UNIVERSITY OF PÉCS
MEDICAL SCHOOL

GENERAL MEDICINE

PROGRAMME

6th (final) year

2010/2011

PECS

GENERAL INFORMATION

Academic year 2010/2011
August 02, 2010 – May 06, 2011

Enrolment

Place: online on the ETR (www.tr.pte.hu)
Period: July 05–09, 2010
Conditions:
1. Payment of the basic tuition fee for the first semester (3550 USD/4140 USD/4600 USD). It may be settled with a cheque or by wire transfer
2. Handing over the gradebook
3. Forwarding the certificates on the completion of all the (4) summer practices
4. Submission of the consultant's statement on the thesis topic
5. Having completed 34 credit points from elective courses and 18 credit points from optional courses, and of course all the obligatory courses of years 1-5
6. Having completed all the criterion requirements: 4 semesters of Physical Education, 4 summer practices and First Aid

Only enrolled students will be supplied with: 1) the student card (or its extension), 2) the certificates necessary for the extension of the permanent residence card in Hungary, bank services, exemption from military service, 3) the Programme Booklet and requirements of the rotational subjects.

Extra procedural fees

Retake examination fees:

Absence fee:	8000 HUF
A and B chances:	free
C and D chances:	8000 HUF (final exam)

Duplicate of the student card	current price
Duplicate of the gradebook (in case of loss)	15000 HUF

CURRICULUM
ACADEMIC YEAR 2010/2011

11-12th semesters (40 weeks) Rotational Module

Code	Title	Course director	Prerequisite 1	Prerequisite 2	Prerequisite 3	L.	P.	S.	Total	Exam	Credit
OASBEL	Internal Medicine	Dr. Tóth Kálmán	OAKNHA			0	284	16	300	fe	10
OASCSO	Family Medicine	Dr. Nagy Lajos	OAKCSA			0	60	0	60	msg	2
OASGYE	Paediatrics	Dr. Molnár Dénes	OAKGY2			0	180	0	180	fe	6
OASNEU	Neurology	Dr. Komoly Sámuel	OAKNE2			0	100	20	120	fe	4
OASOXY	Emergency Medicine	Dr. Bogár Lajos	OASSET taking up	OASBEL taking up	OASNEU taking up	0	60	0	60	msg	2
OASPSZ	Psychiatry	Dr. Fekete Sándor	OAKPS 2			0	120	0	120	fe	4
OASSET	Surgery-Traumatology	Dr. Horváth Örs Péter	OARSEB	OAKSE2		0	180	0	180	fe	6
OASSZN	Obstetrics and Gynaecology	Dr. Bódis József	OAKST2			0	180	0	180	fe	6
						0	**1164**	**36**	**1200**		**40**
OAEDIP	Thesis work					0	0	0	0		**20**

Remarks:

The exams can be taken in any order but only after completing the practice. The Final Closing Examination – arranged centrally by the state – can be taken after the completion of the final exams, the completion of the Family Medicine and the Emergency Medicine practices, and after the successful defence of the thesis by May 01, 2011.

The program of the sixth academic year consists of the clinical practices and final examinations in Internal Medicine, Paediatrics, Surgery, Obstetrics and Gynaecology, Neurology, Psychiatry, and the practices in Family Medicine and Emergency Medicine (mid-semester grades will be given).

The duration and sequence of the rotational subjects (there are five possible sequences) are shown in a chart on page 6. These cycles are intended for those students who are completing all of the practices in Pécs. If you wish to complete your practices abroad, you must make your own practice schedule.

The successful completion of the rotational subjects is to be certified in the gradebook by each head of department at the time of taking the final exam or getting the mid-semester grade.

The practice rotation can be executed at the Medical School's departments, its teaching hospitals in Hungary, or abroad.

