

Swiss Catalogue of Learning Objectives for Undergraduate Medical Training

Under a mandate of the Joint Commission of the Swiss Medical Schools



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Working Group under a Mandate of the Joint Commission of the Swiss Medical Schools

Approved by the Joint Commission of the Swiss Medical Schools (SMIFK/CIMS), 18th June 2008

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Working Group under a Mandate of the Joint Commission of the Swiss Medical Schools

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Preface

In the year 1997, the Federal Counselor Ruth Dreifuss appointed Prof Thomas Fleiner to head a Committee in charge of elaborating a new Federal Act on University Medical Professions (medicine, dental medicine, pharmacy and veterinary medicine), replacing that of 1877. Several members of the Joint Commission of the Swiss Medical Schools (SMIFK/CIMS), a body reuniting representatives of all Swiss Faculties of medicine and of the federal authorities involved in medical teaching and training, participated in this federal committee, in particular Prof Ralph Bloch, Prof Vinzenz Im Hof, Prof Jean-Pierre Wauters, Dr René Salzberg, Dr Ueli Grüninger and myself. As the old law and its ordinances, which prescribed in details the examinations and their contents, had hindered new pedagogical developments, we strongly pleaded for a new law that would give the autonomy to each medical school in the organization of its medical curriculum and in the continuous adaptation of it by taking advantage of the progress in the field of medical education. To counterbalance this autonomy, the committee proposed that the law and its ordinance should provide the federal administration in charge of public health with three powerful tools for controlling the quality of undergraduate medical education, namely:

1. Compulsory accreditation of the medical schools
2. Control of the final product by a comprehensive federal examination which would examine whether the candidates master the knowledge, skills and attitudes as well as the social competencies and behaviors required for practicing the chosen medical profession, thereby enabling them to enter any of the postgraduate medical training programs.
3. Enforcement of a common Swiss catalogue of learning objectives listing knowledge, professional attitudes and clinical skills for each of the five medical professions, thereby contributing to the harmonization of the curricula of the five medical schools.

This was taken into account by the federal committee and eventually resulted in the Federal Act of 23 June 2006 on University Medical Professions (including also chiropractic). The law was enacted in September 2007, giving the medical schools the desired autonomy at the undergraduate level.

Made aware of what was going on by its representatives in the federal Committee, the SMIFK/CIMS decided in 2000 to establish a Swiss Catalogue of Learning Objectives for Undergraduate Medical Training (SCLO), which was adapted from the Dutch Blueprint and published in 2001. In addition, in 2003, the SMIFK/CIMS, in collaboration with the Center of Accreditation and Quality Assurance of the Swiss Universities (OAQ) set up the criteria for accreditation of the Swiss medical schools on the basis of the criteria of the World Federation for Medical Education. Also, in 2004, it was decided to proceed with a complete revision of the SCLO, which led to the present version, approved by the SMIFK/CIMS in 2008 and which will be used as a basis for the preparation of the first new federal examination in the summer of 2011.

Preface

I would like to express my profound gratitude to all the members of the working group of the SCLO for their dedication to the task during all these years. My special thanks go to Prof Hans Bürgi, the chairman of the working group, for his very efficient leadership of the group and for his diplomatic skills and patience when he had to discuss the modifications of the new version of the SCLO with the various panels of experts of the medical specialties. Special thanks also to Dr Bernhard Rindlisbacher, the executive secretary, for his crucial work in the preparation of the working sessions of the group and the reformulation of the general objectives of the catalogue. I thank also Dr Jean-Paul Humair, who accepted to replace me in the working group as of September 2007, despite his many clinical and teaching responsibilities in Geneva.

I would like to conclude with a special thought for Prof Vinzenz Im Hof, a member of the group, who died unexpectedly on the 13th of September 2006. In addition to his influence in the federal Committee on the new law, he has been a constant inspiration to those of us who participated in the major changes in the medical curriculum that have taken place in all Swiss medical schools since 1995, including the implementation of the Bologna process.

Professor Charles Bader, MD, chairman of the Joint Commission of the Swiss Medical Schools.

Geneva, June 2008.



Chapter 1

Introduction

1. Introduction

1.1 The first edition of The Catalogue

The need to establish a Swiss Catalogue of Learning Objectives for Undergraduate Medical Training (henceforth “The Catalogue”) had arisen in the late nineteen-nineties in the course of the procedures to obtain international accreditation and mutual recognition of diplomas. Up until that date, there were only a few paragraphs of a federal law dating back to 1887 (since then amended only twice) to guide Swiss medical schools on the choice of learning objectives. In the year 2000 the Joint Commission of the Swiss Medical Schools (SMIFK/CIMS) therefore entrusted a working group with the task of creating a catalogue of study objectives. Taking the Dutch “Blueprint 1994, the Training of Doctors” as starting point, this working group developed The Catalogue and in November 2001 presented it in electronic form to the SMIFK/CIMS, which decided to:

- introduce The Catalogue for a trial period of two years.
- issue a printed version
- make it available on the internet
- engage on a revision after two years

After being ratified by all five Swiss medical faculties, the SMIFK/CIMS in March 2002 declared The Catalogue as defining the contents of the final federal examination starting with the academic year 2003/04. To optimize its availability and to allow a flexible use e.g. by making possible searches for groups of objectives The Catalogue was published in a database format and with free access in the internet (www.smifk.ch). It was also made available in a PDF-format and in a print version.

1.2 The second edition of The Catalogue, its legal basis, and the definition of goals of undergraduate training

The new *Federal Act of 23 June 2006 on University Medical Professions*, which has become effective in September 2007, defines the goals of undergraduate, postgraduate and continuing education for university medical professions (articles 4, 6, 7, 8). Starting in the year 2011, a new Federal Exam at the end of the undergraduate period will ascertain that the candidates have reached the goals and objectives and are prepared to enter any of the approved postgraduate specialty training programs (article 14). An *Ordinance on the Federal Examinations for University Medical Professions* is in preparation. In addition to settling numerous details of the exam, the ordinance refers to The Catalogue as defining the scope of the examination.

The new law and ordinance will be important, since they confer a solid legal foundation to The Catalogue and define the level to be reached by the undergraduate training: The Federal Exam establishes that **the graduate fulfils the conditions for entering any of the requested postgraduate programs**. This implies indirectly that additional training under supervision must follow the Diploma, before medicine may be practiced independently. The Catalogue will also be an essential prerequisite for the accreditation of the curricula of the five Swiss medical faculties.

1.3 The reasons for a second edition of The Catalogue

In the four years of its use The Catalogue had well served its purpose to help students, teachers, curriculum planners and examiners. However, as one may expect, experience with the application of The Catalogue also uncovered weak points and provoked a number of criticisms (see section 1.4). This had been anticipated, and SMIFK/CIMS asked the Working Group in March 2002 to remain in charge to prepare a new edition in due time, taking into account the experience gained by the use of the first edition. In November 2003 SMIFK/CIMS approved of the Working Group's plan for the revision of The Catalogue. To this purpose the Working Group held more than 30 formal meetings and numerous smaller meetings between 2004 and 2008.

1.4 Changes in the second edition

As for the first edition The Working Group was composed of a representative from each Swiss medical faculty, one representative from the Swiss Society of General Medicine, two representatives of the Federal Office of Public Health and one representative of the Institute of Medical Education.

As outlined below, The Working Group reviewed every chapter of the first edition of The Catalogue in order to address the criticisms that had been voiced.

1.4.1. Chapter 3 (“Profile of the Doctor”) and chapter 4 (“General Objectives”)

Criticisms arose from two sources, namely on one hand from specialists in medical ethics and on the other hand from politicians and the Federal Office of Public Health, which at that time was preparing new legislation (see above). They criticized that The Catalogue put too much weight on knowledge and skills and too little on social competence, attitudes, and ethical aspects. These criticisms were in large part due to the fact that users of The Catalogue tended to skip chapters 3 and 4, and to jump directly to the “Discipline Related Objectives” presented in tabular form. This was however furthered by the fact that the chapters 3 and 4 only made up 8 pages in total, whereas the “Discipline Related Objectives” constituted with 105 pages almost 70% of the whole Catalogue.

The Working Group took the criticisms seriously, and it decided to re-write the two chapters from scratch, defining the objectives in slightly more detailed and in operationalized form and combining them into one chapter, the new Chapter 3: “General Objectives”. Furthermore, SMIFK/CIMS offered two seats in the Working Group to the Swiss Federal Office of Public Health, which commissioned the Institute for Medical Education of the University of Bern to provide a text for this new chapter.

1. Introduction

This text relies for a substantial part on the “CanMEDS 2005 Framework”¹ and on the British “Curriculum for the foundation years in postgraduate education and training”², using also other similar frameworks for Outcome-Based Medical Education such as the “ACGME Outcome Project”³, the „Global Minimum Essential Requirements”⁴ (GME) of IIME and the “Project Professionalism”⁵ of ABIM. Ethical issues were included after several meetings and discussions with the “Specialized Panel on Medical Ethics” of the Swiss Academy of Medical Sciences.

1.4.2. Chapter 5 (“Problems as Starting Points for Training”)

The Working Group reviewed each of these objectives, but made only a few minor changes to this chapter. This is now **Chapter 4**.

1.4.3. Chapter 6 (“Explanation of Levels and Letters of Discipline-Related Objectives”)

The definitions of the levels were revised, especially the levels of the skills, and they were transferred to the new **Chapter 2**: “How to use this Catalogue”

1.4.4. Chapter 7 (“Discipline- Related Objectives”)

The listing of clinical objectives according to medical disciplines was criticized for favoring sectorial over integrated clinical reasoning. The Working Group conceded that grouping of objectives according to bodily regions or according to signs and symptoms might foster integrated thinking. However, university hospitals are still organized according to traditional disciplines, and the Working Group reasoned that a different classification would render the organization of teaching more difficult; the classification according to traditional disciplines was therefore left as it was. These lists of “Clinical Pictures” and “Further Knowledge” now constitute the new **Chapter 6**.

Another criticism was that the Discipline- Related Objectives were too numerous.

Clinical Pictures

All the Clinical Pictures were reviewed with the aim to reduce their number. The Working Group achieved this in the following way:

- It submitted each Clinical Picture to six experienced physicians, two general practitioners (representing the faculty of the sections for general practice of the 5 Medical Faculties), two general surgeons and two general internists (heads of medium-sized teaching hospitals). These six physicians were asked to rate each Clinical Picture on a scale of 1 to 4 as to prevalence (or incidence) and criticality, high criticality meaning that a disease may be rare, but knowledge about it could be life saving.
- The average score of the six raters was calculated for every Clinical Picture.
- Clinical Pictures with a low ranking of both prevalence and criticality were deleted if a Specialty Panel of five university specialists in the corresponding discipline agreed (see section 1.7., list of specialty panel heads).

1 Frank, JR. (Ed). 2005. The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care. Ottawa: The Royal College of Physicians and Surgeons of Canada. http://rcpsc.medical.org/canmeds/CanMEDS2005/CanMEDS2005_e.pdf

2 The Foundation Programme Committee of the Academy of Medical Royal Colleges, in co-operation with Modernising Medical Careers in the Departments of Health. Curriculum for the foundation years in postgraduate education and training. Department of Health, 2004:9

3 Accreditation Council for Graduate Medical Education, <http://www.acgme.org/Outcome/>

4 Institute for International Medical Education, <http://www.iime.org/gmer.htm>

5 American Board of Internal Medicine, <https://www.abim.org/pdf/publications/professionalism.pdf>

1. Introduction

- If the panel disagreed with the deletion, the objective was left in place in most instances

In few instances new Clinical Pictures were added and obsolete nomenclature was corrected.

As a result of this approach the number of Clinical Pictures decreased from 1540 to 1330 (including quite a few Clinical Pictures mentioned twice or more times, in different disciplines, as before). Without these duplicates the total number of Clinical Pictures is now 1220.

Skills

All Skills were reviewed, regrouped, standardized and amended and then submitted to the responsible persons for teaching of skills in the five faculties. The Working Group made in particular the following changes:

- All skills which have to be actively performed by the student, thus corresponding to the earlier levels 3 and 4, e.g. history taking, physical examination, were grouped together in one single list and put into a new separate **Chapter 5: "General Skills"**. Consequently only two (instead of four) performance levels were defined.
- Skills with the former level 1 or 2 ("only theory" / "seen or have had demonstrated"), e.g. gastro- duodenoscopy, were relocated under "Further Knowledge", since they implied no "hands-on" experience by the student.

These measures reduced the number of skills from 600 to 350 (all levels) or from 280 to 170 (former levels 3 and 4).

Further Knowledge

Radiology and Nuclear Medicine: The Working Group felt that the learning objectives covering general aspects of radiology, such as principles of imaging techniques, radio-protection, radiotherapy, should remain in The Catalogue, but that specific radiological pictures could be deleted, because they were part of the "Clinical Pictures", analogous to data from clinical chemistry, pathology and microbiology.

Pharmacotherapy: The first edition of The Catalogue listed as objectives knowledge of individual drugs, as well as of principles of pharmacotherapy (pharmacokinetics etc.) Analogous to radiology, the Working Group considered individual drugs as being part of clinical pictures. The new version only contains general principles of pharmacotherapy.

The number of items under "Further Knowledge" was so reduced from 590 in the first edition (even with the addition of the former skills on level 1 and 2) to 460 in total and 430 without duplicates.

Reduction of number of items

The total number of items under Skills, Clinical Pictures and Further Knowledge was reduced from 2730 to 1960 (including duplicates), a reduction by 30%. Without duplicates the total number of "General Skills" (170), "Clinical Pictures" (1220) and "Further Knowledge" (430) now adds up to 1820.

Alphabetical index

The print version of the first edition of the catalogue contained an Alphabetical Index. The Working Group decided to do without it, since The Catalogue will be used in its PDF version or as a database, which allows for easy searching of any terms.

1.5 Outlook

The chairman of the Working Group feels that the preparation of the second edition was more time consuming than that of the first edition. The requested reduction of the number of objectives, especially the “Clinical Pictures”, was particularly cumbersome, since criteria for deletion of objectives had to be defined. The rating of criticality and incidence finally was chosen as the most useful method. But despite this rating, some specialists objected strongly to any deletion in their specialty. Many specialists erroneously placed postgraduate objectives at the undergraduate level, ignoring that many objectives can and should be taught during postgraduate training, which in most specialties lasts almost as long or in some specialties even much longer than undergraduate training.

Even with a reduced load of objectives in the present catalogue, the knowledge and skills required from students remains enormous. It is the responsibility of the teachers and faculties that goals are set high, but not unrealistically so. Teachers in medicine should keep in mind that even such simple procedures as palpating the pedal pulses or eliciting an ankle reflex cannot be mastered within a few minutes.

1.6 Composition of the Working Group

During the work on the second edition of The Catalogue several members of the Working Group were exchanged. Two representatives from the Federal Office of Public Health joined the group.

Chairman	H. Bürgi (Solothurn)	(2002 - 08)
Executive Secretary and representative of the Institute of Medical Education	B. Rindlisbacher	(2004 -08)
Members and Institutions represented		
University of Bern, Institute of Medical Education	R. Bloch	(2002 – 04)
	P. Schläppi	(2003 – 04)
University of Geneva Faculty of Medicine	Ch. Bader	(2002 – 07)
	J.P. Humair	(2007 – 08)
University of Lausanne Faculty of Medicine	F. Bosman	(2002 – 08)
University of Bern Faculty of Medicine	V. Im Hof⁶	(2002 – 06)
	A. E. Stuck	(2007 – 08)
University of Basel Faculty of Medicine	H. Kaiser	(2002 – 08)
University of Zurich Faculty of Medicine	G. A. Spinass	(2002 – 08)
	W. Gerke	(2003 – 08)
Swiss Society of General Medicine	D. Lefebvre (Versoix)	(2003 – 08)
Swiss Federal Office of Public Health	B. Sottas	(2004 – 08)
	C. Gasser	(2004 – 08)

⁶ deceased

1.7 Heads of Specialty Panels for Discipline Related Objectives

The Specialty Panels were composed of five specialists in the corresponding discipline (one specialist from each of the five Swiss medical faculties), plus in some instances a specialist in private practice. The list of panelists was submitted for approval to the five deans, in order to assure that the panelists rightfully represented the given discipline in their faculty.

Dermatology: Prof. Renato Panizzon, MD, Lausanne

Ethics: Prof. Michel Vallotton, MD, Geneva, Prof. Lazare Benaroyo, MD, Lausanne

Forensic Medicine: Prof. Ulrich Zollinger, MD, Bern

General Practice: Danièle Lefebvre, MD, Versoix

Geriatrics (incorporated into Internal Medicine): Prof. Andreas Stuck, MD, Bern

Gynecology / Obstetrics: Prof. Wolfgang Holzgreve, MD and Eva Visca, MD, Basel

Infectiology (incorporated into Internal Medicine): Prof. Rainer Weber, MD, Zurich

Internal Medicine: Prof. Ulrich Bürgi, MD, Bern

Neurology (incorporated into Internal Medicine): Prof. Christian Walter Hess, MD, Bern

Ophthalmology: Prof. Beatrice Früh, MD, Bern

Otorhinolaryngology: Prof. Rudolf Häusler, MD, Bern

Pediatrics: Prof. Susanne Suter, MD, Geneva

Pharmacotherapy: Jules Desmeules, MD, Geneva

Pneumology (incorporated into Internal Medicine): Prof. Matthias Gugger, MD, Bern

Psychiatry: Prof. Werner Conrad Strik, MD, Bern

Public Health, Insurance- and Occupational Medicine: Prof. Matthias Egger, MD, and Nicole Bender, MD, Bern

Radiology and Nuclear Medicine: Prof. Borut Marincek, MD, Zurich

Rheumatology (incorporated into Internal Medicine): Prof. Peter Villiger, MD, Bern

Surgery: Prof. Daniel Candinas, MD and Stephan Vorburger, MD, MCR Bern

Skills: Peter Frey, MD, Bern

1.8 Acknowledgements

The first edition of The Catalogue relied heavily on the Dutch “Training of Doctors, Blueprint 1994”, for which our Dutch Colleagues had waived the copyright in our favor. Much of this material is still used in our second edition. The Working Group again wishes to thank the authors of the Dutch Blueprint to let us rely on their pioneering work.

For the formulation of the “General Objectives” we relied mainly on the “CanMEDS 2005 Framework” and on the British “Curriculum for the foundation years in postgraduate education and training”. We are grateful to the authors of these outstanding lists of competencies that we were able to use their work.

The Working Group is extremely grateful that members from the Institute of Medical Education of the University of Bern (R. Bloch, P. Schläppi, B. Rindlisbacher) took over the onerous task to prepare the Power Point or Excel-Table projections for the meetings of the Working Group and to keep the electronic records of the changes that had been decided upon.

Mrs. S. Antonopoulos from the Institute of Medical Education succeeded Mrs. E. Walser for organizing the Working Group’s meetings and taking over the secretarial duties. Without this logistical support, The Catalogue could not have been finished in time. The final layout of The Catalogue was designed by Béatrice Boog from the Institute of Medical Education.



Chapter 2

How to use this Catalogue

2. How to use this Catalogue

2.1 Structure of The Catalogue

The purpose of this Catalogue of Learning Objectives is to help

- students to know what they are expected to learn during their undergraduate education, and to give them a framework for the final exam;
- teachers to focus on these objectives,
- curriculum planners to make sure that all the important content is covered in the curriculum, and
- examiners to decide whether the mastering of a specific assessment-task can be expected from the graduating student.

The following chapters constitute the core of this Catalogue of Learning Objectives:

- Chapter 3: General Objectives
- Chapter 4: Problems as Starting Points for Training
- Chapter 5: General Skills
- Chapter 6: Discipline- Related Objectives

It is important to bear in mind that only the chapter “General Objectives” covers the whole scope of undergraduate medical training; thus this chapter is the backbone and most important part of The Catalogue, while Chapters 4 – 6 are on a lower hierarchical level, focusing on specific but important parts of the competencies expected from a physician at the end of her/his undergraduate training.

2.2 Definition of Problems, Levels and Letters

In the Chapters 4-6 the content is listed as key points (e.g. Clinical Pictures) or short sentences. To make clear to what extent a General Skill, a certain Clinical Picture or Further Knowledge should be mastered; there are specifications by Levels and Letters.

The different kinds of objectives and the Levels and Letters are defined as follows:

Definition of Problems

Problems as Starting Points for Training

Here, a problem is defined as a symptom, sign or test result of a patient with which the physician may be confronted.

The physician is able to assess a patient presenting this problem in a well structured way, and to establish a differential diagnosis. She/he is able to propose appropriate diagnostic, therapeutic, social, preventive and other measures, and to provide urgent intervention in case of a life-threatening problem.

Problems were selected if

- they occur frequently
- even though rare, rapid and appropriate intervention may be life-saving or non-intervention might be harmful^E
- they are a cause of excessive emotional distress for the patient

^E Problems which are life-threatening and require urgent intervention are marked with an upper case E.

2 How to use this Catalogue

Definition of Levels

General Skills	Level 1	Level 2
	<p>Some practical experience: The physician is able to explain the skill (principle, indication, contraindication, burden, possible complications, getting informed consent, documentation) and has performed the skill several times under supervision (if necessary with simulator).</p>	<p>Routine: The physician is able to explain the skill (principle, indication, contraindication, burden, possible complications, getting informed consent, documentation). She/he has acquired enough routine to perform the skill correctly without supervision. The skill must be mastered in all age groups of patients, from children to elderly people (but not in newborn and infants)</p>
Clinical Pictures	<p>Be able to recognize the possible relevance: If appropriate, the physician considers this clinical picture as a possible diagnosis. She/he can define this clinical picture in broad terms without knowing details.</p>	<p>Be able to cope with in practice: The physician is able to take a history and perform a physical examination in a structured way. She/he is able to consider the clinical picture as a diagnosis and recognizes and actively searches for the typical complaints and signs. She/he proposes appropriate diagnostic and therapeutic possibilities to her/his supervising physician considering its epidemiology and relevant pathology (including histology, pathophysiology and psychodynamics). She/he explains the diagnostic and therapeutic possibilities to the patient in an appropriate way.</p>
Further Knowledge	<p>This indicates an overview level: The physician is capable to roughly define the concept or describe the procedure including indication and contraindication. She/he is able to recognize its possible relevance in a given clinical situation. She/he has seen the correct performance of the procedure (live, by simulator, video or other media).</p>	<p>Be able to cope with in practice: The physician is capable to use this knowledge in interpreting findings, counseling on preventive measures and treating the patient.</p>

2 How to use this Catalogue

Definition of Letters

D	The diagnosis is made personally by means of physical examination, simple aids or additional investigation requested and interpreted by the physician herself/himself (e.g. X-ray of chest or extremities, electrocardiogram). For example the letter D does not apply for breast cancer, since its diagnosis requires taking and interpreting a biopsy, knowledge beyond a graduate in medicine. Attribution of this letter requires level 2 of competence.
T	Therapy must be carried out by the physician personally, referring to the most common therapy for an uncomplicated illness. Attribution of this letter requires level 2 of competence.
E	The physician is able to perform primary and secondary assessment of patients and initiate emergency measures. The letter E may be attributed even in absence of the letter D. The physician in this case is not required to establish a firm diagnosis; she/he may act on a well-founded suspicion. Example: Referral to hospital in case of suspicion of bacterial meningitis.
P	The physician is able to identify and initiate appropriate preventive measures.
G	The letter G defines a particularly relevant problem for General Practice and Outpatient Medicine.

As mentioned in the introduction it was decided to stick to listing the Discipline- Related Objectives corresponding to traditional disciplines in university hospitals. *Given the comprehensive, interdisciplinary character of **General Practice** it does not make sense within this structure to list the Clinical Pictures and Further Knowledge of this discipline or specialty separately. So as in the first edition the main content of this specialty is defined by the letter G linked to the Clinical Pictures and Further Knowledge in any of the traditional disciplines in university hospital.*

2 How to use this Catalogue

2.3 Code of Objectives (Objective-ID)

In this second edition of The Catalogue each separate learning objective was attributed a **code** or “**Objective-ID**”.

This code consists of 3 parts:

1) One letter for

G = General Objective

P = Problem as Starting Point for Training

S = General Skill

C = Discipline- Related Objectives (Clinical Picture or Further Knowledge)

2) Two letters standing for the Role (General Objectives) or the Discipline (Clinical Pictures and Further Knowledge).

Role (Chapter 3)	Discipline (Chapter 6)
ME Medical Expert	IM Internal Medicine
CM Communicator	PT Pharmacotherapy
CL Collaborator	SU Surgery
MA Manager	PE Pediatrics
HA Health Advocate	GO Gynecology - Obstetrics
SC Scholar	PS Psychiatry
PR Professional	OP Ophthalmology
	DE Dermatology
	OT Otorhinolaryngology
	RN Radiology – Nuclear Medicine
	PH Public Health, Insurance- and Occupational Medicine
	FM Forensic Medicine

3) A number for each objective within the same Role (General Objectives), for each Problem as Starting Point for Training, for each General Skill and for each objective within the same Discipline (Discipline- Related Objectives).

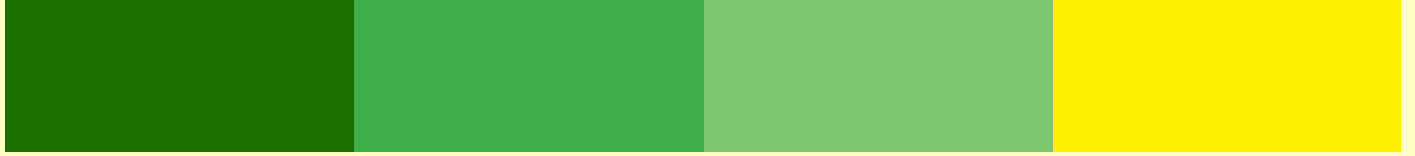
Examples:

G CM 7 is objective number 7 within the Role of Communicator in Chapter 3, General Objectives.

C SU 259 is objective number 259 within the Discipline Surgery in Chapter 6, Discipline- Related Objectives

2.4 Cross-Referencing

All objectives which appear twice or several times within the same chapter are **cross-referenced** within square brackets with the code explained above. So if the Clinical Picture C SU 270 is followed by [C IM 35] this means that the same Clinical Picture can be found in Internal Medicine as objective number 35.



Chapter 3

General Objectives

3. General Objectives

3.1 Introduction

In the 1990s the Royal College of Physicians and Surgeons of Canada (RCPS), responsible for setting residency training, examination and accreditation standards across the country asked its “Societal Needs Working Group” to “identify the core competencies generic to all specialists to meet the needs of society.” The result was the CanMEDS framework. The physician “Roles” concept was provided by the “Educating Future Physicians for Ontario” Project. The framework was the result of a sophisticated process lasting several years and based on expert input e.g. on physician-patient communication, on consultation with other healthcare organizations, on systematic literature search and on input from public focus groups. The seven CanMEDS Roles or thematic groups of competencies, as defined by the framework have since obtained growing international acceptance in medical education as a well suited structure for catalogues of goals and objectives. So the Working Group decided to adopt these Roles to structure the General Objectives.

The CanMEDS Roles and their definition are as follows¹:

Medical Expert

Definition: As *Medical Experts*, physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. Medical Expert is the central physician Role in the CanMEDS framework.

Communicator

Definition: As *Communicators*, physicians effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Collaborator

Definition: As *Collaborators*, physicians effectively work within a healthcare team to achieve optimal patient care.

Manager

Definition: As *Managers*, physicians are integral participants in healthcare organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the healthcare system.

