assessment: available in autumn or spring semester

FORENSIC MEDICINE

Lectures: **5MED1160**
Contents: Diagnosis of death, death certificate, time of death, identification, sudden natural death, death by blunt force, sharp force and fire-arms, asphyxia, drowning, fire injury, cold injury, electrical injury, child abuse, infanticide, drug abuse, intoxication, traces, Forensic Thanatology, Psychopathology, traffic accidents, medical jurisprudence
Assessment: only autumn semester

Practical Training: **5MED3261**
Contents: mentioned above
Assessment: available in autumn or spring semester

GERIATRICS (POL III, QSB)

Lectures (POL III): **5MED1162**
Assessment: only spring semester

Tutorial (POL III): **5MED3263**
Assessment: only spring semester

Course (QSB): **5MED3264**
Contents: Basics of geriatrics
Assessment: available in autumn or spring semester

HEALTH ECONOMICS (QSB)

Lectures: **5MED1165**
Contents: Basics of health economics
Assessment: only autumn semester

Course: **5MED3266**
Contents: Basics of health economics
Assessment: available in autumn or spring semester

INFECTIOLOGY/IMMUNOLOGY (QSB)

Lectures: **5MED1167**
Contents: Interdisciplinary course in Basics of Immunology
Assessment: only spring semester

Course: **5MED3268**
Contents: Interdisciplinary course in Basics of Immunology
Assessment: available in autumn or spring semester

INTERNAL MEDICINE

Lectures: **5MED1169**
(Gerontology, Rheumatology, Nephrology, Haematology, Intensive Care)
Contents: Grand rounds in Internal Medicine. A lecture series held by experienced consultants who present the following fields in Internal Medicine: Gerontology, Rheumatology, Nephrology, Intensive Care
Assessment: only spring semester

Practical Training: **5MED3270**
(Geriatrics, Rheumatology, Haematology, Nephrology and Intensive Care)
Contents: Rheumatology: Bedside teaching on basics of rheumatology, case presentations, visit at the out-patient clinic and normal wards.
Haematology: Bedside teaching on basics of haematology, case presentations, visit at the out-patient clinic and normal wards.
Geriatrics: Bedside teaching on basics of geriatrics, visit at the normal wards.
Assessment: available in autumn or spring semester

NEURO SURGERY as part of Surgery II

Lectures: **5MED1171**
Contents: Traumatic diseases of the CNS, tumours of the CNS including pituitary adenomas, hydrocephalus, vascular malformations including SAH, degenerative disorders of the spine, Surgery of peripheral nerves

Assessment: only autumn semester

Practical Training: **5MED3272**
Contents: Indications for neurosurgical operations
Assessment: available in autumn or spring semester

NEUROLOGY

Lectures: **5MED1173**
Contents: Diagnosis and treatment of neurologic disorders with presentation of patients

Assessment: only autumn semester

Practical Training: **5MED3274** (Neurology I and II)
Contents: Neurologic bedside teaching with examination of patients in small groups and obtaining of case history, teaching of neurologic syndromes

Assessment: available in autumn or spring semester

OCCUPATIONAL MEDICINE (QSB)

Lectures: **5MED1175**
Contents: Stress-strain-concept, dangerous chemical substances, physical effects on people, occupational diseases, problems of occupational injuries. Problems of Occupational Medicine in the hospital, Clinical Occupational Medicine, psychophysiological methods in Occupational Medicine, Occupational Toxicology, Ergonomy, occupational accidents, Preventive Occupational Medicine, cooperation with Occupational Health Care Units, dangerous substances at workplace and in environment (analysis)

Assessment: only autumn semester

Course: **5MED3276**
Assessment: available in autumn or spring semester

OPHTHALMOLOGY

Lectures: **5MED1177**
Contents: Special and scientific problems in Ophthalmology
Assessment: only spring semester

Practical Training: **5MED3278**
Contents: Clinical Ophthalmology, systematic review of Ophthalmology and repetition of examination techniques
Assessment: available in autumn or spring semester

ORAL AND MAXILLOFACIAL SURGERY as part of Surgery II

Lectures: **5MED1179**
Contents: Main diseases of teeth, mouth and jaw with relevance for the physician
Assessment: only autumn semester

Practical Training: **5MED3280**
Contents: mentioned above
Assessment: Practical training is necessary for admission to the second state exam
Assessment: available in autumn or spring semester

ORTHOPAEDICS

Lectures: **5MED1181**
Contents: Different aspects of Orthopaedics with patient demonstration, sport injuries and late damages
Assessment: only autumn semester

Practical Training: **5MED3282** (Orthopaedics I and II)
Contents: Bedside demonstration of in-patients, introduction to out-patients department, additional lessons in the Department of Physical Therapy as well as in the Workshop of Technical Orthopaedics
Assessment: available in autumn or spring semester

OTORHINOLARYNGOLOGY

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Lectures: **5MED1183**
Contents: Main ENT-diseases including case presentations, diagnosis and therapy, examination techniques. Diagnosis and treatment of tumours, foreign bodies and trauma in the ENT region, diagnosis and treatment of conductive and sensorineural hearing loss, otosclerosis, Mb. Ménière, epistaxis, nasal allergy, nasal polyposis.
Assessment: only spring semester

Practical Training: **5MED3284**
Contents: Main examination techniques of ear, nose and throat. Clinical aspects of ENT-diseases with case presentations, examination techniques (mutual examination)
Assessment: available in autumn or spring semester