The student who wants *to complete a practice abroad* is required to respect the following rules:

1. A letter of acceptance from the clinic/hospital concerned should be presented before the practice starts.
2. An application is to be written to the Vice-Dean of Education for permission to do the practice abroad. The letter of acceptance with the approval of the head of our Medical School's department has to be attached to the application.
3. In case the application meets the requirements, the student is entitled to be granted permission, and will be supplied with all the necessary certificates.
4. The completion of the practice must be certified by the clinic/hospital. A copy of the certificate is to be forwarded to the head of the Medical School's department before the examination, and another copy has to be submitted to the Registrar's Office.
5. If the students receives any signatures into the Book of Clinical Skills during the 6th year, the Book of Clinical Skills Foreign Signatures Form for the respective practices is to be completed by the clinic/hospital abroad, and is to be submitted to the head of the department concerned along with the certification form after the practice is completed. In case a Foreign Signatures Form is missing, the student will be denied accepting the Book of Clinical Skills.

A practice done abroad without permission has to be repeated in Hungary. In this case, the date of the Final Closing Examination will be delayed.

The student may sit for an examination either at the end of the practice in the given subject or on any other dates scheduled by the departments. The departments provide two-three days per month for the examinations in each of the six subjects.

The regulations concerning the examinations in general apply to the sixth year's final examinations, too, with the exception that the student does not register for the examination in the ETR, but at the department (secretary or course director).

In case of failing the regular examination, two retake examinations are provided in each subject without the obligation to repeat the practice. Having failed the two retakes, the

practice must be repeated. Preparation for a retake does not exempt the student from the duties of the next practice.

TUITION FEE

1. According to the Dean's order no. 1/2010 (January 04), the tuition fee for the 6th year depends on what yearly tuition fee scheme the student has. In the academic year 2010/2011, there are 3 possible tuition fee schemes. The basic fee is 46% of the yearly tuition fee of the student. The basic fee is to be paid by all the students for the first semester of the 6th year. Students paying 7720 USD yearly tuition fee (beginning their studies in 2003 or earlier) have to pay the basic fee of 3550 USD. Students paying 9000 USD yearly tuition fee (beginning their studies in 2004) have to pay a basic fee of 4140 USD. Students paying 10000 USD yearly tuition fee (beginning their studies in 2005) have to pay a basic fee of 4600 USD. It includes all the charges for the final examinations in 6 subjects, thesis defence, Final Closing Examination, and maximum 4 weeks (120 practical hours) of clinical practice completed in Pécs. All bank charges are to be paid by the student.

2. An additional fee of 1.5% of the yearly fee per week must be paid for each week (or 30 hours) done in Pécs which is above the 4 weeks granted for the basic fee. It is 116 USD per week for the 2003 students, 135 USD per week for the 2004 students, and 150 USD per week for the 2005 students. Students not completing any practices or completing maximum 4 weeks in Pécs do not have to pay any tuition fee for the second semester. Students who have to pay additional tuition fee (for more than 4 weeks spent in Pécs) will have to pay the remaining part of the tuition fee after the 6th year is completed (May 13, 2011), but before the written Final Closing Examination at the latest. The basis of calculating the extra tuition fee is the amount of hours (not weeks!) spent in Pécs.

3. It is possible to complete the practices in a shorter time than it is prescribed in the curriculum. If the period completed is shorter than the required, the number of practice hours per week must be more than is prescribed (30 hours per week). Occasionally night duties and weekend duties can also be acceptable, but the number of hours completed per day cannot exceed 8 hours (in the US 7 hours). Altogether a practice has to be as long as the practical hours prescribed by the curriculum. The basis for calculating the tuition fee is the number of practical hours.