Health Advocate

Definition: As *Health Advocates*, physicians responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

¹ Frank, JR. (Ed). 2005. The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care. Ottawa: The Royal College of Physicians and Surgeons of Canada. http://rcpsc.medical.org/canmeds/CanMEDS2005/CanMEDS2005_e.pdf

3 General Objectives

Scholar

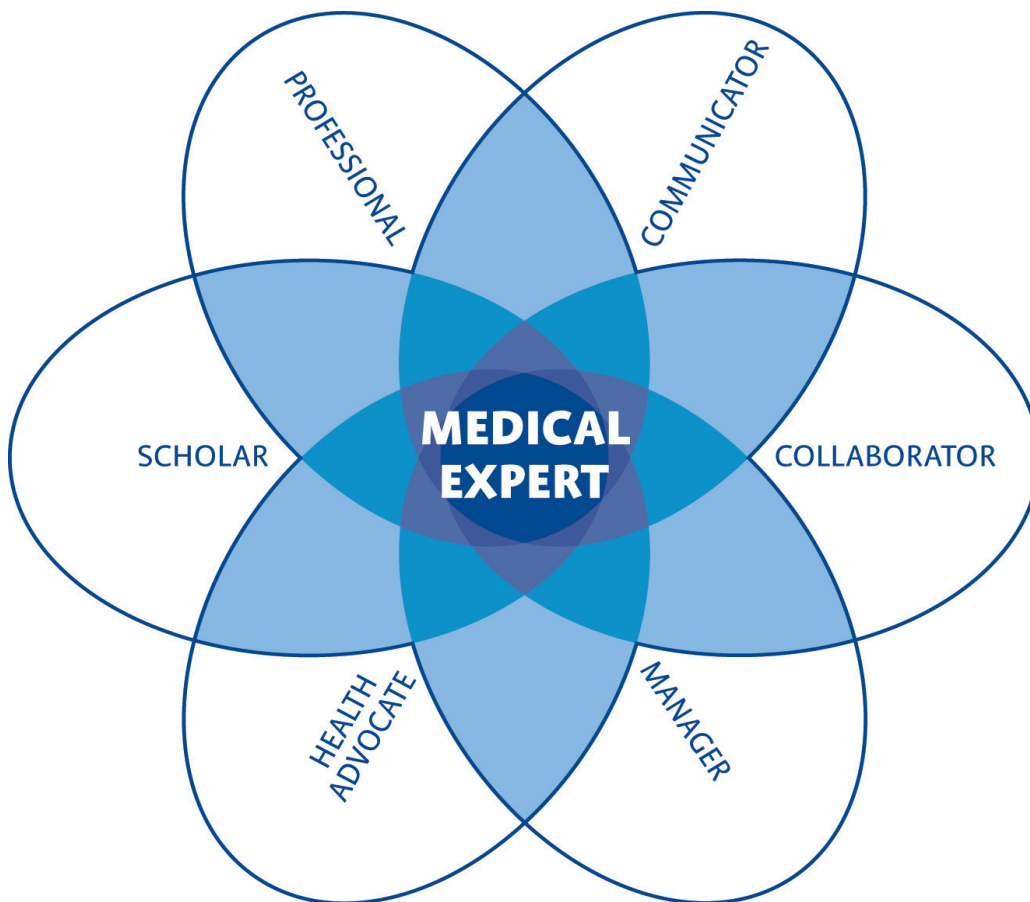
Definition: As *Scholars*, physicians demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

Professional

Definition: As *Professionals*, physicians are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behavior.

CanMEDS Diagram²

A diagram was created in 2001 to illustrate the elements and the interconnections of the CanMEDS Roles embodied by competent physicians: Medical Expert (the central role), Communicator, Collaborator, Health Advocate, Manager, Scholar and Professional. This diagram—also known as the CanMEDS “cloverleaf,” “daisy” or “flower”—was officially trademarked in 2005 and was revised to more accurately reflect the fluidity and overlap amongst the CanMEDS Roles.



THE
CANMEDS
ROLES FRAMEWORK

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3 General Objectives

The following **General Objectives** have been formulated by the Working Group. The first draft relied for a substantial part on the “CanMEDS 2005 Framework” and on the British “Curriculum for the foundation years in postgraduate education and training”.

3.2 Medical Expert (ME)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians possess a defined body of knowledge, clinical skills, procedural skills and professional attitudes, which are directed to patient care under supervision. They apply these competencies to collect and interpret information, make proposals for clinical decisions, and carry out some defined diagnostic and therapeutic procedures. The role of *Medical Expert* is central to the function of physicians, and draws on the competencies included in the Roles of *Communicator*, *Collaborator*, *Manager*, *Health Advocate*, *Scholar*, and *Professional*. (See „daisy-flower” preceding page)

Competencies: The physician is able to...

... elicit a relevant, concise and accurate history from the patient and other sources

Objective ID

- | | |
|--------|--|
| G ME 1 | The physician demonstrates clear history taking and communication with patients, their families and other carers and seeks information from other sources, differentiating the concepts of ‘illness’ as the patient’s story and of ‘disease’ as the medical history of a health disorder [G CM 8]. |
| G ME 2 | The physician clarifies the patient’s expectations and requests for the encounter and elicits information on both the somatic and psychological aspects of her/his symptoms and complaints as well as the patient’s situation, her/his understanding and concerns, social and cultural background and illness experience [G CM 9]. |
| G ME 3 | The physician shows knowledge of common typical presenting symptoms and complaints, even when less explicit and in early stages of disease. |

... conduct an effective physical examination

Objective ID

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|--------|--|
| G ME 4 | The physician explains the examination procedure, gains appropriate consent for the examination and minimizes patient discomfort. |
| G ME 5 | The physician masters clinical examination techniques to elicit relevant clinical signs and uses a coordinated approach to the examination respecting patient dignity. |
| G ME 6 | The physician performs a targeted or a detailed examination corresponding to the patient’s symptoms and the actual diagnostic question. |

3 General Objectives

...analyze and interpret data to establish a differential and a working diagnosis and construct a management plan

Objective ID

- | | |
|---------|---|
| G ME 7 | The physician analyzes and interprets the collected information and establishes a problem list with a differential diagnosis in the order of likelihood and urgency, and establishes a principal working diagnosis taking into account the different epidemiology of disease presentations in primary and secondary care. |
| G ME 8 | The physician takes into consideration relevant context and background of the patient, including family, social, cultural and spiritual factors. |
| G ME 9 | The physician constructs a management plan based on the interpretation of the collected data, including further investigations and treatments and consecutive requests/instructions to other healthcare professionals, keeping open the option of a wait-and-see approach. |
| G ME 10 | The physician appreciates positive or negative predictive value of symptoms and signs, and of findings from ancillary tests obtained in clinical data collection, and their dependency on the prevalence of the target disease. |

... carry out under supervision relevant procedures and organize further investigations

Objective ID

- | | |
|---------|--|
| G ME 11 | The physician carries out specific investigative or therapeutic procedures as outlined in the section "General Skills". |
| G ME 12 | The physician weighs risks and benefits for the patient before undertaking any investigation or procedure. |
| G ME 13 | The physician explains to the patient the arguments for further investigations, their risks and benefits and the specific procedure [G CM 13]. |

... demonstrate appropriate medical data and information management

Objective ID

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|---------|--|
| G ME 14 | The physician synthesizes the relevant information and reports on her/his findings and her/his proposals concerning the management plan in a concise form to her/his supervising physician and other healthcare professionals [G CM 19, G CL 1]. |
| G ME 15 | The physician records accurate, logical, comprehensive and pertinent accounts of history, physical examination, investigations, management plan and follow up that are structured, timed, dated and personally attributable with the understanding that they might be read by the patient [G CM 20]. |
| G ME 16 | The physician takes into account the medico-legal importance of good record-keeping and data protection. |
| G ME 17 | The physician structures reports clearly to communicate findings and outcome of illness episodes [G CM 21]. |

3 General Objectives

... deliver good quality medical care and ensure patient safety

Objective ID

- | | |
|---------|--|
| G ME 18 | The physician demonstrates knowledge of the relevant structures and functions of the human body from molecular level to the individual as a whole in its social context, in its different phases of development and the range from normal to pathological condition. |
| G ME 19 | The physician demonstrates awareness of the scientific base and conceptual framework of modern medicine, its perception in society and its historical evolution over time [G SC 5]. |
| G ME 20 | The physician demonstrates up-to-date knowledge of the evidence-based standard of medical care for common ailments and illnesses and of the basic urgent interventions [G SC 6]. |
| G ME 21 | The physician applies her/his knowledge in daily work by diagnosing and treating the common conditions and mastering the basic urgent interventions. |
| G ME 22 | The physician informs patient and family, colleagues and other professionals in a readily comprehensible way, encouraging discussion and participation in decision-making [G CM 11]. |
| G ME 23 | The physician pays attention to the importance of continuity of care and of patient information transfer e.g. from inpatient to outpatient setting [GCL7]. |
| G ME 24 | The physician allows patients sufficient time to talk, express concerns and to ask questions, listens actively [G CM 14]. |
| G ME 25 | The physician seeks advice promptly when unable to answer a patient's query or concerns. |
| G ME 26 | The physician supports self-management by patients. |
| G ME 27 | The physician demonstrates an understanding of the social and cultural background of patients and takes it into account in her/his clinical work. |
| G ME 28 | The physician shows awareness of possible consequences of disease for family members and further environment (including workplace) of the patient. |
| G ME 29 | The physician identifies the main information elements that have to be transmitted to the patient in order to get her/his informed consent on a medical act and respects patient's rights to refuse treatment. |
| G ME 30 | The physician takes particular care in dealing with vulnerable patients such as children, severely ill and dying patients and patients with mental ill-health [G CM 15]. |
| G ME 31 | The physician considers appropriateness of interventions according to patient's wishes, severity of illness and chronic or co-morbid diseases. |
| G ME 32 | The physician respects patient's wishes for confidentiality. |
| G ME 33 | The physician explains criteria for issuing 'Do Not Attempt Resuscitation'-orders and the level of experience required to issue them. |
| G ME 34 | The physician recognizes personal limits of expertise and decides appropriately if and when other professionals are needed to contribute to a patient's care [G CL 3, G MA 16]. |
| G ME 35 | The physician acts appropriately when a medical error has occurred. |
| G ME 36 | The physician is sensitive to situations where patients are unhappy with aspects of care and seeks to remedy concerns. |
| G ME 37 | The physician demonstrates basic knowledge of detection and appropriate management of medical errors [G MA 15]. |

3 General Objectives

... demonstrate safe prescribing

Objective ID

- | | |
|---------|--|
| G ME 38 | The physician prescribes drugs, oxygen, fluids and blood products appropriately, clearly and unambiguously with date and signature clearly visible. |
| G ME 39 | The physician considers drug costs when prescribing. |
| G ME 40 | The physician applies the principles of safe prescribing for children and elderly people and in the context of pregnancy and breastfeeding, hepatic or renal dysfunction or heart failure. |
| G ME 41 | The physician explains and applies the principles of therapeutics in treatment of pain, palliative and end-of-life care. |
| G ME 42 | The physician shows awareness of possible drug interactions and of adequate tools to reduce prescribing errors. |
| G ME 43 | The physician monitors therapeutic effects and compliance, and appropriately adjusts treatments and dosages and encourages patient compliance. |
| G ME 44 | The physician identifies patients who are not responding as expected to any investigative or treatment measure and takes appropriate and timely action. |
| G ME 45 | The physician shows awareness of the importance to notify drug monitoring agencies in the case of a possible significant adverse drug reaction. |
| G ME 46 | The physician shows understanding of common complications and side effects of treatments / procedures and gives the patient appropriate information, instructions and warnings. |
| G ME 47 | The physician shows awareness of the importance of security issues in respect of prescription forms. |

... foster infection control

Objective ID

- | | |
|---------|---|
| G ME 48 | The physician describes the principles and sources of cross infection. |
| G ME 49 | The physician minimizes the risk of transferring infection through personal behavior, including appropriate hand hygiene. |
| G ME 50 | The physician avoids posing risk to patients by personal (infectious) health problems. |

... promote health of patients and the community

Objective ID

- | | |
|---------|--|
| G ME 51 | The physician recognizes and uses opportunities to counsel for disease prevention and to promote health. |
| G ME 52 | The physician shows basic counseling skills explaining to patients, as appropriate, the possible effects of lifestyle, including the effects of diet, nutrition, smoking, alcohol and illicit drugs [G CM 17]. |
| G ME 53 | The physician recommends screening tests and immunizations appropriately. |

3 General Objectives

... access relevant information on diagnostic and therapeutic options and apply it under supervision to clinical practice

Objective ID

-
- GME 54** The physician, starting from a patient problem, elaborates an appropriate clinical question and efficiently searches for an answer in the literature, using appropriate sources of information [G SC 7].
-
- GME 55** The physician actively accesses relevant evidence and demonstrates basic ability to appraise the quality of evidence from different sources in the literature and proposes appropriate conclusions for patient care to the supervising physician [G SC 8].
-

3 General Objectives

3.3 Communicator (CM)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians enable patient-centered therapeutic communication through partnership and effective dynamic interactions with patients, families, caregivers, other professionals, and important other individuals. Communication skills are essential for the functioning of a physician, effective communication is critical for optimal patient outcomes.

Competencies: The physician is able to...

... develop rapport, trust, and ethical therapeutic relationships with patients and families

Objective ID

- | | |
|--------|--|
| G CM 1 | The physician shows recognition that good communication is a core clinical skill for physicians that can foster patient and physician satisfaction, compliance, and improve clinical outcomes. |
| G CM 2 | The physician shows awareness of nonverbal cues in encounters with patients and acts appropriately. |
| G CM 3 | The physician chooses a suitable setting with necessary support when giving complicated or bad news. |
| G CM 4 | The physician deals with the help from senior colleagues appropriately with angry or dissatisfied patients or relatives. |
| G CM 5 | The physician seeks assistance when dealing with patients with special communication needs, e.g. language or speech problem. |
| G CM 6 | The physician demonstrates an ability to anticipate patients' needs; explains clearly and checks understanding. |
| G CM 7 | The physician balances appropriately distance and proximity with the patient and shows appropriate level of emotional involvement. |

... accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals

Objective ID

- | | |
|---------|--|
| G CM 8 | The physician demonstrates clear history taking and communication with patients, their families and other carers and seeks information from other sources, differentiating the concepts of 'illness' as the patient's story and of 'disease' as the medical history of a health disorder [G ME 1]. |
| G CM 9 | The physician clarifies the patient's expectations and requests for the encounter and elicits information on both the somatic and psychological aspects of her/his symptoms and complaints as well as the patient's situation, her/his understanding and concerns, social and cultural background and illness experience [G ME 2]. |
| G CM 10 | The physician explores, respectfully and without judgment, the social and family context of the patient's health needs and preferences. |

3 General Objectives

... accurately convey relevant information and explanations to patients and families, colleagues and other professionals and foster the development of a common understanding on issues, problems and plans to develop a shared plan of care

Objective ID

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|---------|--|
| G CM 11 | The physician informs patient and family, colleagues and other professionals in a readily comprehensible way, encouraging discussion and participation in decision-making [G ME 22]. |
| G CM 12 | The physician ensures that relatives of acutely ill or unconscious patients are being supported and that relatives, if not present, are notified by someone competent. |
| G CM 13 | The physician explains to the patient the arguments for further investigations, their risks and benefits and the specific procedure [G ME 13]. |
| G CM 14 | The physician allows patients sufficient time to talk, express concerns and to ask questions, listens actively [G ME 24]. |
| G CM 15 | The physician takes particular care in dealing with vulnerable patients such as children, severely ill and dying patients and patients with mental ill-health [G ME 30]. |
| G CM 16 | The physician identifies effectively problems to be addressed in a patient encounter, including the patient's context, concerns and preferences. |
| G CM 17 | The physician shows basic counseling skills explaining to patients, as appropriate, the possible effects of lifestyle, including the effects of diet, nutrition, smoking, alcohol and illicit drugs [G ME 52]. |
| G CM 18 | The physician communicates in an efficient way with all team members to ensure shared understanding of patients' problems and to foster continuity of care [G CL 4]. |

... convey effective oral and written information about a medical encounter

Objective ID

- | | |
|---------|--|
| G CM 19 | The physician synthesizes the relevant information and reports on her/his findings and her/his proposals concerning the management plan in a concise form to her/his supervising physician and other healthcare professionals [G ME 14, G CL 1]. |
| G CM 20 | The physician records accurate, logical, comprehensive and pertinent accounts of history, physical examination, investigations, management plan and follow up that are structured, timed, dated and personally attributable with the understanding that they might be read by the patient [G ME 15]. |
| G CM 21 | The physician structures reports clearly to communicate findings and outcome of illness episodes [G ME 17]. |

3 General Objectives

3.4 Collaborator (CL)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians work in partnership with others who have to be appropriately involved in the care of individuals or specific groups of patients. This is increasingly important in a modern multiprofessional environment, where patient-centered care is widely shared by several teams in multiple locations

Competencies: The physician is able to...

... effectively consult with her/his supervisor and other physicians and healthcare professionals, striving for good teamwork aiming at optimal patient care and at patient safety

Objective ID

- | | |
|--------|--|
| G CL 1 | The physician synthesizes the relevant information and reports on her/his findings and her/his proposals concerning the management plan in a concise form to her/his supervising physician and other healthcare professionals [G ME 14, G CM 1 9]. |
| G CL 2 | The physician discusses treatment options including relative risks and benefits with the supervising physician and colleagues. |
| G CL 3 | The physician recognizes personal limits of expertise and decides appropriately if and when other professionals are needed to contribute to a patient's care [G ME 34, G MA 16]. |
| G CL 4 | The physician communicates in an efficient way with all team members to ensure shared understanding of patients' problems and to foster continuity of care [G CM 18]. |
| G CL 5 | The physician demonstrates good handover practice and ensures continuity of care when going off duty, accurately summarizing the main points of patients' diagnoses, active problems, and management plans. |
| G CL 6 | The physician cross-checks ambiguous instructions and actions with a senior physician. |
| G CL 7 | The physician pays attention to the importance of continuity of care and of patient information transfer e.g. from inpatient to outpatient setting [G ME 23]. |
| G CL 8 | The physician seeks and welcomes appraisal from patients and colleagues on the quality of her/his work and copes with feedback, even when negative [G MA 17]. |

3 General Objectives

... contribute effectively to other interdisciplinary team activities

Objective ID

- | | |
|---------|--|
| G CL 9 | The physician displays effective team working skills and describes her/his personal role and responsibilities in the team. |
| G CL 10 | The physician supports nursing staff in designing and implementing monitoring or calling criteria concerning her/his patients. |
| G CL 11 | The physician seeks out opportunities to discuss the evidence base of clinical decision making and clinical care with colleagues and other professionals [G SC 9]. |
| G CL 12 | The physician shows understanding of the need for collective responsibility for health care of individuals and for health promoting interventions both of which require a multidisciplinary approach and partnership with the patient and the population served. |

3 General Objectives

3.5 Manager (MA)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians function as Managers when (under guidance by their supervisors) they take everyday practice decisions involving resources. They have to make systematic choices when allocating finite healthcare resources and personal time, using information technology.

Competencies: The physician is able to...

... utilize personal time and resources effectively in order to balance patient care, learning needs, and private activities outside the workplace, and to protect her/his own health

Objective ID

- | | |
|--------|---|
| G MA 1 | The physician employs effective time management, plans and prioritizes her/his work. |
| G MA 2 | The physician delegates or calls for help in time when she/he is falling behind. |
| G MA 3 | The physician recognizes excessive stress or early symptoms of illness and seeks appropriate help to protect patients, being aware that own performance may be affected by personal stress and illness. |
| G MA 4 | The physician takes care of her/his own health at work by using adequate protection measures and keeping her/his own immunizations up-to-date. |

... use effectively under supervision finite healthcare resources, while acting in the best interest of the patient

Objective ID

- | | |
|--------|--|
| G MA 5 | The physician shows awareness of possible conflict between health needs of individual patients and the health needs of the community [G PR 17]. |
| G MA 6 | The physician demonstrates and adequately applies in daily work knowledge of the economical and legal basis of the Swiss social security and healthcare systems. |
| G MA 7 | The physician assesses effectiveness, appropriateness and efficiency of medical practice and acts accordingly. |

... work effectively and efficiently in a healthcare organization

Objective ID

- | | |
|--------|---|
| G MA 8 | The physician explains the roles and responsibilities of physicians (including her/his own) and other professionals in the Swiss healthcare system. |
| G MA 9 | The physician gives in broad terms an overview of the structure and organization of the Swiss healthcare system. |

3 General Objectives

... effectively utilize information technology for patient care, self-learning and other activities

Objective ID

- | | |
|---------|--|
| G MA 10 | The physician explains the principles of medical data and information management, especially measures for security of data. |
| G MA 11 | The physician retrieves patient-specific information from the clinical data system at her/his workplace. |
| G MA 12 | The physician searches, collects, organizes and interprets health and biomedical information from different databases and sources. |
| G MA 13 | The physician describes examples for use of information and communication technology to assist in diagnostic, therapeutic and preventive measures for the patient, and for surveillance and monitoring health status (E-Health). |

... assure and improve the quality of care and patient safety

Objective ID

- | | |
|---------|---|
| G MA 14 | The physician shows awareness of the limits of medical care. |
| G MA 15 | The physician demonstrates basic knowledge of detection and appropriate management of medical errors [G ME 37]. |
| G MA 16 | The physician recognizes personal limits of expertise and decides appropriately if and when other professionals are needed to contribute to a patient's care [G ME 34, G CL 3]. |
| G MA 17 | The physician seeks and welcomes appraisal from patients and colleagues on the quality of her/his work and copes with feedback, even when negative [G CL 8]. |
| G MA 18 | The physician gives examples of how the quality of health care is monitored, advanced and assured. |

3 General Objectives

3.6 Health Advocate (HA)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians recognize their duty and ability to improve the overall health of their patients and the society they serve. Doctors identify advocacy activities as important for the individual patient, for populations of patients and for communities.

Competencies: The physician is able to...

... identify the important determinants of health that affect individual and population health, so as to have basic abilities to contribute to improving individual and societal health in Switzerland

Objective ID

-
- G HA 1** The physician recognizes and assesses the risk factors and the positive, healing resources of a specific patient and takes action to foster the resources and coping abilities and to minimize the risks.
-
- G HA 2** The physician recognizes and assesses the health and illness behavior of a specific patient and integrates health promotion on an individual basis as part of the encounter.
-
- G HA 3** The physician demonstrates knowledge of her/his role and ability to take appropriate action in disease, injury and accident prevention and protecting, maintaining and promoting the health of individuals, families and community.
-
- G HA 4** The physician appreciates the potential conflict between the roles of health advocate for a patient or the community with that of gatekeeper.
-

... recognize issues, settings, circumstances, or situations which require advocacy on behalf of patients, professions, or society

Objective ID

-
- G HA 5** The physician identifies health needs of a community based on epidemiological data.
-
- G HA 6** The physician describes in broad lines how current public policies affect the health of the populations served.
-
- G HA 7** The physician strives for equity in the provision of health care
[G PR 11].
-

3 General Objectives

3.7 Scholar (SC)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians engage in a lifelong pursuit of mastery of their domain of professional expertise. They recognize the need to be continually learning.

Competencies: The physician is able to...

... develop, implement, and document a personal continuing education strategy

Objective ID

- | | |
|--------|--|
| G SC 1 | The physician regularly assesses personal learning needs and plans her/his education, recognizes errors and attempts to learn from them. |
| G SC 2 | The physician strives to evaluate the outcome of learning and implements new competencies in her/his practice. |

... apply basic principles of critical appraisal to sources of medical information. This involves developing scientific curiosity and use of scientific evidence in clinical decision making

Objective ID

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|---------|---|
| G SC 3 | The physician demonstrates knowledge of general principles and methods of scientific medical research and their evolution over time. |
| G SC 4 | The physician demonstrates knowledge of principles of critical appraisal and basic statistics. |
| G SC 5 | The physician demonstrates awareness of the scientific base and conceptual framework of modern medicine, its perception in society and its historical evolution over time [G ME 19]. |
| G SC 6 | The physician demonstrates up-to-date knowledge of the evidence-based standard of medical care for common ailments and illnesses and of the basic urgent interventions [G ME 20]. |
| G SC 7 | The physician, starting from a patient problem, elaborates an appropriate clinical question and efficiently searches for an answer in the literature, using appropriate sources of information [G ME 54]. |
| G SC 8 | The physician actively accesses relevant evidence and demonstrates basic ability to appraise the quality of evidence from different sources in the literature and proposes appropriate conclusions for patient care to the supervising physician [G ME 55]. |
| G SC 9 | The physician seeks out opportunities to discuss the evidence base of clinical decision making and clinical care with colleagues and other health professionals [G CL 11]. |
| G SC 10 | The physician shows ability to work with local / national guidelines and protocols and demonstrates a critical approach in doing this. |
| G SC 11 | The physician demonstrates understanding that decisions in medical practice often are complex and based on uncertainty and probability data. |

3 General Objectives

... facilitate the learning of patients, students and other health professionals

Objective ID

-
- G SC 12 The physician shows basic teaching skills in presentations for students and other health professionals.
-
- G SC 13 The physician assesses and reflects on a teaching encounter and provides constructive feedback.
-

... contribute to the development, dissemination, and translation of new knowledge and practices

Objective ID

-
- G SC 14 The physician shows readiness and ability to participate in collaborative research projects.
-
- G SC 15 The physician participates in the dissemination of new knowledge and practices among colleagues and other collaborators and its translation into daily practice.
-

3 General Objectives

3.8 Professional (PR)

Description:

At the end of undergraduate education and the beginning of postgraduate training physicians have a distinctive societal role as professionals who are dedicated to the health and caring of others.

The Professional Role is guided by codes of ethics and a commitment to clinical competence and the embracing of appropriate attitudes and behavior. Physicians are accountable to the society they serve.

Competencies: The physician is able to...