PAEDIATRIC SURGERY

Lectures: **5MED1185**
Contents: Common and specialised Paediatric Surgery: Neonatal Surgery, Abdominal Surgery, Paediatric Neurosurgery (hydrocephalus, myelomeningocele), treatment of solid tumours in childhood, Paediatric Urology, Plastic Surgery and surgical treatment of thermal injury, general management of major injuries (cerebral, thoracal, abdominal trauma, polytrauma), Paediatric Trauma Surgery and Orthopaedics. Acute abdomen, Ambulatory and Day Surgery, patient

handling, Traumatology (elbow and ankle joint injuries, acute head injuries), Neurosurgery (internal hydrocephalus, spina bifida, craniostenosis), Laser and Cryosurgery

Assessment: only autumn semester

Practical training:

5MED3286

Contents: bedside teaching

Assessment: available in autumn or spring semester

PAIN MEDICINE

Lectures:

5MED1187

Assessment: only spring semester

Course:

5MED3288

Contents: Basics of pain medicine

Assessment: available in autumn or spring semester

PALLIATIVE MEDICINE (QSB)

Lectures:

5MED1189

Assessment:

Course:

5MED3290

Interdisciplinary course in Basics of Palliative Medicine

Assessment: available in autumn or spring semester

PREVENTION (QSB)

Lectures:

5MED1191

Assessment: only spring semester

Course:

5MED3292

Interdisciplinary course in Basics of Prevention

Assessment: available in autumn or spring semester

PSYCHIATRY

Lectures:

5MED1193

Contents: Suicide, crisis management, forensic psychiatry, anxiety disorders, family psychiatry, psychiatry in general practice, child and adolescent psychiatry. Affective disorders, Psychotherapy, drug and alcohol abuse, personality disorders, psychosomatic disorders, schizophrenia, Psychopharmacology

Assessment: only autumn semester

Practical Training:

5MED3294

Contents: Management of patients with affective disorders, Psychotherapy, personality disorders, psychosomatic disorders, suicide and crisis management.

Assessment: Practical training is necessary for admission to the second state exam

Assessment: *available in autumn or spring semester*

PSYCHOSOMATIC MEDICINE

Lectures: **5MED1195**

Contents: Introduction to the theory of the aetiology, symptoms and pathogenesis of psychogenetic diseases, introduction to the main methods of Psychotherapy

Assessment: *only autumn semester*

Practical Training: **5MED3296**

Contents: Practical exercises in biographic anamnesis of psychosomatic patients, including reflections to aetiology, pathogenesis and therapy of psychosomatic disorders

Assessment: *available in autumn or spring semester*

REHABILITATION (QSB)

Lectures: **5MED1197**

Contents: Basics of rehabilitation programs

Assessment: *only spring semester*

Course: **5MED3298**

Interdisciplinary course in Basics of Rehabilitation

Assessment: *available in autumn or spring semester*

SPECIAL PATHOLOGY/ CLINICAL-PATHOLOGICAL CONFERENCE

Course: **4MED3299**

Contents: Demonstration and discussion of autopsy cases with clinicopathological correlation, demonstration of instructive and relevant biopsy and surgical specimens from the main histological laboratory
Clinical Pathology of heart and vessels, lung and mediastinum, female and male genital organs, urinary tract, breast, pregnancy, gastrointestinal tract, liver, pancreas, haematopoietic and lymphatic system, endocrine organs, tissues and bones, articulations, skin

Assessment: *available in autumn or spring semester*

**SIXTH YEAR - PRACTICAL YEAR
(SEMESTER 11 and 12)**

After the successfully completed clinical part of the study students have to attend the Practical Year at University Hospitals or affiliated Academic Teaching Hospitals (*Akademische Lehrkrankenhäuser*). The education is divided into 3 parts per 16 weeks. Surgery and Internal Medicine are mandatory parts of the practical year. The third subject can be chosen individually. Students work at the hospital under the guidance of a full-licensed physician. Participation at clinical meetings, discussions and conferences form another part of the training. Along with the duty on the ward goes a theoretical training. The Practical Year ends with the second part of the State Examination.

SURGERY, INTERNAL MEDICINE OR AN OTHER CLINICAL SUBJECT : 20

Practical Course: **6MED3300** 640 h = 3 x 16 weeks

Assessment: *only possible for foreign students when academic subject were acknowledged by:*
Bezirksregierung Düsseldorf
Dez. 24
Landesprüfungsamt für Medizin, Psychotherapie und Pharmazie
Fischerstr. 10
40477 Düsseldorf
Tel. 0211 4750

COMPARISON OF GRADING SCALES

German Grading Scale	Definition	ECTS Grading scale	Definition
1	Excellent: Outstanding performance with only minor errors	A	Excellent: Outstanding performance with only minor errors
2	Good: Above the average standard but some errors	B	Very good: Above the average standard but with some minor errors
3	Satisfactory: Generally sound work with a number of notable errors	C	Good: Generally sound work with a number of notable errors
4	Sufficient: Performance meets the minimum criteria	D	Satisfactory: Fair but with significant shortcomings
-		E	Sufficient: Performance meets the minimum criteria
5	Fail: Some more work required before the credit can be awarded	FX	Fail: Some more work required before the credit can be awarded
6	Fail: Considerable further work is required	F	Fail: Considerable further work is required