SIXTH YEAR TUITION FEE SCHEMES IN 2010/2011

weeks / yearly fee, USD	10000	9000	7720
basic fee = 46%	4600	4140	3550
1 extra week = 30 hours = 1.5%	150	135	116
0-4 ws = 0-120 hrs	4600	4140	3550
5 ws = 150 hrs	4750	4275	3666
6 ws = 180 hrs	4900	4410	3782
7 ws = 210 hrs	5050	4545	3898
8 ws = 240 hrs	5200	4680	4013
9 ws = 270 hrs	5350	4815	4129
10 ws = 300 hrs	5500	4950	4245
11 ws = 330 hrs	5650	5085	4361
12 ws = 360 hrs	5800	5220	4477
13 ws = 390 hrs	5950	5355	4593
14 ws = 420 hrs	6100	5490	4708
15 ws = 450 hrs	6250	5625	4824
16 ws = 480 hrs	6400	5760	4940
17 ws = 510 hrs	6550	5895	5056
18 ws = 540 hrs	6700	6030	5172
19 ws = 570 hrs	6850	6165	5288
20 ws = 600 hrs	7000	6300	5403
21 ws = 630 hrs	7150	6435	5519
22 ws = 660 hrs	7300	6570	5635
23 ws = 690 hrs	7450	6705	5751
24 ws = 720 hrs	7600	6840	5867
25 ws = 750 hrs	7750	6975	5983
26 ws = 780 hrs	7900	7110	6098
27 ws = 810 hrs	8050	7245	6214
28 ws = 840 hrs	8200	7380	6330
29 ws = 870 hrs	8350	7515	6446
30 ws = 900 hrs	8500	7650	6562
31 ws = 930 hrs	8650	7785	6678
32 ws = 960 hrs	8800	7920	6793
33 ws = 990 hrs	8950	8055	6909
34 ws = 1020 hrs	9100	8190	7025
35 ws = 1050 hrs	9250	8325	7141
36 ws = 1080 hrs	9400	8460	7257
37 ws = 1110 hrs	9550	8595	7373
38 ws = 1140 hrs	9700	8730	7488
39 ws = 1170 hrs	9850	8865	7604
40 ws = 1200 hrs	10000	9000	7720

FINAL CLOSING EXAMINATION (FCE)

Preconditions of the FCE (of being allowed to sit for the FCE):

1. Successful defence – according to the related regulations – of the thesis no later than May 01, 2011.
2. Successfully taken final examinations in all the six required subjects, and completed practices in Family Medicine and Emergency Medicine. Copies of the certificates of practices completed abroad are to be submitted to the Registrar's Office, along with the completed Book of Clinical Skills and its correspondent Foreign Signatures Forms (if any).
3. Payment of the residue of the tuition fee. Deadline: one week before the written test.

The students must forward their gradebooks including the results of the final examinations and the copies of the certificates to the Registrar's Office no later than May 13, 2011. The student whose gradebook is not submitted in time will have to sit for the retake FCE in August or November 2011.

The FCE consists of a centrally organized written test on June 07, 2011 (planned date), and a practical and oral examination on the week following the written exam.

THESIS

Recommended extent:	20-40 pages
Character space:	normal
Line space:	1.5
Margins:	right: 2-2.5 cm, left-top-bottom: 4 cm
Outside cover:	the name of the student and year of graduation
Inside cover:	the title of the thesis, name and academic degree of the consultant, name of the department/clinic, name of the student, and year of graduation

Place of submission:	the consultant's department
Recommended deadline of submission:	February 15, 2011
Deadline of defence:	May 01, 2011

The students are to pick up two copies of the thesis evaluation sheet in the Registrar's Office (downloadable from the aok.pte.hu website) and forward those together with two copies of the thesis to the consultant.