... deliver under supervision high quality care, exhibiting appropriate personal and interpersonal professional behavior

Objective ID

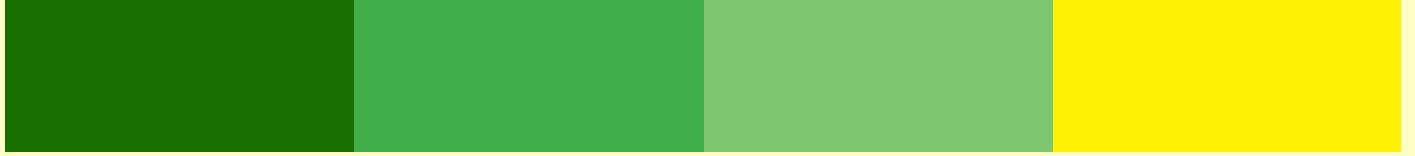
- | | |
|---------|---|
| G PR 1 | The physician maintains and enhances appropriate knowledge, skills and professional behavior. |
| G PR 2 | The physician shows awareness of cultural, societal and spiritual/religious issues that impact on the delivery of care. |
| G PR 3 | The physician shows awareness that in the course of history the perception in society and by the patients of the role of the physician is changing. |
| G PR 4 | The physician shows interest in the patient's experiences relating to illness, care and interactions with the healthcare system. |
| G PR 5 | The physician demonstrates knowledge and respect of the rights of all patients. |
| G PR 6 | The physician demonstrates understanding of the threats to autonomy and dignity of patients that may result from the illness setting. |
| G PR 7 | The physician recognizes that the patient's wishes and preferences are central for medical decision making. |
| G PR 8 | The physician takes into account the principles and limits of patient confidentiality as defined by professional practice standards and the law, e.g. only shares clinical information, whether spoken or written, with the patient's consent and respects the patient's right not to know. |
| G PR 9 | The physician demonstrates an appropriate, caring attitude with consistently high standards of professional behavior, including honesty, integrity, accountability, commitment, compassion, empathy and altruism. |
| G PR 10 | The physician maintains an appropriate balance between personal and professional roles and shows awareness of possible conflicts of interest. |
| G PR 11 | The physician strives for equity in the provision of health care [G HA 7]. |

3 General Objectives

... practice medicine in an ethically responsible manner that respects the medical, legal and professional obligations of belonging to a – in many respects - self-regulating body

Objective ID

- | | |
|---------|---|
| G PR 12 | The physician shows awareness of the ethical dimension of medical practice and clinical decision-making. |
| G PR 13 | The physician shows understanding of the function of ethics and appreciates the difference between ethics and morality as well as between ethics, politics and law. |
| G PR 14 | The physician shows knowledge that there are ethical codes issued by the Swiss Academy of Medical Sciences relevant to her/his daily practice and that there is a professional code of conduct issued by the Swiss Medical Association and she/he demonstrates the ability to find these codes when needed and to apply them to pertinent problems. |
| G PR 15 | The physician demonstrates knowledge of legal regulations and professional codes of conduct relevant for her/his daily clinical practice and the ability to apply them to pertinent problems. |
| G PR 16 | The physician fulfills the regulatory and legal obligations required for daily clinical practice. |
| G PR 17 | The physician shows awareness of possible conflict between health needs of individual patients and the health needs of the community [G MA 5]. |
| G PR 18 | The physician continuously develops her/his sensitivity to ethical issues arising in the healthcare context and reflects on her/his own position and its premises especially concerning end of life issues. |
| G PR 19 | The physician shows knowledge that there are different theoretical approaches to medical ethics (such as contractualist-based, principlist-based, patient rights-based, virtue-based or care ethics-based approaches). |
| G PR 20 | The physician searches for an appropriate solution to an ethical problem considering the perspectives of others. |
| G PR 21 | The physician copes with misconduct in an appropriate manner. |
| G PR 22 | The physician identifies the ethical principles and values emerging in a given clinical situation or in a research-project and identifies the conflicts of ethical principles and values. |
| G PR 23 | The physician identifies the ethical principles in decisions regarding discontinuation or withholding of life-support measures. |



Chapter 4

Problems as Starting Points for Training

4. Problems as Starting Points for Training

4. Problems as Starting Points for Training

for definition see Chapter 2

general symptoms

Objective ID

P	1	loss of blood ^E
P	2	overweight / feeling too fat
P	3	loss of weight, emaciation
P	4	loss of appetite
P	5	malnutrition
P	6	fatigue
P	7	excessive daytime sleepiness (EDS)
P	8	general feeling of illness
P	9	enlarged lymph nodes (lymphadenopathy)
P	10	fever
P	11	fever in the immunocompromised host / recurrent fever
P	12	hypothermia ^E
P	13	hyperthermia ^E
P	14	abnormal perspiration
P	15	flushing
P	16	excessive thirst / excessive fluid intake (polydipsia)
P	17	dehydration ^E
P	18	unexpected, sudden death of unknown etiology and non-natural death ^E

metabolic alterations and abnormal laboratory values

Objective ID

P	19	hyperglycemia / diabetes mellitus
P	20	hypoglycemia
P	21	abnormal serum calcium / phosphate
P	22	abnormal pH of blood
P	23	abnormal serum lipids
P	24	abnormal liver function tests
P	25	abnormal serum potassium / magnesium

4. Problems as Starting Points for Training

P 26	abnormal serum sodium
P 27	abnormalities of white blood cells
P 28	anemia
P 29	polycythemia / elevated hemoglobin
P 30	hypoxia, hypoxemia
P 31	hypercapnia / hypocapnia
P 32	proteinuria
P 33	renal failure

skin manifestations

Objective ID

P 34	paleness
P 35	cyanosis
P 36	jaundice (icterus), including neonatal jaundice
P 37	acute swelling and/or changing color of body parts ^E
P 38	skin inflammation
P 39	skin eruptions, skin rash
P 40	acne
P 41	boils
P 42	increased bleeding tendency (hemorrhagic diathesis)
P 43	itching
P 44	skin blisters
P 45	insect sting
P 46	wounds
P 47	burn / cold injury ^E
P 48	electrical trauma ^E
P 49	skin ulcers
P 50	mole (nevus)
P 51	change of skin pigmentation
P 52	skin tumors
P 53	excess hair (hirsutism)
P 54	lack of hair (alopecia) , excess loss of hair
P 55	abnormalities of the nails

4. Problems as Starting Points for Training

head, face, neck

Objective ID

- | | |
|------|---|
| P 56 | headache, recurring / chronic |
| P 57 | headache, sudden / new ^E |
| P 58 | facial pain |
| P 59 | lack of / diminished facial movement |
| P 60 | lockjaw (trismus) |
| P 61 | trauma to the head ^E including cerebral trauma |
| P 62 | face injuries |
| P 63 | toothache |
| P 64 | neck pain |
| P 65 | stiffness of neck |
| P 66 | swelling in the neck |
| P 67 | goiter |

ear, nose, mouth, tongue, throat, voice

Objective ID

- | | |
|------|--|
| P 68 | ear ache |
| P 69 | discharge from ear |
| P 70 | loss of hearing, slow / sudden ^E |
| P 71 | ringing in the ears (tinnitus) |
| P 72 | nose bleed (epistaxis) |
| P 73 | nasal obstruction |
| P 74 | nasal discharge |
| P 75 | snoring |
| P 76 | abnormalities of lips / tongue / mouth |
| P 77 | increased secretion of saliva |
| P 78 | dry mouth / dry throat |
| P 79 | fetor oris (halitosis) |
| P 80 | sore throat |
| P 81 | problems with denture |
| P 82 | alteration of voice (hoarseness / aphonia / dysphonia) |

4. Problems as Starting Points for Training

eyes

Objective ID

P 83	slow loss of vision
P 84	sudden partial / temporary loss of vision / loss of visual field ^E
P 85	squint (strabismus)
P 86	night-blindness
P 87	floating objects in the eye
P 88	light flashes (photopsia)
P 89	double vision (diplopia)
P 90	photophobia
P 91	acute eye pain ^E / burning in the eye
P 92	foreign body / sandy feeling in the eye
P 93	itching eye
P 94	red eye
P 95	tearing eye
P 96	eye obscured by pus or mucus
P 97	blepharospasm
P 98	abnormal eye movements
P 99	abnormalities of pupils
P 100	exophthalmos (proptosis)
P 101	trauma to the eye ^E
P 102	swollen eyes / swollen eyelids

breast, chest, heart, blood pressure, pulse

Objective ID

P 103	breast: sense of weight / pain / tension
P 104	breast: change in size / outline / symmetry
P 105	gynecomastia
P 106	breast lump
P 107	breast: retracted skin / nipple
P 108	breast: discharging nipple, including galactorrhea
P 109	breast: eczema of nipple / areola
P 110	swollen axilla

4. Problems as Starting Points for Training

P 111	wheezing respiration
P 112	dyspnea ^E
P 113	apnea ^E
P 114	increased respiratory frequency
P 115	painful respiration
P 116	cough
P 117	hemoptysis
P 118	tightness of the chest, chest discomfort
P 119	chest pain ^E
P 120	chest trauma ^E
P 121	pleural effusion
P 122	palpitations
P 123	irregular pulse / bradycardia / tachycardia ^E
P 124	pulseless patient ^E
P 125	high blood pressure
P 126	low blood pressure
P 127	vascular injuries

abdomen, stomach, bowels

Objective ID

P 128	food intolerance
P 129	disorder of food passage, including dysphagia
P 130	regurgitation, belching of undigested food
P 131	swallowed foreign body
P 132	bloated abdomen / swollen sensation in abdomen
P 133	abdominal mass
P 134	abdominal trauma ^E
P 135	heartburn (pyrosis)
P 136	epigastric pain
P 137	nausea / vomiting
P 138	abdominal pain ^E
P 139	flatulence
P 140	diarrhea

4. Problems as Starting Points for Training

P 141	constipation
P 142	hematemesis / melena ^E
P 143	altered color or consistency of feces / blood / mucus / pus in feces
P 144	alteration of defecation pattern
P 145	painful defecation
P 146	fecal incontinence (encopresis)
P 147	rectal blood loss
P 148	anal itching / anal pain

pelvic symptoms, urogenital problems

Objective ID

P 149	dysuria
P 150	disordered micturation
P 151	urinary incontinence (enuresis)
P 152	altered appearance of urine
P 153	loin pain ^E
P 154	swelling in groin
P 155	scrotal pain ^E
P 156	scrotal mass / swelling
P 157	urethral discharge
P 158	anomaly of male external genitalia
P 159	painful coitus (dyspareunia)
P 160	erectile / ejaculatory dysfunction
P 161	premenstrual syndrome
P 162	disorders of menstruation / of menstrual cycle
P 163	dysmenorrhea
P 164	pelvic pain
P 165	pelvic mass
P 166	uterine prolapse / pelvic relaxation
P 167	midcycle pain
P 168	vaginal bleeding: intermenstrual / postmenopausal / during pregnancy ^E / post partum
P 169	vaginal discharge
P 170	abnormal female external genitalia

4. Problems as Starting Points for Training

P 171	premature menopause
P 172	complaints related to the menopause, including flushing
P 173	request for contraception
P 174	request for delaying menstruation
P 175	suspicion of pregnancy
P 176	request for genetic counseling
P 177	request for abortion
P 178	infertile couple
P 179	high risk pregnancy
P 180	poor / excessive weight gain in pregnancy
P 181	fever during pregnancy
P 182	hypertension during pregnancy
P 183	abdominal pain during pregnancy
P 184	edema during pregnancy
P 185	lack of fetal movement
P 186	loss of amniotic fluid
P 187	premature labor

bones, joints, back, extremities

Objective ID

P 188	acute pain in limbs ^E
P 189	typical fractures: radius / scaphoid / finger / humerus / clavicle / vertebra / ribs / femur / pelvis / ankle
P 190	laceration, open wound
P 191	traumatic amputation of limb ^E
P 192	wound with delayed healing or infection
P 193	contusion, soft tissue bruising
P 194	distortion of joint: ankle / hand
P 195	dislocation of joint: shoulder / finger
P 196	shoulder trauma
P 197	knee injury
P 198	trauma to the back including spinal cord trauma ^E
P 199	polytrauma ^E
P 200	swollen or painful joints

4. Problems as Starting Points for Training

P 201	deformities of joints
P 202	morning stiffness
P 203	reduction of strength and/or joint motility
P 204	muscular pain (myalgia) / cramps
P 205	back pain
P 206	abnormal gait
P 207	abnormal posture
P 208	exercise-induced leg pain (claudication)
P 209	leg edema / generalized edema
P 210	leg ulcers
P 211	pain / burning / numbness in the feet

newborn, child, adolescent

Objective ID

P 212	irritable / crying infant
P 213	hypotonic / floppy infant
P 214	diaper rash
P 215	problems with breast feeding
P 216	failure to thrive in infancy and childhood
P 217	refusal to eat / drink in infancy and childhood
P 218	enuresis / encopresis in infancy and childhood
P 219	limp / pain in lower extremity in children
P 220	motor / mental retardation / developmental delay in infancy and childhood
P 221	abnormal growth: slowing / acceleration
P 222	sudden infant death
P 223	precocious puberty / delayed puberty
P 224	hyperactive child

elderly persons, aging

Objective ID

P 225	cognitive impairment in elderly person
P 226	elderly patient dependent in basic activities of daily living
P 227	falls in elderly person

4. Problems as Starting Points for Training

P 228 failure to thrive and malnutrition in elderly person

P 229 hearing / vision impairment in elderly person

P 230 immobility, bedridden patient

P 231 mobility impairment in elderly person

P 232 pain in elderly person

P 233 polypharmacy in elderly person

P 234 sexual dysfunction in elderly person

P 235 sleep disorder in elderly person

P 236 social isolation in elderly person

P 237 urinary incontinence in elderly person

disorders of consciousness, balance, orientation, gait, movement

Objective ID

P 238 dizziness / vertigo: acute^E / chronic

P 239 impairment / loss of consciousness, coma^E

P 240 falls

P 241 twitch, convulsion, seizure^E

P 242 acute paralysis, including hemiplegia^E

P 243 tingling (paresthesia)

P 244 change in sense of touch in the skin

P 245 abnormal involuntary movements: tremor / dyskinesia / tic disorders

mental, behavioral and psychological problems

Objective ID

P 246 disorder of speech / of language

P 247 acute change in behavior^E / personality

P 248 obsessive-compulsive symptoms

P 249 aggressive and violent behavior towards others^E

P 250 autoaggressive behavior / risk of suicide^E

P 251 self-neglect

P 252 loss of initiative and interest

P 253 change in emotions and moods

P 254 nervousness / tension / anxiety / acute stress

4. Problems as Starting Points for Training

P 255	agitation
P 256	confusion
P 257	forgetfulness, disorders of memory
P 258	disorder of attention and concentration
P 259	insomnia / sleep-wake cycle disturbances
P 260	abuse of alcohol
P 261	smoking, use of tobacco
P 262	abuse of medicines
P 263	illicit drug abuse and dependence
P 264	suspicion of poisoning ^F

other reasons for medical consultation or problems in medical care

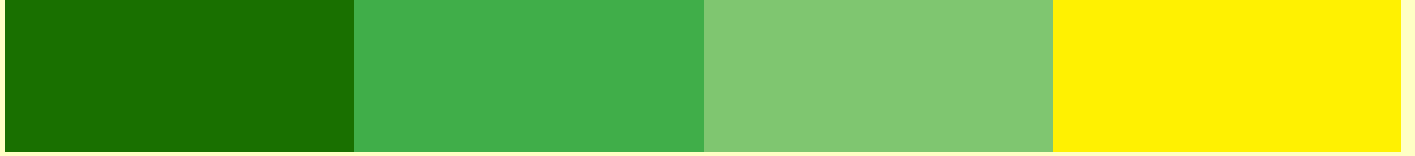
Objective ID

P 265	infant and child immunization / periodic health examination for infants and children
P 266	request for check-up, health examination / for immunization
P 267	counseling / immunizations, before / after trip to foreign (tropical) country
P 268	pre-operative medical evaluation
P 269	request for medical certificate
P 270	psychological / physical / sexual abuse
P 271	fear of cancer / of heart disease / of HIV / of venereal disease / of other serious disease
P 272	terminal disease, the dying patient

psychosocial and interpersonal problems

Objective ID

P 273	loss / death / illness of someone close
P 274	problems at work / concerning work conditions
P 275	absenteeism, non-attendance (school / work)
P 276	financial problems of patient / unemployment
P 277	problems in relationship with parents / partner / child



Chapter 5

General Skills

5. General Skills

5. General Skills

for definition of Levels see Chapter 2

history taking

Objective ID		Level
S 1	clarifying the patient's expectations and requests for the encounter	2
S 2	taking detailed, systematic history of somatic and psychological aspects of symptoms and complaints, the patient's situation, her/his understanding and concerns, social and cultural background and illness experience	2
S 3	taking targeted, hypothesis-directed history	2
S 4	taking history from third party	2
S 5	noting and reacting to nonverbal cues	2
S 6	taking psychiatric history	1
S 7	communicating with and taking history from severely ill or dying patients	1
S 8	taking history in patients with special communication needs, e.g. language or speech problems	1
S 9	drawing a family tree (pedigree)	1
S 10	taking history in travel-related medical problem	1
S 11	taking occupational and workplace history	2
S 12	identifying hazardous behavior and dangerous lifestyle	1
S 13	taking psychoactive substance history	2

information / management

Objective ID		Level
S 14	elaborating a clinical question and searching for its solution in the literature	1
S 15	informing patient and family, colleagues and other professionals on findings and checking understanding	2
S 16	handling phone call from or to patient or third person	1
S 17	breaking bad news to patients and family	1
S 18	giving main information elements necessary to get informed consent	1
S 19	recording findings in patient file	2
S 20	writing letters for transfer or discharge of patient	1
S 21	counseling patients related to lifestyle (diet, physical activity, nutrition, smoking, alcohol, illicit drugs)	1
S 22	prescribing measures in treatment of pain, palliative and end-of-life care	1
S 23	filling-in prescription forms	2

5. General Skills

S	24	filling-in a death certificate	1
S	25	summarizing the main points of diagnoses, active problems and management plans of a patient	2
S	26	diagnostic coding	1
S	27	clarifying with nursing staff monitoring and calling criteria concerning patients	1
S	28	retrieving patient-specific information from clinical data system	1
S	29	working with local / national guidelines and protocols	1
S	30	giving teaching presentations to students and other health professionals	1
S	31	conservative management of self-limiting disease („wait and see“)	1
S	32	perform house call and assess psycho-social, economic and hygienic situation, including risk factors for fall	1
S	33	giving advice about contraception and post-coital interception	1

examination

Objective ID	Level	
S 34	assessment of general condition (habitus and posture, symmetry and mobility of body, nutritional state, mood and mental status)	2
S 35	assessment of vital functions (body temperature, respiration, pulse rate, blood pressure, venous pressure)	2
S 36	assessment of patients with medical emergencies and after trauma	1
S 37	recording of anthropometric data (height, weight, body mass index [BMI], skull circumference, waist and hip circumference)	2
S 38	assessment of skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration)	2
S 39	assessment of basic and instrumental activities of daily living	1
S 40	assessing indication and contraindications for surgical intervention	1
S 41	assessment of attention, thought (form and content), perception, affect and psychomotor behavior	1
S 42	evaluating decision-making capacity in cognitively impaired person	1
S 43	(forensic) examination of persons under the influence of alcohol and/or drugs	1
S 44	clinical diagnosis of death	1
S 45	estimation of time of death (livores, rigor mortis, rectal temperature)	1
S 46	examination of peripheral and central arterial pulses, detection of arterial bruits	2
S 47	examination of lymph node areas	2
S 48	detailed description of skin lesions	2
S 49	description of nails, scalp and visible mucous membranes	2

5. General Skills

S	50	testing for dermatographism	2
S	51	skin inspection with magnifying glass	1
S	52	description of eyelids and of eyelashes	2
S	53	description of upper eyelid after eversion	1
S	54	description of width of palpebral fissure	1
S	55	description of conjunctivae, including fornix	2
S	56	description of sclerae and corneae, including with fluorescein	1
S	57	determination of sensation to touch of cornea	1
S	58	description of pupil, direct reaction to light and convergence	2
S	59	description of iris	1
S	60	recognition and description of nystagmus	1
S	61	description of position and movement of eyes (corneal reflex images, cover test)	1
S	62	description of lens, anterior chamber, media of the eyes (transillumination)	1
S	63	fundoscopy, bringing the fundus into focus	2
S	64	description of optic disc and retinal vessels (discrimination normal-abnormal)	1
S	65	estimation of intra-ocular pressure by palpation	1
S	66	assessment of visual acuity and of visual fields (with Donders confrontation test)	2
S	67	assessment of color vision with Ishihara tables	1
S	68	inspection and palpation of auricle and adjacent region (mastoid)	2
S	69	inspection of external auditory canal and tympanic membrane with otoscope	2
S	70	test of tubal function (motility of ear drum)	1
S	71	hearing tests with whispering, conversational voice and tuning fork	2
S	72	inspection and palpation of nose and face	2
S	73	assessment of nasal obstruction and anterior rhinoscopy	1
S	74	inspection of lips, oral cavity and oral pharynx including teeth, tongue, base of tongue, pharyngeal arches, tonsils, and inspection of excretory ducts of parotid glands (Stenson's duct) and submandibular glands (Wharton's duct)	2
S	75	palpation of floor of the mouth, cheeks, tonsils and base of tongue	1
S	76	inspection and (bimanual) palpation of parotid and submandibular glands	1
S	77	assessment of voice and speech including recognition of aphasia	2
S	78	external inspection and palpation of larynx	2

5. General Skills

S	79	inspection, palpation and auscultation of cervical structures, thyroid, carotid arteries and lymph nodes	2
S	80	palpation of head and cervical spine, testing for mobility, tenderness and neck stiffness	1
S	81	inspection of shape and movement of chest and testing for tenderness on compression and/or percussion	2
S	82	examination of bones, joints and muscles of shoulder girdle	1
S	83	assessment of respiratory chest expansion by inspection, palpation and measurement of chest circumference	2
S	84	palpation of tactile fremitus	2
S	85	palpation of apex beat (heart)	2
S	86	percussion of lungs including respiratory shifting of diaphragm	2
S	87	auscultation of lungs	2
S	88	auscultation of heart	2
S	89	inspection and palpation of breasts including regional lymph nodes	2
S	90	inspection of abdomen	2
S	91	auscultation of abdomen (bowel sounds, bruits)	2
S	92	percussion of abdomen (liver, Traube's area, bladder dullness)	2
S	93	palpation of abdomen (abdominal wall, colon, liver, spleen, aorta, abdominal masses)	2
S	94	eliciting abdominal tenderness, rebound tenderness and guarding	2
S	95	eliciting shifting abdominal dullness	2
S	96	eliciting abdominal fluid thrill	1
S	97	eliciting renal tenderness	2
S	98	testing for inguinal hernia by inspection and palpation (also during increased abdominal pressure) of groin / hernial orifices	1
S	99	external inspection and palpation of (peri)anal area	1
S	100	rectal examination in male (anus, rectum, prostate gland, sacrum) and subsequent inspection of glove	1
S	101	inspection and palpation of penis and scrotum (testes, epididymis, spermatic cord) including transillumination of scrotum	1
S	102	inspection and palpation of female external genitalia (vulva, perineum)	1
S	103	examination of spine, spine mobility and paravertebral muscles standing and supine (kyphosis, scoliosis, lateral tilt, Schober procedure, position-dependent pain)	2
S	104	palpation, percussion and axial compression of spine for tenderness and pain	1
S	105	examination of iliosacral joints and pelvis including muscles (mobility, pain, atrophies)	1
S	106	assessing shape, function, motility and tenderness of upper extremities (elbow, wrist, finger joints and relevant structures and muscles)	1

5. General Skills

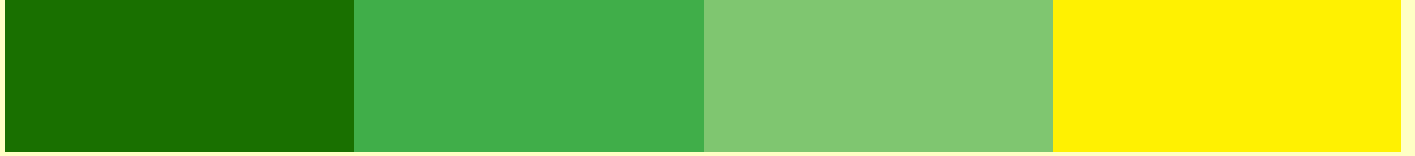
S	107	assessing shape, motility, stability and tenderness of lower extremities and relevant structures and muscles (ankle and knee, meniscus signs, position of patella, patella function and relief)	1
S	108	assessing axes of legs on standing (genu valgum, genu varum)	1
S	109	assessing feet on standing (pes planus, pes valgus)	1
S	110	assessment of capillary pulse and refill	1
S	111	testing for arterial insufficiency (Ratschow-Test)	1
S	112	assessing varicose veins with Trendelenburg test and Perthes test	1
S	113	eliciting tendon reflexes (triceps, biceps, knee, ankle) and plantar response	2
S	114	assessment of function of cranial nerves	1
S	115	assessment of passive muscle stretch, inspection of muscle bulk, muscle tone, muscle strength and involuntary movements	2
S	116	eliciting complex reflexes: abdominal, anal, masseter, snout, grasp	1
S	117	inspection of gait (normal, on heels, hopping in one place)	2
S	118	testing of coordination (finger-to-nose, heel-to-shin, heel-to-toe, diadochokinesis)	2
S	119	Romberg's test, Unterberger's test	1
S	120	recovering of balance after push	1
S	121	assessment of sense of light touch and sense of pain	2
S	122	assessment of sense of temperature, sense of vibration and position sense	1
S	123	assessment of discriminative sensations (e.g. stereognosis)	1
S	124	testing for meningeal irritation	2
S	125	testing for cervical and lumbar radicular signs	1
S	126	assessment of level of consciousness by means of Glasgow coma scale	1
S	127	assessment of orientation in space and time	2
S	128	assessment of memory, Mini Mental Status, Clock test	1
S	129	speculum examination: inspection of vagina and cervix (with simulator)	1
S	130	bimanual examination: palpation of vagina, cervix, uterine corpus, ovaries (with simulator)	1
S	131	rectal examination in female: anus, rectum, palpation of pouch of Douglas and uterus (with simulator)	1
S	132	inspection of abdomen of pregnant woman	1
S	133	recording Apgar score	1

5. General Skills

procedures		
Objective ID		Level
S 134	basic life support for adults: assessment, breathing, circulation, defibrillation (Automatic External Defibrillation) until arrival of professional emergency medical personnel (simulator)	2
S 135	advanced cardiac life support (basic cardiac rhythm algorithms, with simulator)	1
S 136	assessment and initial care of external injuries (wounds, bleeding, burns, sprains, dislocations, fractures)	1
S 137	assessment of trauma patients according to the ABCDE (advanced trauma life support - ATLS)	1
S 138	transport of casualty	1
S 139	stopping hemorrhage (direct pressure, pressure point, pressure bandage, tourniquet)	1
S 140	using appropriate hand hygiene at workplace	2
S 141	intravenous injection and cannulation	1
S 142	subcutaneous and intramuscular injection	1
S 143	pre-operative preparation of operative field for minor surgery, asepsis and antisepsis	1
S 144	infiltration anesthesia	1
S 145	venepuncture	2
S 146	finger prick	2
S 147	patient instruction for mid-stream urine sample collection	1
S 148	performing and reading of urine stick test	2
S 149	preparation and examination of urinary sediment	1
S 150	taking an electrocardiogram at rest	1
S 151	spirometry	1
S 152	measurement of expiratory peak flow	2
S 153	using and giving instructions to use metered dose inhalers, spacers and nebulizers	1
S 154	removal of wound sutures	2
S 155	application of bandage	1
S 156	taking a throat swab	2
S 157	application of eye dressing	1
S 158	instillation of eye drops	2
S 159	application of eye ointment	2
S 160	flooding and rinsing ocular tissue	1
S 161	ear irrigation	1

5. General Skills

S	162	wound cleaning	1
S	163	stitching of skin incisions and lacerations	1
S	164	application of a sling	1
S	165	preparation to watch / to assist in operating theatre (scrub-up, gown up, put on sterile gloves, etc.)	2
S	166	attendance in theatre at various operations	2
S	167	clamping of umbilical cord / separation of placenta from child	1
S	168	assessment of fetal heart rate during pregnancy	1



Chapter 6

Discipline Related Objectives

6.1 Internal Medicine

6.1 Internal Medicine (IM)

Clinical Pictures

auto-immune, rheumatological and skeletal disorders

Objective ID		Level	D	T	E	P	G
C IM 1	achondroplasia [C PE 105]	1					
C IM 2	antiphospholipid antibody syndrome	1					
C IM 3	arthritis, monoarticular	2	D				
C IM 4	arthritis, rheumatoid	2	D				G
C IM 5	arthritis, juvenile chronic [C PE 176]	1					
C IM 6	arthritis, septic	2			E		
C IM 7	arthritis, viral	2					
C IM 8	arthritis, psoriatic	2					
C IM 9	arthritis reactive, Reiter's disease (arthritis, urethritis and conjunctivitis)	2					
C IM 10	Behcet's disease	1					
C IM 11	bone metastases [C SU 68]	2	D				
C IM 12	carpal tunnel syndrome [C SU 234]	2	D				G
C IM 13	Dupuytren's contracture [C SU 235]	2	D				G
C IM 14	erythema multiforme and Stevens-Johnson syndrome [C DE 34]	1					
C IM 15	erythema nodosum [C DE 32]	2	D				G
C IM 16	fibromyalgia	2					G
C IM 17	frozen shoulder, periarthropathia humeroscapularis [C SU 245]	2	D				G
C IM 18	gout	2	D	T			G
C IM 19	pseudogout	2					
C IM 20	Marfan syndrome [C PE 169]	2					
C IM 21	Morton neuralgia	1					
C IM 22	osteogenesis imperfecta [C PE1 09]	1					
C IM 23	osteomalacia	2	D	T			
C IM 24	osteomyelitis, acute / chronic [C SU 75]	2					
C IM 25	osteoporosis [C IM 326]	2	D	T		P	G
C IM 26	Paget's disease of bone, osteitis deformans	1					
C IM 27	polymyalgia rheumatica	2	D	T			G
C IM 28	temporal arteritis, giant cell arteritis	2	D	T			G

6.1 Internal Medicine

C IM 29	polymyositis / dermatomyositis [C DE 39]	1			
C IM 30	myositis, infectious	1			
C IM 31	osteoarthritis deformans	2	D	T	G
C IM 32	epiphyseal instability / epiphysiolysis [C SU 71]	1			
C IM 33	aseptic necrosis of bone, including Osgood-Schlatter / Perthes [C SU 74, C PE 108]	2			
C IM 34	epicondylitis lateral / medial [C SU 246]	2	D		G
C IM 35	prepatellar / olecranon bursitis [C SU 270]	2	D		G
C IM 36	periarthropathia coxae	1			G
C IM 37	chondromalacia patellae	2	D		G
C IM 38	genu varum / genu valgum [C SU 268]	2	D		
C IM 39	Achilles tendinitis [C SU 276]	2	D		G
C IM 40	pes planus [C SU 278]	2	D		G
C IM 41	congenital foot deformity [C SU 252, C PE1 30]	1			
C IM 42	purpura, Henoch-Schonlein (subgroup of hypersensitivity vasculitides) [C PE 172, C DE 38]	1			
C IM 43	reflex sympathetic dystrophy (Sudeck), complex regional pain syndrome [C SU 78]	2			G
C IM 44	rheumatic fever [C PE 21]	2	D		P
C IM 45	intervertebral disc, hernia of [C SU 57]	2		E	G
C IM 46	low back pain, common	2			G
C IM 47	spinal deformation (kyphosis, scoliosis, lordosis, including juvenile kyphosis = Scheuermann's disease) [C SU 58, C PE1 11]	2	D		G
C IM 48	ankylosing spondylitis	2			
C IM 49	septic spondylitis, spondylodiscitis	2		E	
C IM 50	spinal canal stenosis (cervical, lumbar) [C SU 64]	2	D		
C IM 51	spondylarthrosis, spondylosis [C SU 59]	2			G
C IM 52	spondylolisthesis [C SU 61]	2			
C IM 53	spondylolysis [C SU 62]	1			
C IM 54	Sjögren's disease (sicca syndrome with arthritis, LE, scleroderma) [C OT 79]	1			
C IM 55	systemic sclerosis, progressive (scleroderma) [C DE 42]	1			
C IM 56	lupus erythematosus systemic [C PE 178]	2			
C IM 57	polyarteritis nodosa / Churg-Strauss syndrome / Takayasu's disease	1			
C IM 58	Wegener's granulomatosis	1			

6.1 Internal Medicine

hematological disorders

Objective ID		Level	D	T	E	P	G
C IM 59	agranulocytosis	2	D		E		
C IM 60	anemia from iron deficiency [C PE 48]	2	D	T			G
C IM 61	anemia associated with chronic diseases	2					
C IM 62	anemia hemolytic	2					
C IM 63	anemia, aplastic / hypoplastic	1					
C IM 64	anemia, macrocytic	2	D	T			G
C IM 65	coagulation, disseminated intravascular	1					
C IM 66	hemoglobinopathies [C PE 50]	1					
C IM 67	hemophilia A+B	2					
C IM 68	lymphomas (Hodgkin's / non-Hodgkin) [C PE 52]	2					
C IM 69	leukemia, acute [C PE 51]	2					
C IM 70	leukemia, chronic lymphocytic	2					
C IM 71	leukemia, chronic myeloid	2					
C IM 72	myeloma	2					
C IM 73	polycythemia	2					
C IM 74	thrombocytopenia	2	D				
C IM 75	thrombocytosis	1					
C IM 76	Von Willebrand's disease	1					
C IM 77	Waldenström's macroglobulinemia	1					

immunological / allergic reactions

Objective ID		Level	D	T	E	P	G
C IM 78	anaphylactic reaction	2	D	T	E		

endocrinological and metabolic disorders

Objective ID		Level	D	T	E	P	G
C IM 79	acromegaly	1					
C IM 80	adreno-cortical failure in adults	2			E		
C IM 81	Cushing's syndrome, hypercortisolism [C SU 227, C PE 60]	2					
C IM 82	diabetes insipidus [C PE 62]	1					
C IM 83	diabetes mellitus type 1	2	D	T			G

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C IM 84	diabetes mellitus type 2	2	D	T		P	G
C IM 85	diabetes mellitus, acute complications of	2	D	T	E		G
C IM 86	diabetes mellitus, chronic complications of	2	D	T		P	G
C IM 87	hypoglycemia [C PE 67]	2	D	T	E		G
C IM 88	hyperaldosteronism, primary including Conn's syndrome [C SU 229]	2					
C IM 89	pheochromocytoma [C SU 230]	2					
C IM 90	hyperparathyroidism [C SU224]	1					
C IM 91	hypoparathyroidism [C SU 225]	1					G
C IM 92	hyperthyroidism in adults [C SU 223]	2	D				G
C IM 93	hypothyroidism in adults	2	D	T			G
C IM 94	thyroiditis	2					
C IM 95	goiter, nodular / diffuse, including solitary nodules and thyroid carcinoma [C SU 22]	2				P	
C IM 96	hypogonadism	1					
C IM 97	pituitary failure [C PE 64]	1					
C IM 98	pituitary tumors [C SU 231]	1					
C IM 99	multiple endocrine neoplasia syndromes (MEN-syndromes) [C SU 226]	1					
C IM 100	dyslipoproteinemia / hyperlipoproteinemia	2		T		P	
C IM 101	obesity [C PE 168]	2	D			P	G
C IM 102	tumor with ectopic production of hormones	1					
C IM 103	porphyrias	1					

neurological disorders

Objective ID		Level	D	T	E	P	G
C IM 104	seizures, absence / complex partial (non-convulsive seizure manifestations)	2					
C IM 105	seizures, generalized	2	D		E		G
C IM 106	status epilepticus	2	D		E		
C IM 107	seizures, focal epileptic	2					
C IM 108	AIDS, neurological complications	2					
C IM 109	alcohol intoxication [C PS 31]	2	D		E		G
C IM 110	amyotrophic lateral sclerosis	1					
C IM 111	acute cerebellar syndromes (gait ataxia, limb ataxia, nystagmus, abnormal Romberg)	1					

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C IM 112	autonomic nervous system, disorders of (including secondary, side effect of drugs)	1			
C IM 113	paroxysmal benign positional vertigo (cupulo- and canalolithiasis)	2			G
C IM 114	brain death	1			
C IM 115	transverse myelitis and related (non traumatic) myelopathies	1			
C IM 116	spinal cord, acute transverse lesion of (including Brown-Séguard) [C SU 65]	2			E
C IM 117	cauda equina syndrome	2			E
C IM 118	bulbar palsy	1			
C IM 119	cerebral palsy [C PE 83]	2			
C IM 120	cranial nerves disorders	1			
C IM 121	peripheral palsy / paralysis of facial nerve (idiopathic, borreliosis, viral, traumatic, neoplastic) [C SU 46, C OT 90]	2	D		G
C IM 122	borreliosis, Lyme disease [C DE 5]	2	D		G
C IM 123	prion diseases, Creutzfeldt-Jakob's disease	1			
C IM 124	degenerative nervous system disease, subacute combined (dementia and other neurological signs)	1			
C IM 125	encephalopathies (metabolic, endocrine, autoimmune, mitochondrial)	1			
C IM 126	extradural hemorrhage	2			
C IM 127	subdural hemorrhage	2			
C IM 128	subarachnoid hemorrhage [C SU 26]	2			E
C IM 129	intracerebral hemorrhage [C SU 25]	2			E
C IM 130	transient ischemic attack (TIA)	2	D		E G
C IM 131	cerebral infarction including extracranial obstruction [C SU 107]	2			E P G
C IM 132	cerebral venous thrombosis (e.g.thrombosis of the sinus sagitalis superior)	2			E
C IM 133	raised intracranial pressure	2			
C IM 134	prefrontal neuropsychiatric syndromes	1			
C IM 135	Guillain-Barré syndrome and related disorders	2			E
C IM 136	herpes simplex-encephalitis	1			
C IM 137	Horner's syndrome	1			
C IM 138	Huntington's disease	1			
C IM 139	hydrocephalus with normal pressure	2	D		
C IM 140	lead poisoning	1			
C IM 141	Menière's disease [C OT 28]	2	D		G
C IM 142	mental retardation [C PE 261, C PS 4]	1			

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C IM 143	glioma	1			
C IM 144	meningioma	1			
C IM 145	metastases in brain	2			
C IM 146	spinal tumors including metastases [C SU 66]	2			
C IM 147	brain abscess [C PE 181]	1			
C IM 148	meningitis / encephalitis in adults	2		E	P G
C IM 149	migraine and related disorders (cluster headache, migraine aura without headache)	2	D		G
C IM 150	dementia in Alzheimer's disease [C IM 332, C PS 18]	2			G
C IM 151	dementia, vascular (including multi-infarct dementia, subcortical dementia) [C IM 333, C PS 19]	2			G
C IM 152	dementia of frontal type [C IM3 35, C PS 20]	1			
C IM 153	Lewy body dementia [C IM 334, C PS 21]	1			
C IM 154	dementia in neurological diseases [C PS 22]	1			
C IM 155	multiple sclerosis	2			
C IM 156	muscular dystrophy	1			
C IM 157	myasthenia gravis and related disorders	2			
C IM 158	narcolepsy	1			
C IM 159	spina bifida / neural tube defects (including myelomeningocele) [C SU 63, C PE 140]	2			P
C IM 160	neurofibromatosis (Recklinghausen's disease) [C PE 88, C DE 43]	1			
C IM 161	neurogenic bladder	1			
C IM 162	polyneuropathy	2	D		G
C IM 163	neuropathies, peripheral	1			
C IM 164	brachial plexus, neuropathy of	1			
C IM 165	brachial plexus and peripheral nerves, injury of	1			
C IM 166	peroneal palsy	2	D		
C IM 167	radial nerve palsy	1			
C IM 168	ulnar nerve palsy	1			
C IM 169	radicular syndromes, cervical / lumbar	2	D		G
C IM 170	Parkinsonian syndromes [C IM 340]	2	D		G
C IM 171	Parkinson's disease	2	D		G
C IM 172	intoxication by psychotropic and illicit drugs (including heroin, cocaine, amphetamine) [C PS 30, C FM 30]	2	D	T E	G
C IM 173	myopathies, chronic / subacute	1			

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C IM 174	restless legs	1					G
C IM 175	consciousness, disturbances of (Glasgow-Coma Scale) [C SU 44, C PE 5]	2	D		E		G
C IM 176	syphilis [C DE 23]	2	D	T		P	G
C IM 177	tension headache	2	D	T			G
C IM 178	head trauma (minor traumatic brain injury [mTBI] / concussion / contusion / epidural hematoma / subdural hematoma) [C SU 24]	2			E		
C IM 179	tremor, essential and symptomatic	1					G
C IM 180	trigeminal neuralgia	2					
C IM 181	vascular encephalopathy	1					
C IM 182	vestibular function, sudden loss of (vestibular neuritis) [C OT 30]	1			E		G
C IM 183	brain stem infarction (Wallenberg's syndrome)	1					
C IM 184	Wernicke-Korsakoff's encephalopathy, organic amnesic syndrome [C PS 25]	2		T	E		
C IM 185	whiplash injury [C SU 55]	1					
C IM 186	somnambulism, night terrors and nightmares (parasomnia) [C PE 102, C PS 67]	1					
C IM 187	organic confusional state [C PS 24]	2			E		

vascular diseases

Objective ID		Level	D	T	E	P	G
C IM 188	ventricles, aneurysm of	1					
C IM 189	aneurysm of thoracic / of abdominal aorta (including dissection and rupture) [C SU 110]	2			E		
C IM 190	aortic regurgitation [C SU 104]	2					
C IM 191	aortic stenosis [C SU 105]	2					G
C IM 192	mitral regurgitation [C SU 101]	2					G
C IM 193	mitral stenosis [C SU 102]	2					
C IM 194	tricuspid regurgitation [C SU 103]	2					
C IM 195	arterial embolism [C SU 109, C GO 71]	2					
C IM 196	deep vein thrombosis [C SU 119, C GO 69]	2	D	T		P	G
C IM 197	thrombophlebitis [C GO 68]	2	D	T			G
C IM 198	thrombosis, arterial	2	D		E		G
C IM 199	atherosclerosis (disseminated)	2	D			P	G
C IM 200	angina pectoris	2	D	T	E	P	G
C IM 201	angina pectoris, unstable	2	D	T	E	P	G

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C IM 202	myocardial infarction	2	D	T	E	P	G
C IM 203	claudication	2	D			P	G
C IM 204	cardiac arrhythmias	2					
C IM 205	sinus tachycardia	2	D				G
C IM 206	supraventricular premature beat	2	D				G
C IM 207	supraventricular tachycardia in adults	2	D				
C IM 208	atrial fibrillation	2	D	T	E		G
C IM 209	atrial flutter	2	D				
C IM 210	atrio-ventricular heart block, complete	2	D		E		G
C IM 211	ventricular tachycardia	2	D	T	E		
C IM 212	ventricular fibrillation	2	D	T	E		
C IM 213	ventricular premature beat	2	D				G
C IM 214	bundle branch block	2					G
C IM 215	cardiogenic shock	2	D		E		
C IM 216	atrial septal defect [C PE 18]	1					
C IM 217	ventricular septal defect [C PE 19]	1					
C IM 218	cardiomyopathy [C PE 22]	1					
C IM 219	cardio-respiratory arrest	2	D	T			G
C IM 220	coarctation of the aorta	1					
C IM 221	endocarditis, bacterial	2	D		E	P	G
C IM 222	heart failure, left / right ventricular failure	2	D	T	E		G
C IM 223	hypertension in adults	2	D	T			G
C IM 224	hypertension, secondary	2					
C IM 225	myocarditis	1					
C IM 226	pericarditis	2	D				
C IM 227	pulmonary hypertension, cor pulmonale	1					
C IM 228	Raynaud's disease / Raynaud's phenomenon [C SU 114]	2	D				
C IM 229	shock	2	D	T	E		G

respiratory disorders

Objective ID		Level	D	T	E	P	G
C IM 230	sarcoidosis	2					
C IM 231	adult respiratory distress syndrome (ARDS)	1					

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C IM 232	bronchial asthma, acute / chronic [C PE 32]	2	D	T	E	G
C IM 233	atelectasis	2				
C IM 234	bronchiectasis	1				
C IM 235	chronic obstructive pulmonary disease (COPD), bronchitis chronic	2	D	T		P G
C IM 236	bronchitis, acute	2	D	T		G
C IM 237	empyema (pleura)	2				
C IM 238	hyperventilation syndrome	2	D	T	E	G
C IM 239	lung abscess	1				
C IM 240	lung carcinoma [C SU 94]	2				P
C IM 241	metastases in lung [C SU 95]	2				
C IM 242	lung disease, interstitial	1				
C IM 243	lung emphysema	2	D			P G
C IM 244	lung fibrosis	1				
C IM 245	lung infarction	2				
C IM 246	mediastinitis	1				
C IM 247	mesothelioma	1				
C IM 248	pleurisy	2	D			
C IM 249	pneumonia, community acquired, in adults	2	D	T		P G
C IM 250	pneumothorax, including tension pneumothorax [C SU 88]	2	D	T	E	
C IM 251	pulmonary disease, allergic	1				
C IM 252	pulmonary embolism [C SU 108, C GO 70]	2				P
C IM 253	respiratory failure, hypoventilation	2	D		E	
C IM 254	sleep apnea syndrome obstructive / central [C OT 72]	2				G
C IM 255	tracheitis, acute / chronic [C PE 201, C OT 94]	2		T		G

gastrointestinal disorders

Objective ID		Level	D	T	E	P	G
C IM 256	stomatitis, recurrent aphthous [C OT 51]	2	D				G
C IM 257	candidiasis, mouth / throat (thrush) [C SU 30, C PE 195, C OT 46]	2	D	T			G
C IM 258	stomatitis, herpetic [C PE 196, C OT 47]	2		T			
C IM 259	achalasia [C SU 124]	1					
C IM 260	reflux esophagitis including Barrett's esophagus	2		T			G
C IM 261	tumors of esophagus, malignant [C SU 131]	2				P	

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C IM 262	esophageal varices [C SU 127, C OT 81]	2		
C IM 263	esophagus, spasm of	1		
C IM 264	Mallory-Weiss syndrome (esophagus, mucosal tear) [C SU 132]	1		
C IM 265	hernia of diaphragm (including hiatal hernia) in adults [C SU 97]	2		G
C IM 266	gastritis	2	T	G
C IM 267	peptic ulcer, including helicobacter infection [C SU 133]	2	T	
C IM 268	bleeding, gastric	2	D	E
C IM 269	tumors, gastric [C SU 141]	2		
C IM 270	perforation of stomach	2		E
C IM 271	pyloric stenosis, acquired	1		
C IM 272	duodenal ulcer, including perforation [C SU 135]	2		
C IM 273	carcinoid tumors [C SU 143]	1		
C IM 274	celiac disease [C PE 75]	2		P G
C IM 275	colitis / enterocolitis / gastroenteritis infectious [C PE 212]	2	D	E G
C IM 276	colon, carcinoma of [C SU 148]	2		P G
C IM 277	colon, polyps [C SU 152]	2		
C IM 278	ischemic colitis	1		
C IM 279	inflammatory bowel disease (including ulcerative colitis, Crohn's disease) [C SU 155]	2		
C IM 280	diverticulosis / diverticulitis [C SU 149]	2		G
C IM 281	abdominal pain, chronic / irritable bowel syndrome	2		G
C IM 282	angiodysplasia of colon	1		
C IM 283	ileus (mechanical / paralytic / proximal / distal) [C SU 193]	2	D	E
C IM 284	malabsorption	2		
C IM 285	megacolon, toxic	1		
C IM 286	polyposis of colon, familial [C SU 153]	2		
C IM 287	proctitis [C SU 161]	2		
C IM 288	pseudomembraneous colitis [C SU 154]	2	D	
C IM 289	rectal prolapse / anal prolapse [C SU 162]	2	D	E
C IM 290	anal fissures [C SU 157, C PE 79, C DE 79]	2	D	G
C IM 291	hemorrhoids [C SU 160, C DE 80]	2	D	G
C IM 292	typhoid fever	2		
C IM 293	Zollinger-Ellison syndrome [C SU 142]	1		

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disorders of liver, gall bladder and pancreas

Objective ID		Level	D	T	E	P	G
C IM 294	hepatitis, viral	2	D			P	G
C IM 295	hepatitis, alcoholic	2				P	
C IM 296	hepatitis chronic	2					
C IM 297	cirrhosis of the liver [C SU 165]	2	D			P	G
C IM 298	liver abscess [C SU 164]	1					
C IM 299	echinococcosis [C SU 166]	2					
C IM 300	liver tumor, primary [C SU 169]	1					
C IM 301	liver tumor, secondary (metastases) [C SU 168]	2					
C IM 302	portal hypertension / ascites [C SU 170]	2	D			P	
C IM 303	Budd-Chiari syndrome (occlusion of hepatic vein)	1					
C IM 304	liver failure	2					
C IM 305	cholecystitis, acute [C SU 173]	2			E		
C IM 306	chole(doch)lithiasis including biliary colic [C SU 174]	2					G
C IM 307	carcinoma of gallbladder / of bile ducts [C SU 175]	1					
C IM 308	pancreatitis, acute [C SU 180]	2	D		E		G
C IM 309	pancreatitis, chronic (including pseudocysts) [C SU 309]	2				P	
C IM 310	pancreatic carcinoma [C SU 179]	2					
C IM 311	endocrine pancreatic tumors [C SU 228]	1					
C IM 312	cystic fibrosis in adults	1					

renal disorders

Objective ID		Level	D	T	E	P	G
C IM 313	carcinoma of bladder	2					
C IM 314	urinary tract infection (cystitis / urethritis / pyelonephritis) in adults [C SU 202]	2	D	T			G
C IM 315	glomerulonephritis, acute	2					
C IM 316	glomerulonephritis, chronic	2					
C IM 317	Goodpasture's syndrome	1					
C IM 318	nephritis, interstitial	1					
C IM 319	nephrotic syndrome in adults	2	D				
C IM 320	polycystic kidney disease	1					
C IM 321	urolithiasis / renal colic in adults [C SU 208]	2	D	T	E		G

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C IM 322	renal failure, acute in adults	2	D		E		
C IM 323	renal failure, chronic in adults	2	D				G

geriatrics

Objective ID		Level	D	T	E	P	G
C IM 324	hypertension in old age	2	D	T			G
C IM 325	decubital ulcer [C SU 14, C DE 83]	2	D			P	G
C IM 326	osteoporosis [C IM 25]	2	D	T		P	G
C IM 327	fractures of hip [C SU 256]	2			E		G
C IM 328	spine, fractures / dislocations of [C SU 56]	2			E		
C IM 329	degeneration of macula (eye), age dependent [C OP 35]	2					G
C IM 330	presbycusis [C OT 23]	2	D				G
C IM 331	sexual dysfunction [C PS 68]	2					
C IM 332	dementia in Alzheimer's disease [C IM 150, C PS 18]	2					G
C IM 333	dementia, vascular (including multi-infarct dementia, subcortical dementia) [C IM 151, C PS19]	2					G
C IM 334	Lewy body dementia [C IM 153, C PS 21]	1					
C IM 335	dementia of frontal type [C IM 152, C PS 20]	1					
C IM 336	depressive episode in adults [C PS 42]	2	D	T	E		G
C IM 337	recurrent depressive disorder in adults [C PS 47]	2	D		E		G
C IM 338	depression in adults with somatic symptoms [C PS 44]	2			E		G
C IM 339	delirium [C PS 23]	2	D		E		
C IM 340	Parkinsonian syndromes [C IM 170]	2	D				G

infectious diseases, not mentioned elsewhere

Objective ID		Level	D	T	E	P	G
C IM 341	AIDS in adults	2				P	G
C IM 342	amebiasis	1					
C IM 343	cat scratch disease	1					
C IM 344	cholera	1					
C IM 345	cytomegaly	2					
C IM 346	diarrheal diseases, acute infectious (including traveler's diarrhea)	2	D	T		P	G
C IM 347	erysipelas [C DE 6]	2	D	T	E		G
C IM 348	parasitic bowel infestations (giardia, toxocaria, entameba, helminths)	2					

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C IM 349	herpes simplex [C DE 2]	2	D	T		G
C IM 350	varicella / herpes zoster [C PE 207, C DE 3]	2	D	T	P	G
C IM 351	mononucleosis, infectious [C PE 208, C OT54]	2	D	T		G
C IM 352	influenza	2	D	T	P	G
C IM 353	lymphangitis, acute / lymphadenitis, acute [C SU 122, C PE 188, C DE 84]	2	D	T		G
C IM 354	malaria	2			E	P
C IM 355	rickettsioses	1				
C IM 356	schistosomiasis	1				
C IM 357	tetanus [C SU 6, C PE 211]	2	D		E	P
C IM 358	toxoplasmosis	2	D		P	G
C IM 359	tuberculosis	2			P	G
C IM 360	leptospirosis, Weil's disease	1				
C IM 361	nosocomial infections [C SU 5]	2			P	
C IM 362	infections in the immunocompromised host	2	D		E	G
C IM 363	sepsis	2	D		E	G
C IM 364	staphylococcal / streptococcal toxic shock syndrome	1				
C IM 365	clostridium difficile infection	1			P	
C IM 366	Whipple's disease	1				
C IM 367	brucellosis	1				
C IM 368	dengue fever	1				
C IM 369	filariasis	1				
C IM 370	botulism	1				
C IM 371	poliomyelitis [C PE 205]	1			P	G
C IM 372	rabies	1				

poisonings

Objective ID		Level	D	T	E	P	G
C IM 373	carbon monoxide poisoning	2	D	T	E		
C IM 374	paracetamol overdose / intoxication	2	D		E		

vitamin deficiency

Objective ID		Level	D	T	E	P	G
C IM 375	vitamine deficiencies	2	D	T		P	G

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Further Knowledge

geriatrics

Objective ID		Level	D	T	E	P	G
C IM 376	demography and epidemiology of ageing (on global, national, and regional level)	1					
C IM 377	prescribing in the elderly (pharmacokinetic and dynamic variables and principles of adaptation of dosing)	2					
C IM 378	elderly, abuse and neglect of	2	D				G
C IM 379	long-term institutional and home care, principles of	1					G
C IM 380	multimorbidity in old age, concept and consequences of	1					G
C IM 381	old age, nonspecific or atypical presentation of disease	2					G
C IM 382	rehabilitation in the disabled elderly (role of)	1					G

infectious diseases

Objective ID		Level	D	T	E	P	G
C IM 383	antibiotic resistance	1					
C IM 384	list of reportable infectious diseases	1					G

end of life issues

Objective ID		Level	D	T	E	P	G
C IM 385	direct euthanasia / indirect euthanasia / assisted suicide	1					
C IM 386	palliative sedation	1					
C IM 387	advance directives	1					G

information / management

Objective ID		Level	D	T	E	P	G
C IM 388	management of polymorbid and chronic patient	1					G
C IM 389	assessment of work capacity	1					G
C IM 390	prescription of physical therapy [C SU 307]	1					G
C IM 391	prescription of occupational therapy	1					G
C IM 392	assessment of aptitude to drive (Fahreignung / aptitude générale à conduire) including minimal medical standards for drivers [C FM 56]	1					G
C IM 393	assessment of aptitude to dive	1					G
C IM 394	logistics of laboratory work-up in outpatient practice, preanalytics	1					G

6.1 Internal Medicine

examination

Objective ID		Level	D	T	E	P	G
C IM 395	International Classification of Functioning, Disability and Health (ICF)	1					G
C IM 396	establishing the cause and manner of death at the place of death <i>[C FM 43]</i>	1					G

procedures

Objective ID		Level	D	T	E	P	G
C IM 397	rapid streptococcal test	1					G
C IM 398	assisted ventilation, continuous positive airway pressure (CPAP), intermittent positive pressure ventilation ((IPPV), pressure controlled ventilation (PCV) <i>[C SU3 11]</i>	1					
C IM 399	Heimlich manoeuvre	1					
C IM 400	periarticular injection	1					G
C IM 401	intraarticular injection	1					G
C IM 402	insertion of bladder catheter in male and female (transurethral and suprapubic) <i>[C SU 322, C PE 281]</i>	1					G
C IM 403	inserting a nasogastric tube <i>[C SU 323]</i>	1					
C IM 404	application of enema <i>[C SU 325, C PE 283]</i>	1					G
C IM 405	preparation and examination of blood film	1					G
C IM 406	preparation and assessment of Gram stain <i>[C GO 102, C DE 89]</i>	1					
C IM 407	bone marrow aspiration <i>[C PE 285]</i>	1					
C IM 408	joint fluid aspiration <i>[C SU 327]</i>	1					G
C IM 409	synovial biopsy and analysis (cell count, crystals, gram)	1					
C IM 410	biopsy of muscle, kidney, liver <i>[C SU 314]</i>	1					G
C IM 411	gastroduodenoscopy, colonoscopy, bronchoscopy <i>[C SU 313]</i>	1					G
C IM 412	fine needle aspiration for cytology <i>[C OT 137]</i>	1					G
C IM 413	arterial puncture	1					
C IM 414	puncture of pleural and peritoneal space, aspiration of fluid <i>[C SU 326, C PE 286]</i>	1					G
C IM 415	lumbar puncture <i>[C SU 329, C PE284]</i>	1					
C IM 416	hemodialysis / peritoneal dialysis / renal transplantation	1					
C IM 417	electroencephalogram (EEG)	1					
C IM 418	electromyogram (EMG)	1					G
C IM 419	exercise electrocardiogram	1					G
C IM 420	24-hour electrocardiogram (Holter ECG)	1					G
C IM 421	assessing peripheral arterial circulation by Doppler occlusion pressure <i>[C SU 308]</i>	1					G

6.2 Pharmacotherapy

6.2 Pharmacotherapy (PT)

Further Knowledge

interindividual variability and individualized treatment

Objective ID		Level	D	T	E	P	G
C PT 1	pharmacological concept: potency of drugs; efficacy; therapeutic index	1					
C PT 2	pharmacokinetic parameters in the adult, loading and maintenance doses under normal conditions	2					
C PT 3	drug administration routes and pharmaceutical forms	1					
C PT 4	therapeutic drug monitoring (indications, modalities, principles of dosing adaptations, timing and blood sampling, detection of incorrect laboratory results)	1					
C PT 5	prescribing during pregnancy and breast feeding (safe drugs for common conditions, risks of drugs)	2					
C PT 6	prescribing in infancy	1					
C PT 7	principles of prescribing in childhood based on body weight and body surface area	2					
C PT 8	prescribing in the elderly (pharmacokinetic and dynamic variables and principles of adaptation of dosing)	2					
C PT 9	drug-drug interactions (basic pharmacokinetic and pharmacodynamic mechanisms, common drug interactions, use of reference CYP P450 tables)	2					
C PT 10	influence on drug metabolism of gender, diet, tobacco and alcohol, naturally occurring and polluting substances (including enzyme induction and inhibition)	1					
C PT 11	ways of influences of genomics on pharmacokinetics and pharmacodynamics and its association with interindividual variability in efficacy and toxicity	1					
C PT 12	prescribing in renal disease (pharmacokinetic changes, drug dosing, adaptations depending on the creatinine clearance)	2					
C PT 13	prescribing in liver disease (pharmacokinetic and pharmacodynamic changes, drugs best avoided, hepatotoxic drugs, estimation of initial and maintenance doses according to hepatic drug clearance)	1					
C PT 14	prescribing in heart failure (pharmacokinetic and pharmacodynamic changes, optimal route of drug administration, drugs best avoided in cardiac disease cardiotoxic drugs, adaptation of initial and maintenance doses in heart failure)	1					

drug safety, prevention and identification of adverse events

Objective ID		Level	D	T	E	P	G
C PT 15	adverse drug events (frequency, classification, detection and prevention, risk factors, drug allergy, drug toxicity, importance of toxic drug metabolites, information to patients)	2					
C PT 16	definition of pharmacovigilance (causality assessment, reporting)	1					