SCHEDULE OF THE SIXTH YEAR
2010/2011

Sequence of the practices	Dates of the practices	Dates of the examinations
I. Internal Medicine	08/02/2010 - 10/10/2010	10/06/2010 - 10/08/2010
Family Medicine	10/11/2010 - 10/24/2010	----------
Paediatrics	10/25/2010 - 12/05/2010	12/01/2010 - 12/03/2010
Surgery-Traumatology	12/06/2010 - 01/16/2011	01/12/2011 - 01/14/2011
Emergency Medicine	01/17/2011 - 01/30/2011	----------
Obstetrics and Gynaecol.	01/31/2011 - 03/13/2011	03/09/2011 - 03/11/2011
Neurology	03/14/2011 - 04/10/2011	04/06/2011 - 04/08/2011
Psychiatry	04/11/2011 - 05/08/2011	05/04/2011 - 05/06/2011
II. Paediatrics	08/02/2010 - 09/12/2010	09/08/2010 - 09/10/2010
Surgery- Traumatology	09/13/2010 - 10/24/2010	10/20/2010 - 10/22/2010
Emergency Medicine	10/25/2010 - 11/07/2010	----------
Obstetrics and Gynaecol.	11/08/2010 - 12/19/2010	12/15/2010 - 12/17/2010
Neurology	12/20/2010 - 01/16/2011	01/12/2011 - 01/14/2011
Psychiatry	01/17/2011 - 02/13/2011	02/09/2011 - 02/11/2011
Internal Medicine	02/14/2011 - 04/24/2011	04/20/2011 - 04/22/2011
Family Medicine	04/25/2011 - 05/08/2011	----------
III. Surgery-Traumatology	08/02/2010 - 09/12/2010	09/08/2010 - 09/10/2010
Emergency Medicine	09/13/2010 - 09/26/2010	----------
Obstetrics and Gynaecol.	09/27/2010 - 11/07/2010	11/03/2010 - 11/05/2010
Neurology	11/08/2010 - 12/05/2010	12/01/2010 - 12/03/2010
Psychiatry	12/06/2010 - 01/02/2011	12/29/2010 - 12/31/2010
Internal Medicine	01/03/2011 - 03/13/2011	03/09/2011 - 03/11/2011
Family Medicine	03/14/2011 - 03/27/2011	----------
Paediatrics	03/28/2011 - 05/08/2011	05/04/2011 - 05/06/2011
IV. Obstetrics and Gynaecol.	08/02/2010 - 09/12/2010	09/08/2010 - 09/10/2010
Neurology	09/13/2010 - 10/10/2010	10/06/2010 - 10/08/2010
Psychiatry	10/11/2010 - 11/07/2010	11/03/2010 - 11/05/2010
Internal Medicine	11/08/2010 - 01/16/2011	01/12/2011 - 01/14/2011
Family Medicine	01/17/2011 - 01/30/2011	----------
Paediatrics	01/31/2011 - 03/13/2011	03/09/2011 - 03/11/2011
Surgery-Traumatology	03/14/2011 - 04/24/2011	04/20/2011 - 04/22/2011
Emergency Medicine	04/25/2011 - 05/08/2011	----------
V. Neurology	08/02/2010 - 08/29/2010	08/25/2010 - 08/27/2010
Psychiatry	08/30/2010 - 09/26/2010	09/22/2010 - 09/24/2010
Internal Medicine	09/27/2010 - 12/05/2010	12/01/2010 - 12/03/2010
Family Medicine	12/06/2010 - 12/19/2010	----------
Paediatrics	12/20/2010 - 01/30/2011	01/26/2011 - 01/28/2011
Surgery-Traumatology	01/31/2011 - 03/13/2011	03/09/2011 - 03/11/2011
Emergency Medicine	03/14/2011 - 03/27/2011	----------
Obstetrics and Gynaecol.	03/28/2011 - 05/08/2011	05/04/2011 - 05/06/2011

INTERNAL MEDICINE — OASBEL

Course director: **DR. KÁLMÁN TÓTH** , professor, head of department
1st Department of Internal Medicine

10 credits ▪ Rotational module ▪ both semesters ▪ final exam
Number of hours/semester: **0 + 284 + 16 = 300**
Prerequisite: OAKNHA completed
Number of students: **1 – 30**

Topic

Responsible faculty of the course: Lajos Nagy, Kálmán Tóth, István Wittmann.
The aim of the practice is to achieve excellence in significant components of Internal Medicine, then to synthesize this knowledge during the daily bedside practice, and to be able to use it independently yet under supervision.
In accordance with this goal, students work full-time at different departments of Medicine (from 7:30 am to 3:30 pm) as trainees. Initially, students are given a brief refreshing course on how to take the patients history and conduct physical examination. They receive hands-on experience with patients under direct supervision of attendings and residents.
Each student is responsible for one or two rooms (max. 6-10 patients) on the ward. He/she takes the medical history, performs physical examination, follows the examinations of new patients, and plans additional diagnostic and therapeutic measures by his/her own. He/she fulfills all tasks required by the ward-round and regularly reports to the staff. Before the patient's leave he/she participates in writing the discharge summary. Students give account of their own patients during the professorial grand-rounds.
Should there be an opportunity, they accompany their patients to see special examinations (e.g. endoscopy, biopsy, echocardiography, exercise stress test). In case someone's patient is deceased, he/she takes part in the autopsy with the staff physician and reports to the head of the ward.
The theoretical instruction is organized by the departments and the participation is obligatory. These regular consultations and case presentations are an important part of the curriculum.