6.2 Pharmacotherapy

C PT 17	main antidotes in drug poisoning	2
C PT 18	supportive measures in drug poisoning and measures to enhance drug clearance	1
C PT 19	common acute intoxications (sedatives, antidepressants, opiates, opioids, paracetamol, aspirin)	2
C PT 20	drug approval, roles of regulatory (cantonal and federal) authorities	1
C PT 21	prescribing, legal principles	2

principles of therapeutics

Objective ID		Level	D	T	E	P	G
C PT 22	principles for choice of a drug in a class	1					
C PT 23	criteria for status as over-the-counter drug	1					
C PT 24	self-medication (frequency, symptoms and diseases suitable for, advice to patients)	1					
C PT 25	placebo effect (mechanism, importance in clinical research, ethical implications)	2					
C PT 26	development of new drugs (preclinical development; phases of clinical trials)	1					
C PT 27	pharmacoeconomics: Defined Daily Dose (DDD), pricing and cost effectiveness of drugs	1					
C PT 28	pharmaceutical market (industrial, economic, legal and political factors)	1					
C PT 29	drug reimbursement (BAG-OFSP drug list)	1					
C PT 30	drug efficacy, efficiency and effectiveness, definition of therapeutic progress (based on drug usefulness vs. existing drugs)	1					
C PT 31	sources of information on drug treatment	2					
C PT 32	drug-marketing (innovative molecule, me-too molecule, new indication for established drug, new formulation, new treatment methods, biased information)	1					

6.3 Surgery

6.3 Surgery (SU)

Clinical Pictures

inflammation and infection

Objective ID	Level	D	T	E	P	G
C SU 1 bites by animal	2	D				G
C SU 2 fasciitis	2					
C SU 3 gangrene	2	D				
C SU 4 gas gangrene	2	D		E	P	
C SU 5 nosocomial infections [C IM 361]	2				P	
C SU 6 tetanus [C IM 357, C PE 211]	2	D		E	P	

skin and soft tissues

Objective ID	Level	D	T	E	P	G
C SU 7 malignant melanoma [C DE 76]	2				P	G
C SU 8 burns [C DE 58]	2	D		E		G
C SU 9 furuncle / carbuncle [C DE 8]	2	D	T			G
C SU 10 trauma to soft tissue	2	D	T			G
C SU 11 compartment syndrome	2			E		
C SU 12 crush syndrome of skin and soft tissues	1					
C SU 13 ulcers, arterial / venous	2	D				G
C SU 14 decubital ulcer [C IM 325, C DE 83]	2	D			P	G
C SU 15 radiation ulcer	1					
C SU 16 diabetes mellitus, skin lesions including foot ulcer [C DE 55]	2	D				G
C SU 17 hematoma of skin and soft tissue	2	D	T			G
C SU 18 keloid [C DE 65]	2	D				G
C SU 19 pilonidal sinus, abscess of (dermoid cyst)	1					
C SU 20 sarcoma of soft tissue including rhabdomyosarcoma [C PE 56]	1					
C SU 21 tendon sheath, inflammation of	1					

brain and peripheral nerves (neurosurgery)

Objective ID	Level	D	T	E	P	G
C SU 22 arteriovenous malformation in brain / hemangioma, cerebral	1					
C SU 23 brain and peripheral nerves, neurosurgically relevant infection	1					

6.3 Surgery

C SU 24	head trauma (minor traumatic brain injury [mTBI] / concussion / contusion / epidural hematoma / subdural hematoma) [C IM1 78]	2			E		
C SU 25	intracerebral hemorrhage [C IM 129]	2			E		
C SU 26	subarachnoid hemorrhage [C IM 128]	2			E		
C SU 27	brain tumors, benign / malignant [C PE 86]	1					
C SU 28	hydrocephalus in newborn and cerebral malformations [C PE 139]	1					
C SU 29	intracranial pressure, elevated (acute / chronic)	2	D		E		

skull, face, mouth, jaw

Objective ID		Level	D	T	E	P	G
C SU 30	candidiasis, mouth / throat (thrush) [C IM 257, C PE 195, C OT 46]	2	D	T			G
C SU 31	gingivitis / periodontitis [C OT 44]	1					G
C SU 32	glossitis	2	D				
C SU 33	leukoplakia / leukokeratosis (diseases of transitional epithelia) [C DE 71]	2					
C SU 34	lip frenulum, short	1					
C SU 35	micrognathia / macrognathia	1					
C SU 36	odontogenic abscess	2	D				
C SU 37	odontogenic maxillary sinusitis	1					
C SU 38	pharynx and oral cavity, tumors of [C OT 62]	1					
C SU 39	dental caries	2	D			P	G
C SU 40	teeth, injuries to [C PE 6, C OT 64]	2	D		E		G
C SU 41	sialolithiasis of salivary glands [C OT 76]	1					
C SU 42	cleft lip, jaw, palate [C PE 123, C OT 67]	1					
C SU 43	face and jaw emergencies: vital risks, obstruction of upper airways, hemorrhages	2	D		E		
C SU 44	consciousness, disturbances of (Glasgow-Coma Scale) [C IM 175, C PE 5]	2	D		E		G
C SU 45	face injury	1					
C SU 46	peripheral palsy / paralysis of facial nerve (idiopathic, borreliosis, viral, traumatic, neoplastic) [C IM 121, C OT 90]	2	D				G
C SU 47	trismus, restrictions in opening of mouth	2	D		E		
C SU 48	jaw, luxation of	2	D				
C SU 49	jaw, fracture of	2	D				
C SU 50	fracture of the nasal pyramid [C OT 38]	2					
C SU 51	fractures of the facial cranium	1			E		
C SU 52	fracture of skull / of skullbase	1					

6.3 Surgery

C SU 53	fracture of temporal bone (longitudinal / transverse) [C OT 25]	1			E		
C SU 54	postconcussional syndrome [C PS 29]	1					

spine

Objective ID		Level	D	T	E	P	G
C SU 55	whiplash injury [C IM 185]	1					
C SU 56	spine, fractures / dislocations of [C IM 328]	2			E		
C SU 57	intervertebral disc, hernia of [C IM 45]	2			E		G
C SU 58	spinal deformation (kyphosis, scoliosis, lordosis, including juvenile kyphosis = Scheuermann's disease) [C IM 47, C PE 111]	2	D				G
C SU 59	spondylarthrosis, spondylosis [C IM 51]	2					G
C SU 60	spondylitis, spondylodiscitis	2			E		
C SU 61	spondylolisthesis [C IM 52]	2					
C SU 62	spondylolysis [C IM 53]	1					
C SU 63	spina bifida / neural tube defects (including myelomeningocele) [C IM 159, C PE 140]	2					P
C SU 64	spinal canal stenosis (cervical, lumbar) [C IM 50]	2	D				
C SU 65	spinal cord, acute transverse lesion of (including Brown-Séquard) [C IM 116]	2			E		
C SU 66	spinal tumors including metastases [C IM 146]	2					

localized disturbances of muscle and bone

Objective ID		Level	D	T	E	P	G
C SU 67	articular cartilage, lesion of	1					G
C SU 68	bone metastases [C IM 11]	2	D				
C SU 69	bone tumors, primary	1					
C SU 70	pathological fracture	2					
C SU 71	epiphyseal instability / epiphysiolysis [C IM 32]	1					
C SU 72	ganglion of wrist	2	D				G
C SU 73	joint capsule, lesion of	1					G
C SU 74	aseptic necrosis of bone, including Osgood-Schlatter / Perthes [C IM 33, C PE 108]	2					
C SU 75	osteomyelitis, acute / chronic [C IM 24]	2					

6.3 Surgery

wound- and fracture healing

Objective ID	Level	D	T	E	P	G
C SU 76 injuries from polytrauma	2	D		E		
C SU 77 pseudoarthrosis	2	D				
C SU 78 reflex sympathetic dystrophy (Sudeck), complex regional pain syndrome [C IM 43]	2					G
C SU 79 wound abscess	2	D				

breast

Objective ID	Level	D	T	E	P	G
C SU 80 mastitis	2	D				
C SU 81 gynecomastia	2	D				
C SU 82 breast, cysts / benign breast tumors [C GO 27]	2					G
C SU 83 mastopathia, cystic, chronic	2					G
C SU 84 breast, malignant disorders of [C GO 28]	2					G

chest

Objective ID	Level	D	T	E	P	G
C SU 85 chest malformation / funnel chest / chicken breast	1					
C SU 86 thorax contusion	2	D	T	E		G
C SU 87 hemothorax	2					
C SU 88 pneumothorax, including tension pneumothorax [C IM 250]	2	D	T	E		
C SU 89 sternum fractures	1					

trachea, bronchi

Objective ID	Level	D	T	E	P	G
C SU 90 aspiration	2	D		E	P	
C SU 91 foreign body aspiration (larynx, trachea and bronchi) [C PE 10, C OT 102]	2	D		E	P	G

lung

Objective ID	Level	D	T	E	P	G
C SU 92 lung contusion	1					
C SU 93 respiratory distress syndrome	1					
C SU 94 lung carcinoma [C IM 240]	2				P	
C SU 95 metastases in lung [C IM 241]	2					
C SU 96 mediastinal tumors	1					

6.3 Surgery

diaphragm

Objective ID		Level	D	T	E	P	G
C SU 97	hernia of diaphragm (including hiatal hernia) in adults [C IM 265]	2					G
C SU 98	rupture of diaphragm	1					

heart

Objective ID		Level	D	T	E	P	G
C SU 99	cardiac tamponade	1			E		
C SU 100	contusion of heart	1					
C SU 101	mitral regurgitation [C IM 192]	2					G
C SU 102	mitral stenosis [C IM 193]	2					
C SU 103	tricuspid regurgitation [C IM 194]	2					
C SU 104	aortic regurgitation [C IM 190]	2					
C SU 105	aortic stenosis [C IM 191]	2					G

arteries

Objective ID		Level	D	T	E	P	G
C SU 106	Buerger's disease (thrombangitis obliterans)	1					
C SU 107	cerebral infarction including extracranial obstruction [C IM 131]	2			E	P	G
C SU 108	pulmonary embolism [C IM 252, C GO 70]	2				P	
C SU 109	arterial embolism [C IM 195, C GO 71]	2					
C SU 110	aneurysm of thoracic / of abdominal aorta (including rupture, dissection) [C IM 189]	2			E		
C SU 111	occlusion / stenosis of artery in aorto-iliacal region	2					
C SU 112	renal artery stenosis and consequences	2					
C SU 113	occlusion / stenosis of arteries of lower extremities	2	D				G
C SU 114	Raynaud's disease / Raynaud's phenomenon [C IM2 28]	2	D				
C SU 115	subclavian steal syndrome	1					
C SU 116	thoracic outlet syndrome	1					
C SU 117	traumatic vascular lesions, open / closed	1					

veins

Objective ID		Level	D	T	E	P	G
C SU 118	caval vein syndromes	2	D		E		
C SU 119	deep vein thrombosis [C IM 196, C GO 69]	2	D	T		P	G
C SU 120	varicosis / venous insufficiency / leg ulcers / stasis ulcer [C DE 85]	2	D				G

6.3 Surgery

lymphatic vessels

Objective ID		Level	D	T	E	P	G
C SU 121	lymphadenitis, chronic	2					
C SU 122	lymphangitis, acute / lymphadenitis, acute [C IM 353, C PE 188, C DE 84]	2	D	T			G
C SU 123	lymphedema, primary / secondary	2					

esophagus

Objective ID		Level	D	T	E	P	G
C SU 124	achalasia [C IM 259]	1					
C SU 125	diverticulum of esophagus (including Zenker's diverticulum) [C OT 80]	1					
C SU 126	esophageal rupture [C OT 85]	1					
C SU 127	esophageal varices [C IM 262, C OT 81]	2					
C SU 128	esophagus, corrosive lesion (acid, base, stenosis) [C OT 86]	2			E		
C SU 129	esophagus, injuries and perforations of [C OT 82]	1					
C SU 130	esophagus, strictures of [C OT 84]	1					
C SU 131	tumors of esophagus, malignant [C IM 261]	2				P	
C SU 132	Mallory-Weiss syndrome (esophagus, mucosal tear) [C IM 264]	1					

stomach and duodenum

Objective ID		Level	D	T	E	P	G
C SU 133	peptic ulcer, including helicobacter infection [C IM 267]	2		T			
C SU 134	stomach, perforation of	2			E		
C SU 135	duodenal ulcer, including perforation [C IM 272]	2					
C SU 136	foreign body in stomach / in duodenum	2					
C SU 137	gastrectomy, complications of (postgastrectomy syndrome)	2					
C SU 138	gastric dilatation	2	D		E		
C SU 139	gastrointestinal hemorrhage	2	D		E		
C SU 140	hypertrophy or stenosis of pylorus	2					
C SU 141	tumors, gastric [C IM 269]	2					
C SU 142	Zollinger-Ellison syndrome [C IM 293]	1					

6.3 Surgery

jejunum, ileum

Objective ID		Level	D	T	E	P	G
C SU 143	carcinoid tumors [C IM 273]	1					
C SU 144	jejunum and ileum, benign tumors / malignant tumors	1					
C SU 145	volvulus of small intestine, congenital malrotation [C PE 126]	1					
C SU 146	Meckel's diverticulum [C PE 73]	2					

colon

Objective ID		Level	D	T	E	P	G
C SU 147	abdominal trauma (including perforation and organ lesion)	2			E		
C SU 148	colon, carcinoma of [C IM 276]	2				P	G
C SU 149	diverticulosis / diverticulitis [C IM 280]	2					G
C SU 150	enterocolitis, necrotizing in adults	1					
C SU 151	Hirschsprung`s disease (megacolon, congenital) [C PE 74]	1					
C SU 152	colon, polyps [C IM 277]	2					
C SU 153	polyposis of colon, familial [C IM 286]	2					
C SU 154	pseudomembraneous colitis [C IM 288]	2	D				
C SU 155	inflammatory bowel disease (including ulcerative colitis, Crohn's disease) [C IM 279]	2					

rectum and anus

Objective ID		Level	D	T	E	P	G
C SU 156	anal (or perianal) abscess	2					
C SU 157	anal fissures [C IM 290, C PE 79, C DE 79]	2	D				G
C SU 158	condylomata acuminata anal / perianal / penis / vulva / vagina / cervix [C GO 23, C DE 1]	2	D			P	G
C SU 159	fistula of rectum / of anus	2	D				
C SU 160	hemorrhoids [C IM 291, C DE 80]	2	D				G
C SU 161	proctitis [C IM 287]	2					
C SU 162	rectal prolapse / anal prolapse [C IM2 89]	2	D		E		
C SU 163	rectal cancer	2					

6.3 Surgery

liver

Objective ID		Level	D	T	E	P	G
C SU 164	liver abscess [C IM 298]	1					
C SU 165	cirrhosis of the liver [C IM 297]	2	D			P	G
C SU 166	echinococcosis [C IM 299]	2					
C SU 167	liver injury	2			E		
C SU 168	liver tumor, secondary (metastases) [C IM 301]	2					
C SU 169	liver tumor, primary [C IM 300]	1					
C SU 170	portal hypertension / ascites [C IM 302]	2	D			P	

gallbladder / gall ducts

Objective ID		Level	D	T	E	P	G
C SU 171	bile ducts, injury to (including strictures, bilioma)	1					
C SU 172	bile fistula (internal / external)	1					
C SU 173	cholecystitis, acute [C IM 305]	2			E		
C SU 174	chole(doch)lithiasis including biliary colic [C IM 306]	2					G
C SU 175	carcinoma of gallbladder / of bile ducts [C IM 307]	1					
C SU 176	gallbladder hydrops / gallbladder empyema / gallbladder perforation	1					
C SU 177	ileus from gallstone	1					
C SU 178	strictures of bile ducts	2					

pancreas

Objective ID		Level	D	T	E	P	G
C SU 179	pancreatic carcinoma [C IM 310]	2					
C SU 180	pancreatitis, acute [C IM 308]	2	D		E		G
C SU 181	pancreatitis, chronic (including pseudocysts) [C IM 181]	2				P	

spleen

Objective ID		Level	D	T	E	P	G
C SU 182	spleen, rupture / subcapsular hemorrhage	2	D		E		
C SU 183	splenomegaly and „hematologic“ spleen	2	D				

6.3 Surgery

abdominal wall and hernias

Objective ID		Level	D	T	E	P	G
C SU 184	hernia of linea alba (including epigastric hernia, diastasis rectus abdominis)	2	D				
C SU 185	hernia, femoral	2					
C SU 186	hernias, incarcerated	2	D		E		
C SU 187	hernia, incisional	2	D				
C SU 188	hernia, inguinal, in adults	2					G
C SU 189	hernia, umbilical	2	D				

acute abdomen

Objective ID		Level	D	T	E	P	G
C SU 190	abdomen, acute [C PE 1]	2	D		E		G
C SU 191	appendicitis, acute	2	D		E		G
C SU 192	Douglas`abscess	1					
C SU 193	ileus (mechanical / paralytic / proximal / distal) [C IM 283]	2	D		E		
C SU 194	intussusception of bowel, invagination [C PE 11]	1					G
C SU 195	mesenteric infarction	1					
C SU 196	perforation of intestine	2			E		
C SU 197	peritonitis	2	D		E		
C SU 198	pelvic Inflammatory disease (PID: adnexitis / salpingitis / tubo-ovarian abscess) [C GO 4]	2				P	G
C SU 199	subphrenic abscess	1					

kidneys, urinary tract and prostate

Objective ID		Level	D	T	E	P	G
C SU 200	carcinoma of the prostate	2					G
C SU 201	congenital malformations of kidneys / of ureter / of urethra [C PE 127]	1					
C SU 202	urinary tract infection (cystitis / urethritis / pyelonephritis) in adults [C IM 314]	2	D	T			G
C SU 203	kidney and distal urinary tract, (traumatic) lesions of	1					
C SU 204	prostatic hyperplasia	2	D				G
C SU 205	prostatitis	2	D	T			
C SU 206	renal cell carcinoma	1					
C SU 207	urinary retention [C GO 6]	2	D	T	E		G

6.3 Surgery

C SU 208	urolithiasis / renal colic in adults [C IM 321]	2	D	T	E	G
C SU 209	urothelial tumors	1				
C SU 210	vesicoureteric reflux [C PE 45]	2				
C SU 211	Wilms tumor, nephroblastoma	2				

male genitals

Objective ID		Level	D	T	E	P	G
C SU 212	cryptorchidism, undescended testicle [C PE 59]	2	D				G
C SU 213	epididymitis / orchitis	2					
C SU 214	epispadia / hypospasia [C PE 128]	2	D				
C SU 215	erectile dysfunction	2					
C SU 216	infertility / subfertility (female and male) [C GO 40]	1					
C SU 217	pelvic trauma, urethral injury	1					
C SU 218	phimosis / paraphimosis [C PE 37]	2	D		E		G
C SU 219	spermatocele / hydrocele / varicocele	2	D				
C SU 220	testicle and scrotal content, lesion of (including torsion of testicle) [C PE 17]	2	D		E		
C SU 221	testicular cancer	1					

thyroid and parathyroids

Objective ID		Level	D	T	E	P	G
C SU 222	goiter, nodular / diffuse, including solitary nodules and thyroid carcinoma [C IM 95]	2				P	
C SU 223	hyperthyroidism in adults [C IM 92]	2	D				G
C SU 224	hyperparathyroidism [C IM 90]	1					
C SU 225	hypoparathyroidism [C IM 91]	1					G
C SU 226	multiple endocrine neoplasia syndromes (MEN-syndromes) [C IM 99]	1					

endocrinology (if not mentioned elsewhere)

Objective ID		Level	D	T	E	P	G
C SU 227	Cushing's syndrome, hypercortisolism [C IM 81, C PE 60]	2					
C SU 228	endocrine pancreatic tumors [C IM 311]	1					
C SU 229	hyperaldosteronism, primary including Conn's syndrome [C IM 88]	2					
C SU 230	pheochromocytoma [C IM 89]	2					
C SU 231	pituitary tumors [C IM 98]	1					

6.3 Surgery

neck, shoulder girdle and upper extremities

Objective ID		Level	D	T	E	P	G
C SU 232	midline / lateral branchial cysts / fistulas [C OT 87]	1					
C SU 233	torticollis	2	D	T			G
C SU 234	carpal tunnel syndrome [C IM 12]	2	D				G
C SU 235	Dupuytren's contracture [C IM 13]	2	D				G
C SU 236	finger disorder: mallet finger	2	D				
C SU 237	finger nail, loss of	2	D				G
C SU 238	finger tendons, lesion of (including button hole deformity)	2	D				
C SU 239	fracture of clavicle	2	D	T			
C SU 240	fracture of shoulder / of humerus	2	D				
C SU 241	fractures of elbow and lesions of capsule, tendons and ligaments	1					
C SU 242	fractures of fingers and thumb and lesions of capsule, tendons and ligaments	2	D				
C SU 243	fractures of radius / of ulna	2	D				G
C SU 244	fractures of wrist and lesions of capsule, tendons and ligaments	2					
C SU 245	frozen shoulder, periarthropathia humeroscapularis [C IM 17]	2	D				G
C SU 246	epicondylitis lateral / medial [C IM 34]	2	D				G
C SU 247	luxation of shoulder	2	D				
C SU 248	panaritium, paronychia	2	D	T			
C SU 249	phlegmon of flexor tendon of hand	1					
C SU 250	shoulder ligament (including rotator cuff), lesions of	1					
C SU 251	subungual hematoma	2	D	T			G

pelvis and lower extremities

Objective ID		Level	D	T	E	P	G
C SU 252	congenital foot deformity [C IM 41, C PE 130]	1					
C SU 253	congenital dysplasia of hip / congenital dislocation of hip	2					
C SU 254	femoral head, necrosis of	1					
C SU 255	fractures of pelvis	1					
C SU 256	fractures of hip [C IM 327]	2			E		G
C SU 257	fractures of femur	2	D		E		
C SU 258	fractures of knee and lesions of capsule, tendons and ligaments	2	D		E		G
C SU 259	meniscus medial / lateral, lesions of	2	D				G

6.3 Surgery

C SU 260	fractures of tibia	2	D	E		
C SU 261	fractures of fibula	2	D	E		
C SU 262	fractures of ankle and lesions of capsule, tendons and ligaments	2		E	G	
C SU 263	marching fracture (foot)	1				
C SU 264	fractures of toes	2	D	T		
C SU 265	osteoarthritis of hip	2	D			G
C SU 266	osteochondritis dissecans	1				
C SU 267	dislocation of patella	2	D	E		
C SU 268	genu varum / genu valgum [C IM 38]	2	D			
C SU 269	gonarthritis	2				
C SU 270	prepatellar / olecranon bursitis [C IM 35]	2	D			G
C SU 271	patellary cartilage, abnormal	2				G
C SU 272	ankle, instability of	2	D			
C SU 273	hallux valgus	2	D			G
C SU 274	hammer toe	2	D			G
C SU 275	Achilles tendon, rupture of	2	D			
C SU 276	Achilles tendinitis [C IM 39]	2	D			G
C SU 277	ingrown toenail	2	D			G
C SU 278	pes planus [C IM 40]	2	D			G
C SU 279	tarsal tunnel syndrome	1				

Further Knowledge

surgical instruments / wounds

Objective ID	Level	D	T	E	P	G
C SU 280 basic knowledge of surgical instruments	1					
C SU 281 wound characteristics	2	D				G
C SU 282 wound dressing, types of bandages, indications for dressings	2					G

6.3 Surgery

anesthesiology

Objective ID	Level	D	T	E	P	G
C SU 283 preoperative risk assessment	1					G
C SU 284 preparation of patient for anesthesia	1					
C SU 285 preoperative medication	1					
C SU 286 anesthetics (by inhalation or injection), mechanism of action of anesthetics, induction of anesthesia, opiates, opiate-antagonists, muscle relaxants	2					
C SU 287 procedures for general anesthesia	1					
C SU 288 non-invasive and invasive monitoring	1					
C SU 289 risks and complications of anesthesia	2	D	T	E	P	
C SU 290 fluid, volume, and blood replacement, treatment of shock	2					
C SU 291 postoperative phase including analgesia	2					

transplantation

Objective ID	Level	D	T	E	P	G
C SU 292 definition of autograft, isograft, allograft and xenograft transplantation	1					
C SU 293 organ transplantations (selections of donors and patients)	1					
C SU 294 complications of transplantation: graft rejection, infection	1					

disaster medicine, mass disaster

Objective ID	Level	D	T	E	P	G
C SU 295 traffic mass disaster (road, rail, air)	1					G
C SU 296 nuclear accident	1					
C SU 297 chemical accident	1					
C SU 298 mass intoxications	1					
C SU 299 epidemiological disaster due to infections	1					
C SU 300 principles of triage	1					
C SU 301 medical risks in disasters	1					
C SU 302 psychiatric and psychological aspects in disaster situations	1					
C SU 303 special traumatic patterns in disasters (avalanches, landslide, earthquake, floods, fire disaster, frost bite, crush injury)	1					G
C SU 304 splints in disaster situations	1					
C SU 305 analgesia in disaster situations	1					
C SU 306 cold injuries in disaster situations	1					

information / management

Objective ID	Level	D	T	E	P	G
C SU 307 prescription of physical therapy [C IM 390]	1					G

6.3 Surgery

examination

Objective ID	Level	D	T	E	P	G
C SU 308 assessing peripheral arterial circulation by Doppler occlusion pressure [C IM 421]	1					G

procedures

Objective ID	Level	D	T	E	P	G
C SU 309 examination of male genitalia and interpretation of semen examination in infertility [CGO105]	1					
C SU 310 tracheal intubation [COT132]	1					
C SU 311 assisted ventilation, continuous positive airway pressure (CPAP), intermittent positive pressure ventilation (IPPV), pressure controlled ventilation (PCV) [C IM 398]	1					
C SU 312 wound debridement with scalpel and scissors	1					G
C SU 313 gastroduodenoscopy, colonoscopy, bronchoscopy [C IM 411]	1					G
C SU 314 biopsy of muscle, kidney, liver [C IM 410]	1					G
C SU 315 urodynamic examination	1					
C SU 316 urethral swab	1					
C SU 317 incision and drainage of abscess	1					G
C SU 318 repositioning of closed fracture	1					
C SU 319 prehospital management of fracture	1					G
C SU 320 reduction of joint dislocation	1					G
C SU 321 nail removal and nail bed cauterization	1					G
C SU 322 insertion of bladder catheter in male and female (transurethral and suprapubic) [C IM 402, C PE 281]	1					G
C SU 323 inserting a nasogastric tube [C IM 403]	1					
C SU 324 colostomy, changing the bag	1					G
C SU 325 application of enema [C IM 404, C PE 283]	1					G
C SU 326 puncture of pleural and peritoneal space, aspiration of fluid [C IM 414, C PE 286]	1					G
C SU 327 joint fluid aspiration [C IM 408]	1					G
C SU 328 regional anesthesia: spinal, epidural, nerve block	1					
C SU 329 lumbar puncture [C IM 415, C PE 284]	1					

6.4 Pediatrics

6.4 Pediatrics (PE)

Clinical Pictures

accidents, poisonings, emergencies

Objective ID	Level	D	T	E	P	G
C PE 1 abdomen, acute [C SU 190]	2	D		E		G
C PE 2 accidental ingestion / inhalation in children	2	D		E		G
C PE 3 acute life threatening event (ALTE) in infants	2	D		E		G
C PE 4 breath-holding spells in children	1					
C PE 5 consciousness, disturbances of (Glasgow-Coma Scale) [C IM 175, C SU 44]	2	D		E		G
C PE 6 teeth, injuries to [C SU 40, C OT 64]	2	D		E		G
C PE 7 epiglottitis [C OT 91]	2	D		E	P	G
C PE 8 seizures in children, febrile	2	D	T	E	P	G
C PE 9 fever as an emergency in children	2	D	T	E		G
C PE 10 foreign body aspiration (larynx, trachea and bronchi) [C SU 91, C OT 102]	2	D		E	P	G
C PE 11 intussusception of bowel, invagination [C SU 194]	1					G
C PE 12 meningitis / encephalitis in children	2	D		E	P	G
C PE 13 nurse maid's elbow (pronation douloureuse), subluxation of capitulum radii	1					G
C PE 14 pain as an emergency in children	2	D	T	E		G
C PE 15 shock, septic shock, septicemias in children	2	D		E		
C PE 16 sudden infant death syndrome [C FM 23]	1				P	
C PE 17 testicle and scrotal content, lesion of (including torsion of testicle) [C SU 220]	2	D		E		

cardiovascular disorders

Objective ID	Level	D	T	E	P	G
C PE 18 atrial septal defect [C IM 216]	1					
C PE 19 ventricular septal defect [C IM 217]	1					
C PE 20 hypertension in children	2	D				G
C PE 21 rheumatic fever [C IM 44]	2	D			P	
C PE 22 cardiomyopathy [C IM 218]	1					
C PE 23 supraventricular tachycardia in children	1					
C PE 24 congenital complete heart block	1					