Conditions for acceptance of the semester
15% or more absences are not tolerated during the practice. It is possible to make up for absences.

Making up for missed classes

Internal medicine practice can be spent in a foreign country (after approval of the course leader) at an Internal Medicine Ward in a University Hospital, in a Teaching Hospital or County Hospital with 24 hours admissions. The student is required to speak the language of the host country. The head of the ward should certify the fulfillment of the practice according to the criteria of the University of Pécs (this should include signature, readable name of head and stamp of the dept.)

Exam topics/questions

Exam: Final exam consisting of three parts:
A. Written or oral entry questions of the most important simple facts relevant in the emergency diagnostics and treatment at internal medicine patients.
B. Oral practical exam: history taking and physical examination of a patient (at least 20 minutes time for these), review of the patient's file, summary of the results.
C. Oral theoretical part: three questions (one of them gastroenterology, one cardiology, one another topic).
A grade 1 (failed) at one part of the exam automatically results in a grade 1 (failed) of the whole final exam.
There is a possibility to improve grade at repeated exam, but a decrease of grade is also possible.

Exam questions (theses):
1. Supraventricular arrhythmias, diagnosis and therapy
2. Ventricular arrhythmias, diagnosis and therapy
3. Blocks and conduction disorders, diagnosis and drug treatment
4. Preexcitation syndromes, diagnosis and treatment
5. Non-pharmacological therapy of arrhythmias and conduction disorders (cardioversion, pacemakers, automatic implantable cardioverter defibrillator, catheter ablation)
6. Treatment of syncope and sudden cardiac death. Diagnosis and treatment. Cardiopulmonary resuscitation
7. Epidemiology, risk factors and primary prevention of ischemic heart disease
8. The syndromes of ischemic heart disease and their differential diagnostics
9. The types of acute coronary syndromes, their clinical features, complications, diagnosis and treatment

10. The non-pharmacological treatment of ischemic heart disease (percutaneous coronary interventions, stent implantation, coronary bypass operation)
11. Secondary prevention of ischemic heart disease, medical follow-up of patients after a myocardial infarction or coronary revascularisation
12. Epidemiology, pathophysiological background, types and clinical syndromes of heart failure
13. Diagnosis and therapy of heart failure
14. The importance of essential hypertension, epidemiology, diagnosis and treatment
15. Secondary hypertension, types, differential diagnosis and therapy
16. The cardiomyopathies. Types, pathophysiological background, diagnostics and therapy
17. Inflammatory diseases of the heart (endocarditis, myocarditis, pericarditis) and cardiac tamponade
18. Infective endocarditis. Rheumatic fever and its consequences
19. Valve diseases. Diagnosis and therapy
20. The differential diagnostics and acute management of chest pain
21. Platelet inhibition, anticoagulant and fibrinolytic treatment in internal medicine, methods for monitoring their efficacy
22. Types of anemia. Etiology of iron deficiency anemia, clinical picture and treatment
23. Megaloblastic and other macrocytic anemias. Etiology, types and diagnostics of hemolytic anemias
24. Immune thrombocytopenia. Diagnostics and treatment. Thrombotic thrombocytopenic purpura and the hemolytic uremic syndrome, clinical picture and treatment
25. The aplastic anemia
26. Acute myeloid and lymphoid leukemia. Diagnostics, clinical picture and principles of treatment
27. Classification of myeloproliferative disorders, general characteristics. Polycythemia vera, essential thrombocytemia and osteomyelofibrosis. Clinical picture, possibilities of treatment
28. Chronic myeloid leukemia. Diagnostics, clinical picture and treatment
29. Chronic lymphocytic leukemia. Diagnostics, clinical picture and possibilities of treatment
30. Malignant lymphomas. Classification, diagnostics and clinical features. Hodgkin's disease. Classification, diagnostics, treatment possibilities
31. Non-Hodgkin malignant lymphomas (NHL). Classification, clinical characteristics of indolent and aggressive NHL, possibilities of treatment
32. Multiple myeloma. Diagnostics, symptoms, treatment
33. Deep venous thrombosis and pulmonary embolism. Diagnostics and treatment
34. Inherited and acquired thrombophilias
35. Etiology and types of hemorrhagic disorders
36. Hemophilias. Clinical characteristics, principles of substitution therapy
37. Tumors of the hypophysis. Diabetes insipidus
38. Hyperthyroidism. Hypothyroidism
39. Thyroid tumors. Inflammatory disorders of the thyroid gland
40. Conn's syndrome. Prolactinoma
41. Cushing's disease and syndrome. Addison's disease
42. Hypoparathyroidism. Hyperparathyroidism
43. Pheochromocytoma
44. Acromegaly. Hypopituitarism
45. Congenital adrenal hyperplasia. Osteoporosis
46. Basic symptoms of systemic autoimmune diseases. Primary and secondary Raynaud's syndrome
47. Rheumatoid arthritis (RA). Clinical and laboratory features, treatment
48. Systemic lupus erythematosus (SLE). Characteristics, diagnosis, therapy
49. The antiphospholipid syndrome. Polymyositis, dermatomyositis
50. Main clinical characteristics of Sjögren's syndrome. Extraglandular manifestations
51. Basic features and treatment of systemic sclerosis
52. Systemic vasculitis syndromes. Temporal arteritis
53. Types of vomiting. Diarrhea
54. Gastro-esophageal reflux disease
55. Tumors of the esophagus, stomach and small intestine
56. Peptic ulcer disease. Helicobacter pylori infection
57. Acute and chronic gastritis
58. Functional bowel diseases
59. Celiac disease. Malabsorption syndromes
60. Crohn's disease and ulcerative colitis. Precancerous states of the gastrointestinal tract
61. Colonic polyps and cancer. Diverticulosis and diverticulitis of the colon
62. Appendicitis. Differential diagnostics of abdominal pain
63. Acute and chronic pancreatitis. Functional diagnostics of pancreas insufficiency
64. The ileus. Types of peritonitis. The acute abdomen
65. Classification and differential diagnostics of jaundice. Acute and chronic viral hepatitis
66. Alcoholic liver disease. Liver cirrhosis
67. Autoimmune hepatitis. Primary biliary cirrhosis
68. Primary sclerosing cholangitis

69. Gall stone disease
70. Tumors of the liver and the biliary system. Pancreas cancer
71. Hemochromatosis and Wilson's disease
72. Diagnostics and therapy of gastrointestinal bleeding
73. Differential diagnostics of hematuria
74. Differential diagnostics of proteinuria
75. Differential diagnostics of edema
76. Examination of the kidney (function, morphology, histology)
77. Acute glomerulonephritis
78. Rapidly progressive glomerulonephritis
79. Nephropathies associated to systemic illnesses (SLE nephropathy, vasculitis, atherosclerosis, hemolytic uremic syndrome)
80. Nephrotic syndrome (minimal change, focal segmental glomerulosclerosis, membranous glomerulonephritis)
81. IgA nephropathy
82. Urinary tract infections
83. Acute tubulointerstitial nephritis, analgesic nephropathy
84. Acute renal failure
85. Chronic renal failure
86. Renal replacement therapies
87. Impaired fasting glucose (IFG), impaired glucose tolerance (IGT) and diabetes mellitus. Diagnostics. Treatment of IFG and IGT
88. Clinical picture of type 1 diabetes mellitus in adults. Types of insulin, techniques and regimens of insulin treatment, blood sugar monitoring
89. Gestational, pancreatoprive diabetes and the maturity onset diabetes in the young (MODY). Their clinical picture and treatment, preoperative management of diabetic patients
90. The clinical picture of type 2 diabetes. Dietary, oral antidiabetic and insulin treatment
91. Clinical picture of the metabolic syndrome. Primary prevention of atherosclerosis
92. Hyperglycemia, ketoacidosis, hypoglycemia, diabetic neuropathy, diabetic foot. Their diagnosis and treatment
93. Diabetic nephropathy. Diagnosis and treatment
94. The primary dyslipidemias. Clinical picture and treatment
95. The secondary dyslipidemias. Clinical picture and treatment
96. Treatment of hypertension in patients with metabolic diseases (diabetes mellitus, dyslipidemia, metabolic syndrome)
97. Types of pneumonia, symptoms and therapy
98. Symptoms of bronchial asthma. Its differentiation from chronic obstructive pulmonary disease (COPD) and cardiac asthma. Therapy of bronchial asthma
99. Chronic obstructive pulmonary disease (COPD). Diagnostics, types, therapy
100. Tuberculosis, a differential diagnostic problem
101. Importance of pneumoconiosis and its complications
102. Infectious diseases with bloody stool
103. The anthropozoonoses
104. Lyme's disease
105. Influenza
106. Human immunodeficiency virus (HIV) infection and its consequences