6.4 Pediatrics

C PE 25	ductus arteriosus, persistent	1					
C PE 26	heart murmur, innocent	2					G
C PE 27	coarctation of aorta, congenital	2					
C PE 28	pulmonary stenosis (obstruction to right ventricular outflow) in children	1					
C PE 29	tetralogy / pentalogy of Fallot	1					
C PE 30	transposition of great arteries in infants	1					

respiratory disorders

Objective ID		Level	D	T	E	P	G
C PE 31	adenoidal and tonsillar hypertrophy	1					G
C PE 32	bronchial asthma, acute / chronic [C IM 232]	2	D	T	E		G
C PE 33	bronchopulmonary dysplasia	1					
C PE 34	cystic fibrosis in children and adolescents	2					

diseases and malformations of kidneys and urinary tract

Objective ID		Level	D	T	E	P	G
C PE 35	adhesions of labia	1					G
C PE 36	hymen, imperforate, in childhood	1					
C PE 37	phimosis / paraphimosis [C SU 218]	2	D		E		G
C PE 38	enuresis, primary / secondary	2	D				
C PE 39	Fanconi syndrome (kidney)	1					
C PE 40	glomerulonephritis in children	1					
C PE 41	hemolytic uremic syndrome	1					
C PE 42	hydronephrosis	1					
C PE 43	nephrotic syndrome in children	2					
C PE 44	renal failure, acute / chronic in children	1					
C PE 45	vesicoureteric reflux [C SU 210]	2					
C PE 46	urethral valves (malformation)	1					
C PE 47	urolithiasis / renal colic in children	1					

6.4 Pediatrics

hemato-oncologic disorders

Objective ID		Level	D	T	E	P	G
C PE 48	anemia from iron deficiency [C IM 60]	2	D	T			G
C PE 49	aplastic / hypoplastic anemia	1					
C PE 50	hemoglobinopathies [C IM 66]	1					
C PE 51	leukemia, acute [C IM 69]	2					
C PE 52	lymphomas (Hodgkin's / non-Hodgkin) [C IM 68]	2					
C PE 53	purpura, thrombocytopenic idiopathic	2			E		G
C PE 54	nephroblastoma	1					
C PE 55	neuroblastoma	1					
C PE 56	sarcoma of soft tissue including rhabdomyosarcoma [C SU 20]	1					

diseases of the endocrine organs

Objective ID		Level	D	T	E	P	G
C PE 57	adreno-cortical failure in children	1					
C PE 58	adrenogenital syndrome	1					
C PE 59	cryptorchidism, undescended testicle [C SU 212]	2	D				G
C PE 60	Cushing's syndrome, hypercortisolism [C IM 81, C SU 227]	2					
C PE 61	diabetes mellitus type 1 / type 2 in children	2	D		E		
C PE 62	diabetes insipidus [C IM 82]	1					
C PE 63	hypothyroidism, neonatal and infantile	1					
C PE 64	pituitary failure [C IM 97]	1					

metabolic disorders

Objective ID		Level	D	T	E	P	G
C PE 65	dehydration in children	2	D	T	E		G
C PE 66	hyperglycemia in childhood	2	D				
C PE 67	hypoglycemia [C IM 87]	2	D	T	E		G
C PE 68	hypocalcemia in neonates and children	1					
C PE 69	rickets	2	D	T		P	

6.4 Pediatrics

gastrointestinal disorders

Objective ID		Level	D	T	E	P	G
C PE 70	hiatal hernia in children	1					
C PE 71	reflux, gastroesophageal in children	2	D			P	G
C PE 72	pyloric stenosis, congenital	1					
C PE 73	Meckel's diverticulum [C SU 146]	2					
C PE 74	Hirschsprung's disease (megacolon, congenital) [C SU 151]	1					
C PE 75	celiac disease [C IM 274]	2				P	G
C PE 76	milk protein intolerance in children	1					
C PE 77	hernia, inguinal, in children	2			E		G
C PE 78	constipation in children	2	D				G
C PE 79	anal fissures [C IM 290, C SU 157, C DE 79]	2	D				G

neurological disorders

Objective ID		Level	D	T	E	P	G
C PE 80	absence attacks, typical, in children	1					
C PE 81	seizures, partial / generalized in children	2			E		
C PE 82	spasms, infantile	1					
C PE 83	cerebral palsy [C IM 119]	2					
C PE 84	spinal muscular atrophy	1					
C PE 85	headache, migraine in children	1					G
C PE 86	brain tumors, benign / malignant [C SU 27]	1					
C PE 87	myopathy	1					
C PE 88	neurofibromatosis (Recklinghausen's disease) [C IM 160, C DE 43]	1					
C PE 89	retinoblastoma in children and adults [C OP 39]	2					

psychiatry of childhood and adolescence

Objective ID		Level	D	T	E	P	G
C PE 90	attention deficit and hyperactivity disorder (ADHD, ADHS) [C PS 1]	1					G
C PE 91	autism [C PS 2]	1					
C PE 92	psychic reaction of children to chronic disease [C PS 6]	1					G
C PE 93	psychic reaction of children to parental divorce [C PS 8]	1					G
C PE 94	depression in children [C PS 7]	1					
C PE 95	dyslexia [C PS 9]	1					

6.4 Pediatrics

C PE 96	eating disorders in childhood [C PS 10]	2					
C PE 97	encopresis [C PS 11]	1					
C PE 98	parent - child relationship, disorders	1					G
C PE 99	mutism [C PS 13]	1					
C PE 100	psychoses of the child and adolescent [C PS 14]	1					
C PE 101	psychosomatic disorders in children (non specific symptoms: abdominal pain, headache, fatigue) [C PS 15]	1					G
C PE 102	somnambulism, night terrors and nightmares (parasomnia) [C IM 186, C PS 67]	1					
C PE 103	speech and language disorders in childhood, including stuttering [C PS 17]	1					
C PE 104	tic disorders [C PS 5]	1					

orthopedic disorders

Objective ID		Level	D	T	E	P	G
C PE 105	achondroplasia [C IM 1]	1					
C PE 106	craniosynostosis in infants	1					
C PE 107	Ewing's sarcoma	1					
C PE 108	aseptic necrosis of bone including Osgood-Schlatter, Perthes [C IM 33, C SU 74]	2					
C PE 109	osteogenesis imperfecta [C IM 22]	1					
C PE 110	osteosarcoma	1					
C PE 111	spinal deformation (kyphosis, scoliosis, lordosis, including juvenile kyphosis = Scheuermann's disease) [C IM 47, C SU 58]	2	D				G
C PE 112	synovitis of hip, transient	2					

skin diseases

Objective ID		Level	D	T	E	P	G
C PE 113	acne, hydradenitis suppurativa [C DE 53]	2	D	T			G
C PE 114	atopic / constitutional eczema [C DE 29]	2	D	T		P	G
C PE 115	rash from diaper	2	D	T		P	G
C PE 116	seborrheic dermatitis in children	1					
C PE 117	urticaria [C DE 37]	2	D	T	E		G
C PE 118	hemangioma of skin	2	D				G
C PE 119	pediculosis capitis and pubis [C DE16]	2	D	T		P	G
C PE 120	scabies [C DE 17]	2	D	T		P	G

6.4 Pediatrics

neonatology

Objective ID		Level	D	T	E	P	G
C PE 121	birth injuries, common	1					
C PE 122	atresia, choanal	1					
C PE 123	cleft lip, jaw, palate [C SU 42, C OT 67]	1					
C PE 124	congenital torticollis	1					
C PE 125	atresia in newborn (esophageal, intestinal, biliary, anal)	1					
C PE 126	volvulus of small intestine, congenital malrotation [C SU 145]	1					
C PE 127	congenital malformations of kidneys / of ureter / of urethra [C SU 201]	1					
C PE 128	epispadia / hypospadia [C SU 214]	2	D				
C PE 129	congenital dislocation of the hip	1					
C PE 130	congenital foot deformity [C IM 41, C SU 252]	1					
C PE 131	conjunctivitis in newborn	1					
C PE 132	cataract in children	1					
C PE 133	diaphragmatic hernia of newborn	1					
C PE 134	enterocolitis, necrotizing in infants	1					
C PE 135	meconium aspiration	1					
C PE 136	meconium ileus	1					
C PE 137	hemorrhagic disease of the newborn	2				P	
C PE 138	hyaline membrane disease in newborn	1					
C PE 139	hydrocephalus in newborn and cerebral malformations [C SU 28]	1					
C PE 140	spina bifida / neural tube defects (including myelomeningocele) [C IM 159, C SU 63]	2				P	
C PE 141	infant, small for gestational age	1					
C PE 142	macrosomia in neonates	1					
C PE 143	erythema toxicum in newborn	1					
C PE 144	milium in infants	1					
C PE 145	mongolian spot	1					
C PE 146	neonatal meningitis	1					
C PE 147	neonatal pneumonia	1					
C PE 148	seizures in neonates	1					
C PE 149	sepsis in neonates	1					
C PE 150	omphalocele	1					
C PE 151	perinatal asphyxia	2	D		E		

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C PE 152	postmature infant	1					
C PE 153	prematurity of infant	1					
C PE 154	apnea in infant	2	D		E		
C PE 155	respiratory distress in infants	2	D		E		
C PE 156	rhesus / ABO incompatibility	2	D				P

pathologies during pregnancy with consequences on the newborn

Objective ID		Level	D	T	E	P	G
C PE 157	oligohydramnios [C GO 54]	1					
C PE 158	hydramnios [C GO 53]	1					

growth and pubertal disturbances

Objective ID		Level	D	T	E	P	G
C PE 159	failure to thrive in children	2	D				G
C PE 160	growth disorder, short stature / tall stature	2	D				G
C PE 161	gynecomastia in puberty	1					G
C PE 162	menstrual cycle, dysfunction of in adolescence	1					
C PE 163	premature thelarche / pubarche	1					
C PE 164	puberty, precocious / delayed	1					
C PE 165	Klinefelter syndrome	1					
C PE 166	Turner syndrome, gonadal dysgenesis [C GO 37]	1					
C PE 167	genitalia, ambiguous, mixed gonadal dysgenesis [C GO 36]	1					
C PE 168	obesity [C IM 101]	2	D			P	G
C PE 169	Marfan syndrome [C IM 20]	2					

immunological and allergic disorders

Objective ID		Level	D	T	E	P	G
C PE 170	rhino-conjunctivitis, allergic / rhinosinusitis, allergic [C OT 34]	2	D	T		P	G
C PE 171	allergy to insects / allergy to food	2			E	P	G
C PE 172	purpura, Henoch-Schonlein (subgroup of hypersensitivity vasculitides) [C IM 42, C DE 38]	1					
C PE 173	hypogammaglobulinemia / agammaglobulinemia	1					
C PE 174	immunodeficiency syndromes	1					
C PE 175	AIDS in children	1					

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C PE 176	arthritis, juvenile chronic [C IM 5]	1					
C PE 177	Kawasaki syndrome (mucocutaneous lymph node syndrome)	1					G
C PE 178	lupus erythematosus systemic [C IM 56]	2					

infectious diseases

Objective ID		Level	D	T	E	P	G
C PE 179	arthritis, septic / arthritis, reactive in children	1					
C PE 180	bacteremia	2	D				
C PE 181	brain abscess [C IM 147]	1					
C PE 182	meningococemia	2			E	P	
C PE 183	orbit, inflammation of / orbital cellulitis [C OP 52]	2			E		G
C PE 184	conjunctivitis [C OP 17]	2	D	T			G
C PE 185	erythema infectiosum, fifth disease (Ringelröteln, mégalérythème épidémique)	1					G
C PE 186	exanthema subitum (roseola)	1					G
C PE 187	impetigo [C DE 9]	2	D	T			G
C PE 188	lymphangitis, acute / lymphadenitis, acute [C IM 353, C SU 122, C DE 84]	2	D	T			G
C PE 189	otitis media, acute, viral / bacterial [C OT 10]	2	D	T			G
C PE 190	otitis media, chronic, with effusion (glue ear) / with central perforation of tympanic membrane [C OT 11]	2	D				
C PE 191	mastoid abscess / purulent otomastoiditis [C OT 13]	1			E		
C PE 192	otitis, external [C OT 5]	2	D	T			G
C PE 193	rhinitis, rhinosinusitis, acute [C OT 33]	2	D	T			G
C PE 194	rhinitis, rhinosinusitis, chronic [C OT 35]	1					
C PE 195	candidiasis, mouth / throat (thrush) [C IM 257, C SU 30, C OT 46]	2	D	T			G
C PE 196	stomatitis, herpetic [C IM 258, C OT 47]	2		T			
C PE 197	peritonsillar abscess / retropharyngeal abscess [C OT 59]	2	D		E		G
C PE 198	scarlet fever [C OT 57]	2	D	T			G
C PE 199	viral croup (pseudocroup, laryngitis subglottica) [C OT 95]	2	D	T	E		G
C PE 200	diphtheria, including diphtheric croup [C OT 53]	1			E	P	G
C PE 201	tracheitis, acute / chronic [C IM 255, C OT 94]	2		T			G
C PE 202	bronchiolitis	2	D		E		G
C PE 203	pneumonia, community acquired, in children	2	D		E	P	G
C PE 204	whooping cough	2	D		E	P	G

6.4 Pediatrics

C PE 205	poliomyelitis [C IM 371]	1				P	G
C PE 206	rubella	2	D			P	G
C PE 207	varicella / herpes zoster [C IM 350, C DE 3]	2	D	T		P	G
C PE 208	mononucleosis, infectious [C IM 351, C OT 54]	2	D	T			G
C PE 209	measles	2	D			P	G
C PE 210	mumps (epidemic parotitis) [C OT 73]	2	D			P	G
C PE 211	tetanus [C IM 357, C SU 6]	2	D		E	P	
C PE 212	colitis / enterocolitis / gastroenteritis infectious [C IM 275]	2	D		E		G
C PE 213	urinary tract infection (cystitis, urethritis) in children	2	D	T			G
C PE 214	orchitis / epididymitis	2					
C PE 215	vulvovaginitis in children	2	D	T			
C PE 216	balanitis	2	D	T			G

Further Knowledge

genetics

Objective ID		Level	D	T	E	P	G
C PE 217	chromosomal abnormalities (21, 13, 18)	1					
C PE 218	principles of genetic transmission	1					
C PE 219	prenatal diagnostics (indications, methods)	1					
C PE 220	genetic counseling	1					

pathologies during pregnancy with consequences on the newborn

Objective ID		Level	D	T	E	P	G
C PE 221	pregnancy complications due to pre-existing maternal disease (diabetes mellitus, hypertension, epilepsy) [C GO 86]	2					
C PE 222	pregnancy, adverse effects of maternal medication on fetus	1				P	G
C PE 223	pregnancy and substance abuse, e.g. alcohol, nicotine, heroin and cannabis	1				P	G
C PE 224	pregnancy, complications due to infectious diseases (toxoplasmosis, other infectious microorganisms, rubella, cytomegaly, herpes simplex = TORCH) [C GO 88]	1				P	
C PE 225	adverse effects of ionizing radiation on fetus	1				P	G

6.4 Pediatrics

general growth and development (including normal variation)

Objective ID		Level	D	T	E	P	G
C PE 226	main parameters of intrauterine growth and intrauterine maturation	1					
C PE 227	maturation of lungs and adaptation to extrauterine life	1					
C PE 228	fetal circulation and adaptation to extrauterine life	1					
C PE 229	maturation of liver functions	1					
C PE 230	maturation of skeleton	1					
C PE 231	maturation of teeth	1					
C PE 232	metabolic and endocrine disorders, screening for in infants (Guthrie)	2					
C PE 233	vitamin D supplementation in newborn	1				P	
C PE 234	APGAR-Score	1					
C PE 235	immune system, passive transfer of immunity	1					
C PE 236	physiological jaundice in infants	2	D				
C PE 237	physiology of lactation	2					
C PE 238	breast-feeding, techniques and frequent problems	1					
C PE 239	formula feeding and alimentation in the first year of life	2					
C PE 240	fluid and food requirements as a function of age	2					
C PE 241	cardiovascular system (heart rate, blood pressure), maturation of in infants	2					
C PE 242	maturation of respiratory system (respiratory rate, type of respiration)	1					
C PE 243	gastro-intestinal system (changes in first year of life)	1					
C PE 244	maturation of urinary and rectal sphincter function	2					G
C PE 245	hematopoiesis (fetal and adult hemoglobin levels, variations of red cell mass)	1					
C PE 246	language development	1					
C PE 247	intellectual development after language development	1					
C PE 248	lung and heart activity, variants of norm in children	2	D				G
C PE 249	main parameters of growth (weight, length, head circumference) and of maturation	2	D				G
C PE 250	psychomotor development	2					G
C PE 251	pubertal development	2	D				G
C PE 252	regulation of body temperature in children	1					
C PE 253	adolescent, cognitive and social development	1					
C PE 254	role of affective bonding as a function of age	1					G

6.4 Pediatrics

social and preventive pediatrics

Objective ID		Level	D	T	E	P	G
C PE 255	well child care	2				P	G
C PE 256	abuse and neglect in childhood	2	D		E		G
C PE 257	common accidents in children	2				P	G
C PE 258	dental care in children	1				P	
C PE 259	screening for scoliosis in childhood	1					G
C PE 260	immunizations recommended by Swiss Federal Office of Public Health (BAG / OFSP)	2				P	G
C PE 261	mental retardation [C IM 142, C PS 4]	1					
C PE 262	physical exercise (including in children with chronic diseases)	1					
C PE 263	physical, sensory and social handicaps	1					
C PE 264	principal causes of death in children and adolescents	1					

psychiatry of childhood and adolescence

Objective ID		Level	D	T	E	P	G
C PE 265	school difficulties	1					
C PE 266	sleep-related problems in childhood [C PS 16]	1					
C PE 267	antisocial behavior in children [C PS 89]	1					
C PE 268	risk factors associated with suicide in childhood and adolescence [C PS 90]	2			E		

examination

Objective ID		Level	D	T	E	P	G
C PE 269	physical examination of newborn and infant [C GO 96]	1					
C PE 270	developmental screening tests (e.g. Denver)	1					
C PE 271	gestational age assessment and growth category in newborn	1					
C PE 272	investigation of battered children [C FM 53]	1					G
C PE 273	screening test of visual acuity in infants and small children [C OP 75]	1					G
C PE 274	screening test of hearing in infants and small children	1					G

6.4 Pediatrics

procedures

Objective ID		Level	D	T	E	P	G
C PE 275	basic life support in children: assessment, breathing, circulation, defibrillation (Automatic External Defibrillation) until arrival of professional emergency medical personnel (simulator)	1					
C PE 276	orotracheal intubation in children	1					
C PE 277	neonatal resuscitation	1					
C PE 278	peripheral venous access in children	1					G
C PE 279	intraosseous infusion	1					
C PE 280	blood sampling (capillary, venous, arterial) in infants and newborn	1					G
C PE 281	insertion of bladder catheter in male and female (transurethral and suprapubic) [C IM 402, C SU 322]	1					G
C PE 282	urine collection by urinary bladder puncture	1					
C PE 283	application of enema [C IM 404, C SU 325]	1					G
C PE 284	lumbar puncture [C IM 415, C SU 329]	1					
C PE 285	bone marrow aspiration [C IM 407]	1					
C PE 286	puncture of pleural and peritoneal space, aspiration of fluid [CIM414, C SU 326]	1					G
C PE 287	paracentesis	1					G

6.5 Gynecology - Obstetrics

6.5 Gynecology - Obstetrics (GO)

Clinical Pictures

adnexae

Objective ID		Level	D	T	E	P	G
C GO 1	benign adnexal tumors	2					
C GO 2	carcinoma of ovary	2					
C GO 3	pregnancy, ectopic	2			E		
C GO 4	pelvic inflammatory disease (PID: adnexitis / salpingitis / tubo-ovarian abscess) [C SU 198]	2				P	G
C GO 5	torsion / rupture of adnexal tumor / of ovarian cyst	2					
C GO 6	urinary retention [C SU 207]	2	D	T	E		G

body of the uterus

Objective ID		Level	D	T	E	P	G
C GO 7	trophoblast disorders (hydatidiform mole, choriocarcinoma)	1					
C GO 8	congenital malformations of body of the uterus	1					
C GO 9	endometrial carcinoma	2					
C GO 10	benign uterine tumors (fibroids, polyps)	2					
C GO 11	uterine descent, descensus of uterus	2					
C GO 12	uterine prolaps / vaginal vault prolaps	2	D				G

cervix

Objective ID		Level	D	T	E	P	G
C GO 13	carcinoma of cervix	2					
C GO 14	pre-malignant disorders of cervix	2					
C GO 15	cervicitis (herpes, chlamydia, gonorrhea)	2				P	G

vagina

Objective ID		Level	D	T	E	P	G
C GO 16	cystocele / cysto-urethrocele / rectocele / enterocele	1					
C GO 17	fistula of vagina (vesico-vaginal / uretero-vaginal / recto-vaginal)	1					
C GO 18	vaginal carcinoma	2					
C GO 19	vaginitis, atrophic	1					
C GO 20	vaginitis / colpitis (candidiasis, bacterial vaginosis, trichomoniasis) [C DE 24]	2					G

6.5 Gynecology - Obstetrics

vulva

Objective ID		Level	D	T	E	P	G
C GO 21	abscess of hair follicle / of sebaceous gland	2	D				G
C GO 22	carcinoma of vulva	2					
C GO 23	condylomata acuminata anal / perianal / penis / vulva / vagina / cervix [C SU 158, C DE 1]	2	D			P	G
C GO 24	cyst of Bartholin / abscess of Bartholin's gland	2	D				
C GO 25	vulva, dystrophy of (craurosis vulvae)	2	D				
C GO 26	vulvitis (candidiasis / herpes-simplex / pediculosis pubis)	2	D	T			G

breasts

Objective ID		Level	D	T	E	P	G
C GO 27	breast, cysts / benign breast tumors [C SU 82]	2					G
C GO 28	breast, malignant disorders of [C SU 84]	2					G
C GO 29	breast, inflammation of	2	D				G

endocrine gynecological disorders

Objective ID		Level	D	T	E	P	G
C GO 30	endometriosis	2					
C GO 31	hirsutism and virilization	1					
C GO 32	hyperprolactinemia and galactorrhea	1					
C GO 33	menopause, climacteric syndrome and osteoporosis	2	D	T			G
C GO 34	polycystic ovary syndrome (metabolic syndrome)	2					
C GO 35	premenstrual disorders / amenorrhea / oligomenorrhea / dysmenorrhea	2	D				

genetic disorders

Objective ID		Level	D	T	E	P	G
C GO 36	genitalia, ambiguous, mixed gonadal dysgenesis [C PE 167]	1					
C GO 37	Turner syndrome, gonadal dysgenesis [C PE 166]	1					

miscellaneous gynecological disorders

Objective ID		Level	D	T	E	P	G
C GO 38	foreign body in female internal genitalia	1					
C GO 39	traumatic gynecological injuries	1					
C GO 40	infertility, subfertility (female and male) [C SU 216]	1					

6.5 Gynecology - Obstetrics

pregnancy

Objective ID		Level	D	T	E	P	G
C GO 41	abortion, spontaneous	2					
C GO 42	abruptio placentae	2					
C GO 43	blood group incompatibility in pregnancy	2					
C GO 44	cervical incompetence in pregnancy	2					
C GO 45	intrauterine fetal demise	1					
C GO 46	gestational diabetes mellitus	2	D				G
C GO 47	hyperemesis gravidarum	2	D				
C GO 48	ascending intra-amniotic infection (chorioamnionitis)	1					
C GO 49	iron deficiency anemia in pregnancy	2	D	T		P	G
C GO 50	multiple pregnancy	2					
C GO 51	placenta previa	2					
C GO 52	placental insufficiency	2					
C GO 53	hydramnios [C PE 158]	1					
C GO 54	oligohydramnios [C PE 157]	1					
C GO 55	pregnancy induced hypertensive disorders (pregnancy induced hypertension, preeclampsia, eclampsia)	2	D		E		G
C GO 56	urinary tract infection in pregnancy	2	D	T			G
C GO 57	pyelitis in pregnancy	2					G
C GO 58	threatened abortion	2					

delivery

Objective ID		Level	D	T	E	P	G
C GO 59	fetus, unstable lie of / malposition after 36 weeks	2					
C GO 60	hypoxia of fetus during delivery	2			E		
C GO 61	placenta, retained in delivery / postpartum	2					
C GO 62	postdate delivery (placental insufficiency)	2					
C GO 63	preterm delivery (PTD) / preterm premature rupture of membranes (PPROM)	2	D		E		
C GO 64	rupture of perineum / of cervix uteri / of uteri in delivery	2					
C GO 65	shoulder-dystocia in delivery	2			E		
C GO 66	umbilical cord presentation / umbilical cord prolapse	1			E		

6.5 Gynecology - Obstetrics

postpartum and puerperium

Objective ID		Level	D	T	E	P	G
C GO 67	postpartum hemorrhage from uterus	2	D		E		
C GO 68	thrombophlebitis [C IM1 97]	2	D	T			G
C GO 69	deep vein thrombosis [C IM 196, C SU 119]	2	D	T		P	G
C GO 70	pulmonary embolism [C IM 252, C SU 108]	2				P	
C GO 71	arterial embolism [C IM 195, C SU 109]	2					
C GO 72	incontinence of feces / of urine in puerperium	2	D				
C GO 73	mastitis in puerperium	2	D	T			G
C GO 74	nipple, cracked in puerperium	2	D	T			
C GO 75	inflammation of pelvis postpartum and in puerperium (including endo-myometritis, salpingitis, pelvoperitonitis, perimetritis)	2					
C GO 76	involution and subinvolution of puerperal uterus	1					
C GO 77	postpartum depression [C PS 45]	2					G
C GO 78	postpartum psychosis [C PS 39]	2					

Further Knowledge

contraception / pregnancy / delivery

Objective ID		Level	D	T	E	P	G
C GO 79	prevention of neural tube defects (NTD)	2				P	G
C GO 80	contraception	2					G
C GO 81	basal temperature curve	1					
C GO 82	screening for infectious diseases in pregnancy	1					
C GO 83	prenatal screening for chromosomal disorders	1					
C GO 84	prenatal ultrasound screening for malformations, intrauterine growth retardation	1					
C GO 85	invasive prenatal diagnosis of genetic disorders, infections, anemia	1					
C GO 86	pregnancy complications due to pre-existing maternal disease (diabetes mellitus, hypertension, epilepsy) [C PE 221]	2					
C GO 87	pregnancy induced maternal disease (gestational diabetes mellitus, cholestasis, dermatosis)	2					

6.5 Gynecology - Obstetrics

C GO 88	pregnancy, complications due to infectious diseases (toxoplasmosis, other infectious microorganisms, rubella, cytomegaly, herpes simplex = TORCH) <i>[C PE 224]</i>	1					P
C GO 89	physiology of delivery	2					
C GO 90	pathological course of delivery	1					
C GO 91	termination of pregnancy	2					

examination

Objective ID		Level	D	T	E	P	G
C GO 92	combined recto-vaginal examination: palpation of recto-vaginal septum	1					
C GO 93	internal examination in early pregnancy	1					
C GO 94	obstetric examination (assessment of cervix, dilatation, membranes, presentation of fetus, descent)	1					
C GO 95	palpation of abdomen in pregnancy: fundal height, Leopold's manoeuvre, external assessment of position	1					
C GO 96	physical examination of newborn and infant <i>[C PE 269]</i>	1					
C GO 97	inspection of placenta and examination of umbilical cord	1					
C GO 98	postpartum examination: fundal height, placenta loose / retained	1					
C GO 99	estimate of blood loss after delivery	1					
C GO 100	assessment of lochia	1					
C GO 101	breasts in puerperium: inspection, lactation	1					

procedures

Objective ID		Level	D	T	E	P	G
C GO 102	preparation and assessment of Gram stain <i>[C IM 406, C DE 89]</i>	1					
C GO 103	genital discharge: vaginal swab, microscopic examination with saline or potassium hydroxide	1					G
C GO 104	insertion of intrauterine device (IUD)	1					
C GO 105	examination of male genitalia and interpretation of semen examination in infertility <i>[C SU 309]</i>	1					
C GO 106	curettage	1					
C GO 107	laparoscopy	1					
C GO 108	pregnancy test in urine	1					G
C GO 109	ultrasound examination during pregnancy	1					
C GO 110	pelvic examination during pregnancy	1					
C GO 111	attending woman in labor	1					

6.5 Gynecology - Obstetrics

C GO 112	inspection and support of perineum	1
C GO 113	induction of labor by drugs or by artificial rupture of membranes	1
C GO 114	cardiotocography (CTG): performance and interpretation	1
C GO 115	cesarean section	1
C GO 116	episiotomy	1
C GO 117	assisted vaginal delivery	1
C GO 118	fetal blood sampling	1
C GO 119	receive / hold newborn	1
C GO 120	aspiration of mouth / throat of newborn infant	1
C GO 121	delivery of placenta	1
C GO 122	assist and check mother and newborn	1

6.6 Psychiatry

6.6 Psychiatry (PS)

Clinical Pictures

psychiatry of childhood and adolescence

Objective ID		Level	D	T	E	P	G
C PS 1	attention deficit and hyperactivity disorder (ADHD, ADHS) [C PE 90]	1					G
C PS 2	autism [C PE 91]	1					
C PS 3	learning disorders	2					
C PS 4	mental retardation [C IM 142, C PE 261]	1					
C PS 5	tic disorders [C PE 104]	1					
C PS 6	psychic reaction of children to chronic disease [C PE 92]	1					G
C PS 7	depression in children [C PE 94]	1					
C PS 8	psychic reaction of children to parental divorce [C PE 93]	1					G
C PS 9	dyslexia [C PE 95]	1					
C PS 10	eating disorders in childhood [C PE 96]	2					
C PS 11	encopresis [C PE 97]	1					
C PS 12	mother-child relationship, disorders	1					G
C PS 13	mutism [C PE 99]	1					
C PS 14	psychoses of the child and adolescent [C PE 100]	1					
C PS 15	psychosomatic disorders in children (non specific symptoms: abdominal pain, headache, fatigue) [C PE 101]	1					G
C PS 16	sleep-related problems in childhood [C PE 266]	1					
C PS 17	speech and language disorders in childhood, including stuttering [C PE 103]	1					

organic mental disorders

Objective ID		Level	D	T	E	P	G
C PS 18	dementia in Alzheimer's disease [C IM 150, C IM 332]	2					G
C PS 19	dementia, vascular (including multi-infarct dementia, subcortical dementia) [C IM 151, C IM 333]	2					G
C PS 20	dementia of frontal type [C IM 152, C IM 335]	1					
C PS 21	Lewy body dementia [C IM 153, C IM 334]	1					
C PS 22	dementia in neurological diseases [C IM 154]	1					
C PS 23	delirium [C IM 339]	2	D		E		
C PS 24	organic confusional state [C IM 187]	2			E		
C PS 25	Wernicke-Korsakoff's encephalopathy, organic amnesic syndrome [C IM 184]	2		T	E		
C PS 26	organic hallucinosis	1					

6.6 Psychiatry

C PS 27	organic psychotic disorders	1					
C PS 28	organic personality disorder	1					
C PS 29	postconcussional syndrome [C SU 54]	1					

psychoactive substance abuse

Objective ID		Level	D	T	E	P	G
C PS 30	intoxication by psychotropic and illicit drugs (including heroin, cocaine, amphetamine) [C IM 172, C FM 30]	2	D	T	E		G
C PS 31	alcohol intoxication [C IM 109]	2	D		E		G
C PS 32	psychoactive substances, harmful use and dependence syndromes	2	D			P	G
C PS 33	withdrawal states	2	D	T	E	P	G

schizophrenia and related disorders

Objective ID		Level	D	T	E	P	G
C PS 34	schizophrenia, paranoid, hebephrenic, catatonic, undifferentiated	2					G
C PS 35	residual schizophrenia	1					G
C PS 36	acute polymorphic psychotic disorders	1			E		G
C PS 37	induced delusional disorder (folie à deux)	1					
C PS 38	schizoaffective disorders	1					
C PS 39	postpartum psychosis [C GO 78]	2					

mood disorders

Objective ID		Level	D	T	E	P	G
C PS 40	manic episode	2	D		E		G
C PS 41	mania with psychotic symptoms	1			E		G
C PS 42	depressive episode in adults [C IM 336]	2	D	T	E		G
C PS 43	depression in adults with psychotic symptoms	1			E		
C PS 44	depression in adults with somatic symptoms [C IM 338]	2			E		G
C PS 45	postpartum depression [C GO 77]	2					G
C PS 46	bipolar affective disorder in adults	2			E		G
C PS 47	recurrent depressive disorder in adults [C IM 337]	2	D		E		G
C PS 48	cyclothymia	1					G
C PS 49	dysthymia	1					G

6.6 Psychiatry

neurotic and related disorders

Objective ID		Level	D	T	E	P	G
C PS 50	agoraphobia	2	D		E		G
C PS 51	phobia, social	1					
C PS 52	phobia, specific	1					
C PS 53	panic disorder	2	D		E		G
C PS 54	anxiety disorder, generalized	2	D		E		G
C PS 55	obsessive-compulsive disorder	1					
C PS 56	acute stress reaction	1					
C PS 57	post-traumatic stress disorder / enduring personality changes after catastrophic experience	1					
C PS 58	adjustment disorders	1					
C PS 59	dissociative disorders	1					
C PS 60	somatization disorder, somatoform autonomic dysfunction, somatoform pain disease	2					G
C PS 61	hypochondrial disorder	1					G
C PS 62	neurasthenia	1					
C PS 63	depersonalization-derealization syndrome	1					

behavioral syndromes with somatic factors

Objective ID		Level	D	T	E	P	G
C PS 64	anorexia nervosa	2	D		E		G
C PS 65	bulimia nervosa	2	D				G
C PS 66	sleep disorder	2	D	T			G
C PS 67	somnambulism, night terrors and nightmares (parasomnia) <i>[C IM 186, C PE 102]</i>	1					
C PS 68	sexual dysfunction <i>[C IM 331]</i>	2					
C PS 69	abuse of non-dependence-producing substances (antidepressants, laxatives, analgesics, antacids, vitamins, steroids or hormones, specific herbal or folk remedies)	2	D		E	P	G

adult personality and behavioral disorders

Objective ID		Level	D	T	E	P	G
C PS 70	paranoid personality disorder	1					
C PS 71	schizoid personality disorder	1					
C PS 72	dissocial personality disorder	1					

6.6 Psychiatry

C PS 73	emotionally unstable personality disorder, impulsive type	1				
C PS 74	emotionally unstable personality disorder, borderline type	1				
C PS 75	histrionic personality disorder	1				
C PS 76	anankastic personality disorder	1				
C PS 77	anxious personality disorder	1				
C PS 78	dependent personality disorder	1				
C PS 79	personality changes, enduring, after psychiatric illness	1				
C PS 80	gambling, pathological	1				
C PS 81	pyromania	1				
C PS 82	kleptomania	1				
C PS 83	trichotillomania	1				
C PS 84	transsexualism	1				
C PS 85	problems of sexual preference, gender identity disorder	1				
C PS 86	factitious disorder (intentional feigning of physical or psychological signs and symptoms)	1				
C PS 87	aggressive behavior	2	D	E	P	G
C PS 88	suicide	2	D	E	P	G

6.6 Psychiatry

Further Knowledge

psychiatry of childhood and adolescence

Objective ID	Level	D	T	E	P	G
C PS 89 antisocial behavior in children [C PE 267]	1					
C PS 90 risk factors associated with suicide in childhood and adolescence [C PE 268]	2			E		

treatment

Objective ID	Level	D	T	E	P	G
C PS 91 managing patients with aggressive or suicidal behavior	1					G
C PS 92 non pharmacological somatic psychiatric treatment (light therapy, electroconvulsive therapy, sleep deprivation)	1					
C PS 93 systemic, psychodynamic and cognitive behavioral therapy	1					
C PS 94 side effects of psychotropic drugs	2	D				G

legal aspects

Objective ID	Level	D	T	E	P	G
C PS 95 coercive treatment, forced admission to hospital [C FM 36]	2					G
C PS 96 legal aspects of personality (Persönlichkeitsrechte, ZGB / Droits de la personnalité, CC) [C FM 37]	1					

examination

Objective ID	Level	D	T	E	P	G
C PS 97 assessment of ability to judge (Urteilsfähigkeit / capacité de discernement) [C FM 54]	1					

6.7 Ophthalmology

6.7 Ophthalmology (OP)

Clinical Pictures

eyelids

Objective ID		Level	D	T	E	P	G
C OP 1	blepharitis	2	D				G
C OP 2	chalazion	2	D				G
C OP 3	ectropion	2	D				
C OP 4	entropion	2	D				
C OP 5	epicanthus (eyelids)	2	D				
C OP 6	eyelid laceration	2	D				
C OP 7	eyelid tumor, e.g. basal cell carcinoma	2					
C OP 8	hordeolum	2	D				G
C OP 9	lagophthalmos	2	D				
C OP 10	ptosis	2	D				G
C OP 11	trichiasis (eyelashes grow inwards)	2	D				
C OP 12	xanthelasma of eyelid	2	D				

lacrimal apparatus

Objective ID		Level	D	T	E	P	G
C OP 13	dacryocystitis	2	D				
C OP 14	dacryostenosis	1					
C OP 15	lacrimal duct, laceration	1					

conjunctiva

Objective ID		Level	D	T	E	P	G
C OP 16	conjunctiva, foreign body	2	D	T	E		G
C OP 17	conjunctivitis [C PE 184]	2	D	T			G
C OP 18	pterygium	2	D				
C OP 19	subconjunctival hemorrhage	2	D				

6.7 Ophthalmology

cornea

Objective ID		Level	D	T	E	P	G
C OP 20	burns of cornea by alkali / by acid / by heat	2	D		E		G
C OP 21	cornea, foreign body	2	D		E		G
C OP 22	cornea, superficial lesions of (actinic keratitis, erosion, contact lenses)	2	D	T	E		G
C OP 23	corneal edema	1					
C OP 24	keratitis, keratitis with corneal ulcer	2	D				
C OP 25	keratitis, dendritic (herpes)	2	D				
C OP 26	kerato-conjunctivitis sicca	1					G
C OP 27	keratoconus	1					

anterior chamber

Objective ID		Level	D	T	E	P	G
C OP 28	hyphema (eyes)	2	D		E		
C OP 29	hypopyon (eyes)	2	D		E		

lens

Objective ID		Level	D	T	E	P	G
C OP 30	cataract in adults	2	D				G
C OP 31	lens dislocation	1					
C OP 32	pseudophakia (artificial lens)	1					

iris and ciliary body

Objective ID		Level	D	T	E	P	G
C OP 33	iridocyclitis, iritis	2	D				G

vitreous fluid

Objective ID		Level	D	T	E	P	G
C OP 34	vitreous hemorrhage (eye)	1					

retina

Objective ID		Level	D	T	E	P	G
C OP 35	degeneration of macula (eye), age dependent [C IM 329]	2					G
C OP 36	hypertensive retinopathy	2					

6.7 Ophthalmology

C OP 37	retina: vessel occlusion / bleeding	2					
C OP 38	retinal detachment	2			E		G
C OP 39	retinoblastoma in children and adults [C PE 89]	2					
C OP 40	scleritis / episcleritis	1					

optic disc and optic nerve

Objective ID		Level	D	T	E	P	G
C OP 41	optic disc cupping	2					
C OP 42	optic nerve atrophy	1					
C OP 43	optic neuropathy, e.g. optic neuritis	2					
C OP 44	papilledema, e.g. increased intracranial pressure	2					G

choroid

Objective ID		Level	D	T	E	P	G
C OP 45	chorioretinitis	1					
C OP 46	choroid, neoplasms of (melanoma, metastases)	1					

eyeball

Objective ID		Level	D	T	E	P	G
C OP 47	buphthalmos (hydrophthalmos)	1					
C OP 48	contusion of eyeball	2	D		E		G
C OP 49	endophthalmitis	2			E		
C OP 50	eyeball trauma: contusion / perforation / intraocular foreign body	2	D		E		G

orbit

Objective ID		Level	D	T	E	P	G
C OP 51	fracture of orbit (blow-out fracture) [C OT 40]	1					
C OP 52	orbit, inflammation of / orbital cellulitis [C PE 183]	2			E		G
C OP 53	tumor of orbit	1					

refraction and accommodation

Objective ID		Level	D	T	E	P	G
C OP 54	astigmatism	1					
C OP 55	hypermetropia (eyes)	2					G

6.7 Ophthalmology

C OP 56	myopia	2							G
C OP 57	presbyopia	2							G

vision and visual fields

Objective ID		Level	D	T	E	P	G
C OP 58	amblyopia	2					
C OP 59	hemianopsia, bitemporal / homonymous	2	D				
C OP 60	night-blindness	1					
C OP 61	scotoma	2					

glaucoma

Objective ID		Level	D	T	E	P	G
C OP 62	glaucoma, acute	2	D		E		G
C OP 63	glaucoma, secondary	1					
C OP 64	glaucoma, simple	2					G

squint

Objective ID		Level	D	T	E	P	G
C OP 65	nystagmus [C OT 113]	1					
C OP 66	strabismus	1					

underlying diseases

Objective ID		Level	D	T	E	P	G
C OP 67	eye disorders due to diabetes mellitus	2					
C OP 68	eye disorders due to hyperthyroidism (Graves disease)	2					

6.7 Ophthalmology

Further Knowledge

examination

Objective ID		Level	D	T	E	P	G
C OP 69	inspection lacrimal apparatus	1					
C OP 70	assessment of binocular vision	1					G
C OP 71	perimetry	1					
C OP 72	slit-lamp examination of the eye	1					
C OP 73	intra-ocular pressure, measurement by aplanation tonometer or non-contact- tonometer	1					
C OP 74	assessment of refraction, subjective and objective (refractometry, kerato- meter)	1					
C OP 75	screening test of visual acuity in infants and small children [C PE 273]	1					G
C OP 76	examination with Amsler panes	1					

procedures

Objective ID		Level	D	T	E	P	G
C OP 77	measurement of lacrimal production	1					
C OP 78	removal of foreign body with swab (if necessary by eversion of upper eye- lid)	1					G
C OP 79	cornea, removal of foreign body and debris	1					G
C OP 80	removal of contact lens from the eye	1					G

6.8 Dermatology

6.8 Dermatology (DE)

Clinical Pictures

viral infections

Objective ID		Level	D	T	E	P	G
C DE 1	condylomata acuminata anal / perianal / penis / vulva / vagina / cervix [C SU 158, C GO 23]	2	D			P	G
C DE 2	herpes simplex [C IM 349]	2	D	T			G
C DE 3	varicella / herpes zoster [C IM 350, C PE 207]	2	D	T		P	G
C DE 4	warts, human papilloma virus HPV, molluscum contagiosum	2	D	T			G

bacterial infections

Objective ID		Level	D	T	E	P	G
C DE 5	borreliosis, Lyme disease [C IM 122]	2	D				G
C DE 6	erysipelas [C IM 347]	2	D	T	E		G
C DE 7	folliculitis	2	D	T			G
C DE 8	furuncle / carbuncle [C SU 9]	2	D	T			G
C DE 9	impetigo [C PE 187]	2	D	T			G
C DE 10	lepra	1					
C DE 11	staphylococcal scaled skin syndrome (SSSS, toxic shock syndrome)	2					

fungal infections

Objective ID		Level	D	T	E	P	G
C DE 12	candidiasis	2	D	T			G
C DE 13	dermatophytic disease (fungal infection of skin)	2	D	T			G
C DE 14	pityriasis versicolor	2	D	T			G

parasitic infections

Objective ID		Level	D	T	E	P	G
C DE 15	leishmaniasis, cutaneous	1					
C DE 16	pediculosis capitis and pubis [C PE 119]	2	D	T		P	G
C DE 17	scabies [C PE 120]	2	D	T		P	G
C DE 18	sting of insects / insect bites	2	D	T		P	G

6.8 Dermatology

sexually transmitted diseases (not mentioned elsewhere)

Objective ID		Level	D	T	E	P	G
C DE 19	AIDS, cutaneous manifestations of	2	D			P	G
C DE 20	chlamydial infection	2	D	T		P	G
C DE 21	gonorrhoea	2	D	T		P	G
C DE 22	herpes genitalis	2	D	T		P	G
C DE 23	syphilis [C IM 176]	2	D	T		P	G
C DE 24	vaginitis / colpitis (candidiasis, bacterial vaginosis, trichomoniasis) [C GO 20]	2					G
C DE 25	sexually transmitted disease STD (ulcer soft, lymphgranuloma vernerum, granuloma inguinale)	1					
C DE 26	urethritis, nonspecific	2	D	T		P	G

allergic and non-allergic intolerance reactions

Objective ID		Level	D	T	E	P	G
C DE 27	allergic contact dermatitis	2	D	T	E	P	G
C DE 28	angio-edema	2	D		E		
C DE 29	atopic / constitutional eczema [C PE 114]	2	D	T		P	G
C DE 30	dermatitis from diaper	2	D	T			
C DE 31	drug rash	2	D		E		G
C DE 32	erythema nodosum [C IM 15]	2	D				G
C DE 33	seborrheic eczema in adults	2	D	T			G
C DE 34	erythema multiforme and Stevens-Johnson syndrome [C IM 14]	1					
C DE 35	toxic / irritant contact dermatitis	2	D	T	E	P	G
C DE 36	toxic epidermal necrolysis	2					
C DE 37	urticaria [C PE 117]	2	D	T	E		G
C DE 38	purpura, Henoch-Schonlein (subgroup of hypersensitivity vasculitides) [C IM 42, C PE 172]	1					

auto-immune and bullous dermatoses

Objective ID		Level	D	T	E	P	G
C DE 39	polymyositis / dermatomyositis [C IM 29]	1					
C DE 40	lupus erythematosus cutaneous	2					
C DE 41	dermatosis autoimmune-bullous	1					
C DE 42	systemic sclerosis, progressive (scleroderma) [C IM 55]	1					

6.8 Dermatology

alterations of pigmentation

Objective ID		Level	D	T	E	P	G
C DE 43	neurofibromatosis (Recklinghausen's disease) [C IM 160, C PE 88]	1					
C DE 44	lentigo simplex	2	D				G
C DE 45	vitiligo	2	D				G

diseases of skin appendages

Objective ID		Level	D	T	E	P	G
C DE 46	nail dyschromias	1					
C DE 47	nail dystrophies (psoriasis / lichen planus / mycoses)	2	D				

genodermatoses

Objective ID		Level	D	T	E	P	G
C DE 48	xeroderma pigmentosum (genodermatosis)	1					

granulomatous diseases

Objective ID		Level	D	T	E	P	G
C DE 49	granuloma annulare	1					G
C DE 50	sarcoidosis, cutaneous lesions	1					

papular and erythematous disorders

Objective ID		Level	D	T	E	P	G
C DE 51	prurigo	2	D				G
C DE 52	psoriasis	2	D	T			G

sebaceous gland diseases

Objective ID		Level	D	T	E	P	G
C DE 53	acne, hydradenitis suppurativa [C PE 113]	2	D	T			G
C DE 54	dermatitis, perioral, rosacea	1					G
C DE 55	diabetes mellitus, skin lesions including foot ulcer [C SU 16]	2	D				G
C DE 56	paraneoplastic dermatological syndromes	1					

6.8 Dermatology

photodermatoses and physically induced dermatoses

Objective ID		Level	D	T	E	P	G
C DE 57	actinic dermatitis	2	D			P	G
C DE 58	burns [C SU 8]	2	D		E		G
C DE 59	dermatitis, solar	2	D	T		P	G
C DE 60	pernio / frost bites / chilblains	1					
C DE 61	photodermatoses in a broad sense	1					
C DE 62	actinic keratosis	2	D	T		P	G

benign tumors and nevi

Objective ID		Level	D	T	E	P	G
C DE 63	hemangioma of skin	2	D				G
C DE 64	histiocytoma	1					
C DE 65	keloid [C SU 18]	2	D				G
C DE 66	lipoma	2	D				G
C DE 67	nevus cell nevus	2	D				G
C DE 68	nevus flammeus	2	D				G
C DE 69	seborrheic keratosis	2	D				G
C DE 70	urticaria pigmentosa, cutaneous mastocytosis	1					

pre-malignant and malignant skin lesions

Objective ID		Level	D	T	E	P	G
C DE 71	leukoplakia / leukokeratosis (diseases of transitional epithelia) [C SU 33]	2					
C DE 72	Bowen's disease [C OT 61]	2					
C DE 73	basalioma, spinalioma, squamous cell carcinoma [C OT 36]	2				P	G
C DE 74	lentigo maligna	2					
C DE 75	malignant lymphoma of the skin	2					
C DE 76	malignant melanoma [C SU 7]	2				P	G
C DE 77	Paget's disease of the breast	1					
C DE 78	skin metastases caused by internal tumors	1					

6.8 Dermatology

proctological diseases

Objective ID		Level	D	T	E	P	G
C DE 79	anal fissures [C IM 290, C SU 157, C PE 7 9]	2	D				G
C DE 80	hemorrhoids [C IM 291, C SU 160]	2	D				G

psychodermatoses

Objective ID		Level	D	T	E	P	G
C DE 81	dermatitis artefacta	1					
C DE 82	psychogenic pruritus	1					G

vascular diseases

Objective ID		Level	D	T	E	P	G
C DE 83	decubital ulcer [C IM 325, C SU 14]	2	D			P	G
C DE 84	lymphangitis, acute / lymphadenitis, acute [C IM 353, C SU 122, C PE 188]	2	D	T			G
C DE 85	varicosis / venous insufficiency / leg ulcers / stasis ulcer [C SU 120]	2	D				G

Further Knowledge

dermatologic therapy

Objective ID		Level	D	T	E	P	G
C DE 86	basics of dermatologic therapy (topical, systemic, physical, galenic, specific drugs)	1					

examination

Objective ID		Level	D	T	E	P	G
C DE 87	identification of parasite in skin and hair	1					G

procedures

Objective ID		Level	D	T	E	P	G
C DE 88	preparation and assessment of fungal and bacterial swabs and smears	1					G
C DE 89	preparation and assessment of Gram stain [C IM 406, C GO 102]	1					
C DE 90	patch test	1					
C DE 91	intracutaneous test	1					
C DE 92	punch biopsy	1					G

6.9 Otorhinolaryngology

6.9 Otorhinolaryngology (OT)

Clinical Pictures

external ear

Objective ID	Level	D	T	E	P	G
C OT 1 earwax, impacted	2	D	T			G
C OT 2 exostosis, hyperostosis in external ear	1					
C OT 3 foreign body in external auditory canal	2	D		E		G
C OT 4 erysipelas of external ear	2	D				
C OT 5 otitis, external [C PE 192]	2	D	T			G
C OT 6 furunculosis of the external auditory canal	2	D	T			
C OT 7 perichondritis of auricle	1					
C OT 8 ear, laceration of, injury to external auditory canal	1			E		
C OT 9 ear, prominent auricle (bat ear, lop ear)	1					

middle ear

Objective ID	Level	D	T	E	P	G
C OT 10 otitis media, acute, viral / bacterial [C PE 189]	2	D	T			G
C OT 11 otitis media, chronic, with effusion (glue ear) / with central perforation of tympanic membrane [C PE 190]	2	D				
C OT 12 cholesteatoma	1					
C OT 13 mastoid abscess / purulent otomastoiditis [C PE 191]	1			E		
C OT 14 otogenic brain abscess	1					
C OT 15 otogenic meningitis	2	D		E	P	G
C OT 16 thrombosis of lateral sinus from inflammation of middle ear	1					
C OT 17 otosclerosis	1					
C OT 18 barotrauma of middle ear	1			E		
C OT 19 Eustachien tube dysfunction	2	D	T			G
C OT 20 traumatic perforation of tympanic membrane	1			E		

inner ear and vestibular organ

Objective ID	Level	D	T	E	P	G
C OT 21 acoustic trauma and noise-induced hearing loss	2	D			P	G
C OT 22 ototoxic hearing loss	2	D			P	

6.9 Otorhinolaryngology

C OT 23	presbycusis [C IM 330]	2	D				G
C OT 24	acoustic neurinoma (vestibular schwannoma)	1					
C OT 25	fracture of temporal bone (longitudinal / transverse) [C SU 53]	1			E		
C OT 26	labyrinthitis	1					
C OT 27	benign paroxysmal positional vertigo (cupulo- and canalolithiasis)	2					G
C OT 28	Menière's disease [C IM 141]	2	D				G
C OT 29	motion sickness (kinetosis)	2	D	T			
C OT 30	vestibular function, sudden loss of (vestibular neuritis) [C IM 182]	1			E		G

nose, paranasal sinus, anterior skullbase

Objective ID		Level	D	T	E	P	G
C OT 31	furuncle of the nose	2	D	T			
C OT 32	nasal polyposis	2					G
C OT 33	rhinitis, rhinosinusitis, acute [C PE 193]	2	D	T			G
C OT 34	rhino-conjunctivitis, allergic / rhinosinusitis, allergic [C PE 170]	2	D	T		P	G
C OT 35	rhinitis, rhinosinusitis, chronic [C PE 194]	1					
C OT 36	basalioma, spinalioma, squamous cell carcinoma [C DE 73]	2				P	G
C OT 37	epistaxis	2	D	T	E		G
C OT 38	fracture of the nasal pyramid [C SU 50]	2					
C OT 39	fractures of the facial cranium [C SU 51]	1			E		
C OT 40	fracture of orbit (blow-out fracture) [C OP 51]	1					
C OT 41	choanal atresia	1					
C OT 42	nasal septum, deviation	2					G

oral cavity, pharynx, hypopharynx

Objective ID		Level	D	T	E	P	G
C OT 43	cheilitis angularis (Perlèche)	2	D	T			G
C OT 44	gingivitis / periodontitis [C SU 31]	1					G
C OT 45	herpes labialis	2	D	T			G
C OT 46	candidiasis, mouth / throat (thrush) [C IM 257, C SU 30, C PE 195]	2	D	T			G
C OT 47	stomatitis, herpetic [C IM 258, C PE 196]	2		T			
C OT 48	leukoplakia, hairy of the border of the tongue in AIDS	1					
C OT 49	abscess of the floor of the mouth (including of dental origin)	1					

6.9 Otorhinolaryngology

C OT 50	pressure sores from dental prostheses	1					
C OT 51	stomatitis, recurrent aphthous [C IM 256]	2	D				G
C OT 52	agranulocytotic angina	1					
C OT 53	diphtheria, including diphtheric croup [C PE 200]	1			E	P	G
C OT 54	mononucleosis, infectious [C IM 351, C PE 208]	2	D	T			G
C OT 55	pharyngitis, acute / chronic	2	D	T			G
C OT 56	Plaut-Vincent angina (trench mouth), acute necrotizing ulcerative gingivitis	1					
C OT 57	scarlet fever [C PE 198]	2	D	T			G
C OT 58	tonsillitis, streptococcal (including complications: glomerulonephritis, rheumatic fever, chorea minor)	2	D	T			G
C OT 59	peritonsillar abscess / retropharyngeal abscess [C PE 197]	2	D		E		G
C OT 60	tonsillogenic septicemia	1			E		
C OT 61	Bowen's disease [C DE 72]	2					
C OT 62	pharynx and oral cavity, tumors of [C SU 38]	1					
C OT 63	oral cavity and pharynx, thermal and caustic lesions of	1			E		
C OT 64	teeth, injuries to [C SU 40, C PE 6]	2	D		E		G
C OT 65	tongue bite / piercing of tongue	1			E		
C OT 66	traumatic lesions of the palate	1			E		
C OT 67	cleft lip, jaw, palate [C SU 42, C PE 123]	1					
C OT 68	tongue, norm variants of	1					
C OT 69	dysgeusia / ageusia	1					
C OT 70	foreign body in hypopharynx	1			E		
C OT 71	ranula (mucus retention cyst sublingual gland)	1					
C OT 72	sleep apnea syndrome obstructive / central [C IM 254]	2					G

salivary glands

Objective ID		Level	D	T	E	P	G
C OT 73	mumps (epidemic parotitis) [C PE 210]	2	D			P	G
C OT 74	parotitis, malarial	1					
C OT 75	parotitis, suppurative	1					
C OT 76	sialolithiasis of salivary glands [C SU 41]	1					
C OT 77	pleomorphic adenoma (benign mixed tumor) and other benign tumors of salivary glands	1					