Reading material

- Andreoli, T. E., Carpenter, C. C. J., Griggs, R., Loscalzo, J. (Eds.): Cecil Essentials of Medicine 5th Edition (W.B. Saunders Company, 2007)
- Kasper DL, Braunwald E, Fauci AS, Hauser SL, Longo DL, Jameson JL, Loscalzo J. Harrison's principles of internal medicine (17th ed.). New York: McGraw-Hill Medical Publishing Division, 2008. ISBN 978-0-07-146633-9.

Practices

1-284. Practice (depending upon current medical attendance)

Seminars

1. Case presentation (Dr. Matild Schmelczer / Dr. Mária Figler) (2010.09.22, 2010.11.17, 2011.01.12, 2011.03.09)
2. Coronary artery disease (Dr. László Czopf) (2010.09.29, 2010.11.24, 2011.01.19, 2011.03.16)
3. Heart failure (Dr. Tamás Habon) (2010.08.10, 2010.10.05, 2010.11.30, 2011.01.25, 2011.03.22)
4. Cardiac arrhythmias (Dr. Kálmán Tóth) (2010.09.28, 2010.11.23, 2011.01.18, 2011.03.15)
5. Diabetes (Dr. István Wittmann) (2010.09.15, 2010.11.10, 2011.01.05, 2011.03.02)
6. Nephrology (Dr. Judit Nagy) (2010.09.14, 2010.11.09, 2011.01.04, 2011.03.01)
7. Infectology (Dr. Zoltán Péterfi) (2010.09.08, 2010.11.03, 2010.12.29, 2011.02.23)

8. Pulmonology (Dr. Veronika Sárosi) (2010.09.07, 2010.11.02, 2010.12.28, 2011.02.22)
9. Clinical immunology (Dr. László Czirják) (2010.09.01, 2010.10.27, 2010.12.22, 2011.02.16)
10. Endocrinology (Dr. Emese Mezősi) (2010.08.31, 2010.10.26, 2010.12.21, 2011.02.15)
11. Malignant hematologic diseases (Dr. Marianna Dávid/Dr. Ágnes Nagy) (2010.08.25, 2010.10.20, 2010.12.15, 2011.02.09, 2011.04.06)
12. Hypertension (Dr. Tibor Kovács) (2010.09.21, 2010.11.16, 2011.01.11, 2011.03.08)
13. Disorders of blood coagulation (Dr. Hajna Losonczy/ Dr. Marianna Dávid) (2010.08.24, 2010.10.19, 2010.12.14, 2011.02.08, 2011.04.05)
14. Chronic liver diseases (Dr. Alajos Pár) (2010.08.18, 2010.10.13, 2010.12.08, 2011.02.02, 2011.03.30)
15. Dyslipidemia and obesity (Dr. László Bajnok) (2010.08.17, 2010.10.12, 2010.12.07, 2011.02.01, 2011.03.29)
16. Acid related gastrointestinal diseases (Dr. Áron Vincze) (2010.08.11, 2010.10.06, 2010.12.01, 2011.01.26, 2011.03.23)

FAMILY MEDICINE — OASCSA

Course director: **PROF. DR. LAJOS NAGY**, professor
Family Medicine Inst.