6.9 Otorhinolaryngology

C OT 78	tumors of salivary gland, malignant	1						
C OT 79	Sjögren's disease (sicca syndrome with arthritis, LE, scleroderma) [C IM 54]	1						

esophagus

Objective ID		Level	D	T	E	P	G
C OT 80	diverticulum of esophagus (including Zenker's diverticulum) [C SU 125]	1					
C OT 81	esophageal varices [C IM 262, C SU 127]	2					
C OT 82	esophagus, injuries and perforations of [C SU 129]	1					
C OT 83	foreign body in esophagus	1				E	
C OT 84	esophagus, strictures of [C SU 130]	1					
C OT 85	esophageal rupture [C SU 126]	1					
C OT 86	esophagus, corrosive lesion (acid, base, stenosis) [C SU 128]	2				E	

cervico-facial region

Objective ID		Level	D	T	E	P	G
C OT 87	midline / lateral branchial cysts / fistulas [C SU 232]	1					
C OT 88	enlarged cervical lymph nodes (inflammatory, metastatic)	1					
C OT 89	cervico-facial tumors benign (including simple goiter)	1					
C OT 90	peripheral palsy / paralysis of facial nerve (idiopathic, borreliosis, viral, traumatic, neoplastic) [C IM 121, C SU 46]	2	D				G

larynx, vocal cords, tracheo-bronchial system

Objective ID		Level	D	T	E	P	G
C OT 91	epiglottitis [C PE 7]	2	D		E	P	G
C OT 92	laryngitis acute	1					G
C OT 93	laryngitis, chronic	1					G
C OT 94	tracheitis, acute / chronic [C IM 255, C PE 201]	2		T			G
C OT 95	viral croup (pseudocroup, laryngitis subglottica) [C PE 199]	2	D	T	E		G
C OT 96	tracheomalacia	1					
C OT 97	palsy of recurrent laryngeal nerve, unilateral / bilateral	1					
C OT 98	vocal cord paralysis, neurologic syndromes causing it	1					
C OT 99	laryngeal carcinoma, clinical symptoms of	2					
C OT 100	tumors of the larynx	1					
C OT 101	vocal cord and larynx: nodules / cysts / polyps / papillomas	1					

6.9 Otorhinolaryngology

C OT 102	foreign body aspiration (larynx, trachea and bronchi) [C SU 91, C PE 10]	2	D		E	P	G
C OT 103	laryngeal trauma, external, blunt / sharp (with fractures of cartilage and structural displacements)	1			E		
C OT 104	larynx and trachea, thermal / corrosive injuries of	1			E		

Further Knowledge

hearing disorders

Objective ID		Level	D	T	E	P	G
C OT 105	hearing loss, congenital / acquired	1					
C OT 106	hearing loss, conductive	2	D				G
C OT 107	hearing loss, sensory neural	2	D				
C OT 108	hearing loss, retrocochlear	1					
C OT 109	hearing loss, central	1					
C OT 110	hearing aid fitting	1					
C OT 111	cochlea implantation	1					

vestibular dysfunction

Objective ID		Level	D	T	E	P	G
C OT 112	definition of vertigo and disequilibrium	1					
C OT 113	nystagmus [C OP 65]	1					
C OT 114	vestibular ototoxicity	2					
C OT 115	vestibular dysfunction, peripheral / central	2					
C OT 116	vestibular compensation	1					

examination

Objective ID		Level	D	T	E	P	G
C OT 117	ear microscopy	1					
C OT 118	posterior rhinoscopy	1					
C OT 119	testing of the act of swallowing	1					
C OT 120	indirect pharyngo-laryngoscopy	1					

6.9 Otorhinolaryngology

procedures

Objective ID		Level	D	T	E	P	G
C OT 121	tympanometry and measurement of stapedius reflex	1					
C OT 122	pure tone audiogram and speech audiometry	1					
C OT 123	acoustic evoked potentials	1					
C OT 124	induced nystagmus (rotation, optokinetic, caloric)	1					
C OT 125	endoscopy of nasal cavity	1					
C OT 126	endoscopy of pharynx	1					
C OT 127	direct fiberoptic laryngoscopy	1					
C OT 128	bronchoscopy	1					
C OT 129	endoscopy of the esophagus	1					
C OT 130	coniotomy	1					
C OT 131	tracheotomy	1					
C OT 132	tracheal intubation [C SU 310]	1					
C OT 133	emergency treatment of acute dyspnea in patients with tracheal canula	1					G
C OT 134	anterior tamponade in nose	1					G
C OT 135	treatment of hemorrhage after tonsillectomy	1					
C OT 136	CPAP-ventilation	1					G
C OT 137	fine needle aspiration for cytology [C IM 412]	1					G

6.10 Radiology and Nuclear Medicine

6.10 Radiology and Nuclear Medicine (RN)

Further Knowledge

physics of X-ray and types of radiation used

Objective ID	Level	D	T	E	P	G
C RN 1	1					
components of environmental radiation						
C RN 2	1					
basic physics of the X-ray process						
C RN 3	1					
production of radiation: generator, tube						
C RN 4	1					
types of radiation						
C RN 5	1					
radiation attenuation law						
C RN 6	1					
principles of X-ray detection						

physics of nuclear medicine

Objective ID	Level	D	T	E	P	G
C RN 7	1					
radio-isotopes and radio-tracers						
C RN 8	1					
physical / biological half-life in nuclear medicine						
C RN 9	1					
principles of gamma ray detection: scintigraphy, SPECT, PET						

principles of radio-oncology

Objective ID	Level	D	T	E	P	G
C RN 10	2					
natural tumor development, tumor classification and TNM principles						
C RN 11	1					
techniques in radio-oncology						
C RN 12	1					
treatment planning in radio-oncology						

risks from exposure to ionizing radiation

Objective ID	Level	D	T	E	P	G
C RN 13	1					
calculation of effective and organ dose in radiation						
C RN 14	2					G
explaining risks of radiological imaging to patients						
C RN 15	1					G
exposure situations and associated radiation risks for population, individual person, health professional, patient						

legislation on imaging data and radiation protection

Objective ID	Level	D	T	E	P	G
C RN 16	1					
legal regulations on imaging data						
C RN 17	1					
radiation protection law						

6.10 Radiology and Nuclear Medicine

CRN 18	practical X-ray protection	2							G
CRN 19	administration of radioactive isotopes: radiation protection of patient and environment	1							
CRN 20	personal protection and monitoring: dose limits, typical dose to staff, associated risks, precautions	1							G

conventional radiography

Objective ID		Level	D	T	E	P	G
CRN 21	technical parameters of conventional radiography: scatter, contrast, viewing window, use of grids, X-ray detection	1					
CRN 22	conventional radiographic examinations using contrast agents	1					

Computed Tomography (CT)

Objective ID		Level	D	T	E	P	G
CRN 23	technical parameters of Computed Tomography (CT): detector, image generation, enhancement, Hounsfield units	1					
CRN 24	CT-guided intervention (CT-fluoroscopy)	1					
CRN 25	indications for Computed-Tomography	1					

Ultrasonography (US)

Objective ID		Level	D	T	E	P	G
CRN 26	technical parameters of Ultrasonography (US): image formation, Doppler effect, probe	1					
CRN 27	advantages and drawbacks of US versus other imaging modalities	2					

Magnetic Resonance Imaging (MRI)

Objective ID		Level	D	T	E	P	G
CRN 28	technical parameters of Magnetic Resonance Imaging (MRI): magnetism, radiofrequency, relaxation time, signal characteristics of tissues	1					
CRN 29	indications and contraindications, safety considerations of MRI	2					

special uses of radiology

Objective ID		Level	D	T	E	P	G
CRN 30	interventional radiology: classification, indications and risks	1					

6.10 Radiology and Nuclear Medicine

contrast media

Objective ID		Level	D	T	E	P	G
C RN 31	contrast media: types, indications and contraindications	1					
C RN 32	contrast media: adverse effects, prevention and treatment	2					

organ related radiopathology

Objective ID		Level	D	T	E	P	G
C RN 33	conventional radiopathology of the lung: alveolar consolidation, interstitial disease, pulmonary nodules and masses	2					G
C RN 34	conventional radiopathology of pleural, extra-pleural, mediastinal, hilar and chest wall conditions	2					G
C RN 35	conventional radiopathology of bones and joints: osteoporosis, bone metastasis, osteomalacia, pseudarthrosis, osteoarthritis deformans, loss of joint space	2					G
C RN 36	conventional radiology of fractures of extremities: clavicle, shoulder, humerus, radius, ulna, wrist (distal radius), fingers, femur, knee, tibia, fibula, toes	2					G
C RN 37	conventional radiology of the spine: compression fracture, scoliosis, kyphosis	2					G

practice of imaging procedures

Objective ID		Level	D	T	E	P	G
C RN 38	standard radiological exam of chest: performance	1					G
C RN 39	standard radiological exam of extremities: performance	1					G
C RN 40	abdominal ultrasonography (US): performance	1					G
C RN 41	computed tomography (CT): performance	1					
C RN 42	magnetic resonance imaging (MRI): performance	1					

6.11 Public Health, Insurance- and Occupational Medicine

6.11 Public Health, Insurance- and Occupational Medicine (PH)

Further Knowledge

basic terms and concepts of public health

Objective ID		Level
C PH 1	important definitions and concepts: health and disease, salutogenesis and pathogenesis, causation and association, the individual, the population, public health, epidemiology, clinical epidemiology, social medicine, preventive medicine, environmental medicine, health services, health economics, public health policy, health care, health promotion, health behavior.	2
C PH 2	approaches and strategies of prevention: primary, secondary and tertiary prevention; structural and individual-level prevention strategies; population approach and high-risk approach.	2
C PH 3	concepts in social medicine and social epidemiology: social class, socioeconomic status, social mobility, gender, ethnicity, social networks, cultural changes.	2
C PH 4	explanations for differences in health and utilization of healthcare services of population groups, according to age, sex, social status, ethnicity.	1

epidemiology

Objective ID		Level
C PH 5	applications of epidemiology: descriptive and analytical approaches.	1
C PH 6	measures of disease frequency: prevalence, incidence, incidence rate, cumulative incidence (risk).	2
C PH 7	measures of association: relative measures (risk ratio, rate ratio, odds ratio); absolute measures (risk difference, number needed to treat / harm, attributable risk).	2
C PH 8	observational and experimental study designs, their advantages and disadvantages and areas of application: case series, cross-sectional studies, case-control studies, cohort studies, randomized controlled trials, systematic reviews, meta-analysis.	2
C PH 9	critical appraisal of study methodology, internal and external validity of results: systematic error (selection bias, information bias); confounding and how to deal with it (age standardization, stratification, multivariable analysis).	2
C PH 10	diagnostic and screening tests: sensitivity, specificity, positive and negative predictive values, likelihood-ratio, pre-test probability, post-test probability.	2
C PH 11	types of bias in the evaluation of diagnostic and screening tests (partial verification bias, differential verification bias); influence of the patient spectrum and pre-test probability on the interpretation of test results.	1
C PH 12	types of bias in the evaluation of screening programs (lead time bias, length bias, overdiagnosis bias).	1

6.11 Public Health, Insurance- and Occupational Medicine

biostatistics

Objective ID		Level
C PH 13	type of variables: categorical (binary, nominal, ordinal) and numerical (discrete, continuous).	2
C PH 14	describing data and their variability: frequency, proportion, mean, standard deviation, median; histogram, box-plot, scatter plot, survival curve.	2
C PH 15	estimation: standard errors (of a mean, difference between two means, proportion, difference between two proportions), confidence intervals.	2
C PH 16	hypothesis testing: null and alternative hypotheses; interpretation of P values; relation between P values and confidence intervals.	2

demography, health indicators and data sources

Objective ID		Level
C PH 17	important indicators: birth rate, various death rates, life expectancy, years of life lost, health related quality of life, DALY (disability adjusted life year), QALY (quality adjusted life year).	2
C PH 18	trends in health indicators in Switzerland, demographic predictions, comparison with other countries.	1
C PH 19	major causes of death, according to age, sex, social status, ethnicity; importance of different causes in relation to years of life lost.	2
C PH 20	important data sources in Switzerland: population census, birth- and death-registers, health surveys, hospital statistics, Swiss household panel, linkage studies (for example Swiss National Cohort).	1

the Swiss healthcare system

Objective ID		Level
C PH 21	definition of the term healthcare system.	1
C PH 22	responsibilities of the state at federal, cantonal and municipal levels: surveillance, health promotion, and disease prevention; education, occupations and research. Role of non-governmental organizations (self-help groups, disease-specific organizations, Red Cross).	1
C PH 23	responsibilities and organization of healthcare providers: out-patient care (doctors, midwives and nurses in private practice, managed care group practices, pharmacists, Spitex services); providers of care in public and private hospitals, hospital out-patient clinics and nursing homes.	1
C PH 24	international comparisons of different types of healthcare systems.	1
C PH 25	funding of healthcare in Switzerland: funders (the state, social insurance, out of pocket payments); sources of costs (out-patient and in-patient healthcare providers, medicines). Trends and determinants of health care spending.	2
C PH 26	models of reimbursement for healthcare provision: fee-for-service, fee-per-case, prospective or retrospective lump sum payments, HMO model (principle of capitation). Fundamentals of the Tarmed system.	1
C PH 27	costs and benefits of interventions: direct, indirect and intangible costs.	1

6.11 Public Health, Insurance- and Occupational Medicine

prevention and health promotion

Objective ID		Level
C PH 28	population-based public health strategies: general principles, appropriate setting of priorities, feasibility, evaluation.	1
C PH 29	population-based primary prevention: general principles, mass campaigns and targeted interventions, structural and individual-based strategies.	1
C PH 30	secondary prevention: general principles, screening programs, criteria for assessing the appropriateness of screening, current recommendations for screening.	1
C PH 31	principles of primary and secondary prevention in primary health care, opportunistic screening.	1
C PH 32	ethical issues related to public health interventions (for example screening), prioritization and equity in health care.	1
C PH 33	salutogenesis: important behavior-related (exercise, nutrition, relaxation, safer sex) and psychosocial resources (health competence, coping, sense of coherence, social support).	1
C PH 34	pathogenesis: important behavior-related risk factors (smoking, alcohol, obesity) and psychosocial burdens (stress, critical life events).	1
C PH 35	lifestyle and health behavior: role of cultural influences and the social environment.	1
C PH 36	counseling of individuals: model of behavior change; stages of change, stage-appropriate advice.	2
C PH 37	epidemiology, preventive recommendations and approaches to intervention regarding exercise, nutrition, alcohol consumption, smoking and sexual behavior.	2
C PH 38	health promotion: Ottawa Charta (levels of action, strategies), health promotion in defined settings (for example schools, communities, workplaces, hospitals).	1
C PH 39	prevention and health promotion: important institutions and programs in Switzerland (national health goals, plans of action of Federal Office of Public Health, national campaigns); opportunities and barriers; considerations at the political level.	1

chronic and degenerative diseases, accidents

Objective ID		Level
C PH 40	epidemiology (prevalence, incidence, mortality, years of life lost) in Switzerland, international comparisons, and strategies for the prevention of: cardiovascular diseases, diabetes, cancer (lung, breast, colon, prostate, melanoma), musculoskeletal diseases, respiratory diseases and allergies, mental health problems, addiction, accidents.	1
C PH 41	life course approach to health: specific risks, health problems and preventive measures for children, adolescents and young adults, middle-aged adults and the elderly.	1

6.11 Public Health, Insurance- and Occupational Medicine

environmental medicine, methodological aspects

Objective ID		Level
C PH 42	estimating human exposure to environmental pollution (methods of measuring, semiquantitative procedures, indicators, dosage and safety limits).	1
C PH 43	evaluating health risks due to environmental factors from the point of view of the individual and of society as a whole.	1

physical, chemical and radiological hazards

Objective ID		Level
C PH 44	sources, trends, distribution and health consequences of: outdoor air pollutants (particulate matter, ozone, nitrogen dioxide); indoor air pollutants (passive smoking, radon, asbestos, formaldehyde, solvents and mould); non-ionizing and ultraviolet radiation; ionizing radiation; noise pollution; water- and soil-pollutants (nitrates, heavy metals, production and quality of drinking water in Switzerland).	1
C PH 45	sources, trends, distribution and health consequences of greenhouse gases and climate change.	1

international health

Objective ID		Level
C PH 46	international priorities for health and health care: UN Millennium Development Goals; strengthening health systems; Global Fund to fight for AIDS, TB and Malaria; essential health interventions; primary health care for all.	1
C PH 47	major causes of disease and death in infancy and the neonatal period, under-5s, adults in different parts of the world.	1
C PH 48	determinants of international differences in health: poverty, hunger, population growth, education, differences in income, gender differences, environment, conflicts, access to medical resources.	1

infectious diseases, basic terms and concepts

Objective ID		Level
C PH 49	important definitions and concepts: virulence, resistance, pathogenicity, transmissibility; contamination, colonization, infection, carrier; incubation period, latent period, infectious period; exposure, primary and secondary attack rate, reproductive number (R_0), herd immunity; endemic, epidemic, pandemic, sporadic case, outbreak; surveillance, notification; zoonosis, reservoir, vector, vehicle; chemoprophylaxis, immunization, vaccination, active immunization, passive immunization; emerging and re-emerging infections.	2
C PH 50	laws: international health regulations; paragraphs in the Swiss constitution (Article 69, 69bis); law on epidemic diseases (Epidemiengesetz / Loi sur les épidémies), notification regulations (Meldeverordnung / Ordonnance sur la déclaration).	1
C PH 51	epidemiological surveillance: national and international notification requirements (who reports what, when, and to whom); the Sentinella network; advantages and disadvantages of different surveillance systems.	1
C PH 52	steps in the recognition, investigation and control of outbreaks.	1

6.11 Public Health, Insurance- and Occupational Medicine

epidemiology and prevention of infectious diseases

Objective ID		Level
C PH 53	epidemiology (incidence, prevalence, mortality and years of life lost, route of transmission, risk factors) in Switzerland, international comparison, and strategies for the prevention of major infectious diseases: food-borne infections; vaccine preventable infections; nosocomial infections; HIV and sexually transmitted infections; zoonoses; travel-related infections (travelers' diarrhea, malaria, amebiasis, hepatitis, yellow fever, rabies, Dengue fever, typhoid fever, tuberculosis, legionnaire's disease, cholera, HIV and sexually transmitted infections); healthcare-related infections (hepatitis, HIV, tuberculosis, influenza, varicella, parvoviruses).	1

preventive strategies for infectious diseases

Objective ID		Level
C PH 54	vaccination (characteristics, indications, contraindications, side-effects, storage, means of delivery and usage of vaccines for routine administration and specific indications): viral: poliomyelitis, MMR, hepatitis A, hepatitis B, influenza, varicella, tick-borne encephalitis; bacterial: tetanus, diphtheria, pertussis, hemophilus influenzae B, meningococcus C, BCG, typhoid fever, pneumococcal infection.	2
C PH 55	benefits and risks of vaccination: vaccine efficacy, vaccination coverage, vaccination campaigns, vaccination failure, adverse events, cost-effectiveness.	1
C PH 56	chemoprophylaxis (recommended medications, contraindications and indications) for: meningococcal meningitis, tuberculosis, endocarditis, malaria, toxoplasmosis, pneumocystis jiroveci (carinii)-pneumonia in the immune-suppressed, pre- and post-exposure prophylaxis of HIV infection; principles and indications for chemoprophylaxis in individuals and during epidemics.	1
C PH 57	general preventive measures in hospitals: hand washing, asepsis, sterilization, disinfection, isolation; specific precautions for specific risk procedures (surgical interventions, urinary catheters, intravascular catheters, endoscopy).	2
C PH 58	other measures: border medical examinations and mass screening, needle exchange programs, testing of drinking water, prohibition to work in an occupation (for example handling food).	1

occupational medicine, basic terms and concepts

Objective ID		Level
C PH 59	important definitions and concepts: occupational medicine, occupational disease, occupation-related illnesses. Occupational safety limits of the Swiss Accident Insurance Fund (SUVA).	1
C PH 60	steps in the investigation of a suspected occupation-related health problem in an individual or a group.	2
C PH 61	regulations for health protection and promotion in the occupational and accident insurance law (UVG/LAA).	2
C PH 62	principles of primary, secondary and tertiary prevention in the workplace.	1

6.11 Public Health, Insurance- and Occupational Medicine

occupational diseases

Objective ID		Level
C PH 63	occupational workplace history-taking, and important work-place hazards (noise, electromagnetic fields, vibration, lead, mercury, solvents, carbon monoxide, aromatic amines, asbestos, wood dust, benzene).	2

work and health

Objective ID		Level
C PH 64	ergonomics: workplace layout and environmental influences, including working at a computer terminal, in an open-plan office, person-machine interactions.	2
C PH 65	psychosocial factors and stress, including conditions of work, new work forms, bullying, burnout, unemployment, stress-associated diseases.	2
C PH 66	health-promoting organization of the workplace: work tasks and organization, including working in groups, working time, regulation of coffee and lunch breaks.	1
C PH 67	company health management: absence (determining and maintaining the ability to work), addiction, health promotion.	1
C PH 68	epidemiology of: accidents in the place of work for specific occupations in Switzerland; major work-related diseases, recognized by the accident insurance law (UVG/LAA), in different occupations.	1
C PH 69	epidemiology and health and social consequences of shift- and night-work, work during pregnancy, part-time work.	1

insurance medicine, basic terms and concepts

Objective ID		Level
C PH 70	insurance medicine-related duties of treating physicians; independent medical examiner (Vertrauensarzt / médecin-conseil).	2
C PH 71	liability principles: finality principle, causality principle.	1

social insurance

Objective ID		Level
C PH 72	general aims and characteristics of social insurance.	2
C PH 73	overview of the Swiss social insurance system.	2
C PH 74	funding sources in the Swiss social insurance system: insurance payments, salary deductions, franchises, costs carried by the patient, subventions.	2
C PH 75	definitions in the general section of the social insurance regulations (ATSG/LPGA): sickness, accidents, inability to work, incapacity to work, disability, helplessness, subsidiarity principle.	2
C PH 76	definitions of the Swiss accident insurance law (UVG/LAA): accident-like bodily damage, occupational disease.	2
C PH 77	health insurance law (KVG/LAMal): insured persons, benefits (including positive list of preventive measures).	2
C PH 78	accident insurance law (UVG/LAA): insured persons, SUVA and other insurance providers, benefits, including integrity benefits.	1
C PH 79	occupational diseases: insured persons, list of occupational diseases recognized by UVG/LAA	1

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C PH 80	disability insurance (IVG/LAI): insured persons, benefits, including re-integration measures, special training and auxiliary equipment.	1
C PH 81	prevention, medical checkups and health promotion (KVG/LAMal).	1
C PH 82	criteria of effectiveness, appropriateness and efficiency of medical measures (WZW/EAE) as required by KVG/LAMal.	1
C PH 83	managed care: forms of provision and insurance products (HMO systems, general practitioner networks, gatekeeping).	1
C PH 84	instruments for treatment management: case management, disease management, demand management.	1

legal aspects of working as a physician

Objective ID		Level
C PH 85	physicians' obligations: to treat, to protect confidential data, to report and to give information (if appropriate).	1
C PH 86	determination of the degree of incapacity to work.	2
C PH 87	administration of justice in the area of social insurance (ATSG/LPGA).	1
C PH 88	requirements for informed consent of patients.	2
C PH 89	principles of physicians' liability (malpractice).	1

6.12 Forensic Medicine

6.12 Forensic Medicine (FM)

Clinical Pictures

dead body

Objective ID		Level	D	T	E	P	G
C FM 1	death, possibility of sham death / apparent death (forensic aspects)	2	D				
C FM 2	death signs (livores / rigor / decomposition / time of death)	2	D				G
C FM 3	death, estimation of time of (by postmortem changes)	2					G
C FM 4	death, (forensic) establishment of manner of death (accident / suicide / homicide / natural death / undetermined death)	1					
C FM 5	autopsy, forensic indications for and duty of notification of death to police / to judge	2	D				G

legal aspects of injury (StGB / CP)

Objective ID		Level	D	T	E	P	G
C FM 6	classification of injury in law (mild injury / severe injury / intention / negligence)	1					
C FM 7	abuse, maltreatment (Misshandlung / maltraitance) forensic aspects	2	D				G

forensic traumatology

Objective ID		Level	D	T	E	P	G
C FM 8	physical and biomechanical principles of injury	1					
C FM 9	injury, self inflicted / mutilation, self-inflicted / second party-inflicted injury / accidental injury (forensic aspects)	1					
C FM 10	trauma, blunt to the skin / to long bones / to head (forensic aspects)	2					
C FM 11	shaken baby syndrome (forensic aspects)	1					
C FM 12	injuries by sharp objects (forensic aspects)	1					G
C FM 13	bite wounds (forensic aspects)	1					
C FM 14	gun shots (forensic aspects)	1					
C FM 15	asphyxia (forensic aspects)	2					
C FM 16	strangulation, types of (forensic aspects)	1					
C FM 17	aspiration and drowning (forensic aspects)	2					
C FM 18	choking, death by (Bolustod / mort par bolus) (forensic aspects)	1					
C FM 19	injury, thermal (forensic aspects)	1					
C FM 20	electrical injury (forensic signs)	1					

6.12 Forensic Medicine

C FM 21	injuries (in traffic) of pedestrians (forensic aspects)	2					
C FM 22	injuries (in traffic) of vehicle passengers (forensic aspects)	2					

death of a child

Objective ID		Level	D	T	E	P	G
C FM 23	sudden infant death syndrome [C PE 16]	1				P	
C FM 24	still-birth (forensic aspects)	1					
C FM 25	battered child syndrome	1					

sexual offences

Objective ID		Level	D	T	E	P	G
C FM 26	sexual abuse in child (forensic aspects)	2					
C FM 27	sexual abuse in adult (forensic aspects)	2					

parentage testing

Objective ID		Level	D	T	E	P	G
C FM 28	parentage, uncertain (forensic aspects)	2					

injuries due to chemical causes

Objective ID		Level	D	T	E	P	G
C FM 29	intoxication by gases: CO, CO ₂ , CN, H ₂ S (forensic aspects)	2					
C FM 30	intoxication by psychotropic and illicit drugs (including heroin, cocaine, amphetamine) [C IM 172, C PS 30]	2	D	T	E		G
C FM 31	intoxication by cyanide	1					
C FM 32	intoxication by plant poisons (including mushrooms) and by animal bites and stings	1					
C FM 33	alcohol intoxication (forensic aspects)	2	D				

6.12 Forensic Medicine

Further Knowledge

professional duties and responsibilities

Objective ID		Level	D	T	E	P	G
C FM 34	abortion (legal aspects)	1					G
C FM 35	formal and legal pre-requisites of a medical certificate (Zeugnis / certificat)	2					G
C FM 36	coercive treatment, forced admission to hospital [C PS 95]	2					G
C FM 37	legal aspects of personality (Persönlichkeitsrechte, ZGB / Droits de la personnalité, CC) [C PS 96]	1					
C FM 38	medical duties in emergencies	2					G

interference / injury due to chemical cause

Objective ID		Level	D	T	E	P	G
C FM 39	metabolism of ethanol / blood level of ethanol	2	D				
C FM 40	pathways of poisons	1					
C FM 41	principles of intoxication	1					

forensic traumatology

Objective ID		Level	D	T	E	P	G
C FM 42	traffic injuries: biomechanics	1					

examination

Objective ID		Level	D	T	E	P	G
C FM 43	establishing the cause and manner of death at the place of death [C IM 396]	1					G
C FM 44	examination of the eyes in dead body (double ectropion of the eyelids)	1					
C FM 45	ano-genital examination in living person and dead body for forensic purposes	1					
C FM 46	estimation of wound age in living person and dead body for forensic purposes	1					
C FM 47	establishment of identity of dead persons in mass disaster	1					
C FM 48	identification of dead body (establishment of identity of dead person)	1					
C FM 49	legal external inspection of dead body (Legalinspektion / inspection légale)	1					
C FM 50	external examination of dead body (Leichenschau / examen du cadavre)	1					G
C FM 51	diagnosis of cerebral death	1					

6.12 Forensic Medicine

C FM 52	examination and documentation of wounds and echymoses in living person and dead body	1					
C FM 53	investigation of battered children [C PE 272]	1					G
C FM 54	assessment of ability to judge (Urteilsfähigkeit / capacité de discernement) [C PS 97]	1					
C FM 55	assessment of current fitness to drive (Fahrfähigkeit / aptitude actuelle à conduire), e.g. under the influence of alcohol, drugs, disease or fatigue	1					
C FM 56	assessment of aptitude to drive (Fahreignung / aptitude générale à conduire) including minimal medical standards for drivers [C IM 392]	1					G

procedures

Objective ID		Level	D	T	E	P	G
C FM 57	sampling of blood and urine for toxicological analysis	1					
C FM 58	collection of specimens from dead body and protection of biological evidence	1					
C FM 59	sampling of vaginal-, anal- and skin-swabs for DNA-analysis	1					
C FM 60	sampling of blood and buccal swabs for DNA-analysis	1					