2 credits ▪ Rotational module ▪ both semesters ▪ mid-semester grade
Number of hours/semester: **0 + 60 + 0 = 60**
Prerequisite: OAKCSA completed

Topic

To get impression and information about the Family Physicians' colorful work and how Family Medicine synthesises the kowledge of many different specialities. To learn and/or practise new methods and clinical skills.

Conditions for acceptance of the semester

During the 2 week practice, two case reports ought to be prepared by the students (nessessary to get the signature)

Making up for missed classes

The attendence of the practice is obligatory. Missing more than 20% of the 2 weeks means that the practice will not be accepted.

Exam questions

Reading material

- Ian R. McWhinney: A textbook of Family Medicine, second edition Oxford University Press, 1997
- Robert B. Taylor: Fundamentals of Family Medicine, second edititon Springer, 1998
- Owen Epstein, G. David Pekin, David P. De Bono, John Cookson: Clinical Examination Mosby-Wolfe, 1995

Lectures

Seminars

Practices

Differential diagnosis of common diseases
Acute and emergency care in family medicine
Home care, home visits
Prevention and management of various diseases
Care of the dying patient
patient history
common diagnostic procedures
screening
follow-up
rehabilitation
pre-and postoperative management of the patient
records, consltation and referral
family physician in the family and in the community
common problems of the elderly
care of the dying patient
Communication Skills
getting to know the team of the family practice
taking the family history and the medical history
administration
patient examination
examining children
neurological physical examination
blood pressure measure
taking blood sample
measuring the blood sugar level
giving intramuscular and intraveneous injection
making ECG

analysing ECG
home visits
educating patients
informing patients and realtives
acute care in the practice
duty work
making differential diagnosis
administration of medication
administration of opiats, narcotic drugs
medication and the side effects of drugs
pregnant care
the process of different juidical examinations (driving licence, post mortem
administration of different juidical examinations

PAEDIATRICS OASGYE

Course director: **PROF. DR. DÉNES MOLNÁR**, professor and head of department
Department of Paediatrics

6 credits ▪ Rotational module ▪ both semesters ▪ final exam
Number of hours/semester: **0 + 180 + 0 = 180**
Prerequisite: OAKGY2 completed

Topic

The primary aim of the six-week bedside practice (including one week for the examination) of the sixth year students is to attache theoretical knowledge to the practical one, furthermore to get some experiences in the most common manual acticities at least at a basic level. Another task during that time is to observe and take part in the practical management of the most common paediatric diseases, both at the hospital and after discharge.

Conditions for acceptance of the semester

Oral exam. Before the oral exam a practical examination of a patient has to be done. Oral exam requires a successful practical exam.

The student is expected to act in the ward if he/she was a newly graduated young staff member, of course under proper supervision. The student's working hours is the same as that of the doctors. After the first three weeks he/she should participate in the duty service.

Some kinds of manual activities and personal experiences must be by all means practised by the students, and these are to be validated by the teacher (see the enclosed „Checking sheet"). The validation is a precondition for the oral final examination.

Making up for missed classes

It can be accepted only in very special cases.

Exam questions

http://www.pote.hu/index.php?page=egyseg&egy_id=350&menu=dokumentumok&nyelv=eng
DOKUMENTUMTÁR

Reading material

- Kliegman RM, Maradante K, Jenson HB, Behrman, RE: Nelson Essentials of Pediatrics. 5th Ed. Saunders 2005, ISBN978-1-4160-0159-1

Lectures

Practices

Bedside practice

Topics to be studied

1. Points in and significance of the prenatal and paediatric anamnesis; taking the anamnesis
2. Evaluation of the psychosomatic development of the infant; recognition of the normal and abnormal variations
3. Practical questions regarding the growth- and weight-retarded infant
4. Planning diets for infants
5. Abnormal growth in childhood; use of growth charts; recognition, most frequent causes, first line diagnostic tests in case of pathologic growth
6. Most common causes of childhood mental retardation; differential diagnosis at a basic level
7. Normal and pathologic puberty
8. Various aspects of childhood intersexuality
9. Symptomatology of viral and bacterial infections (in general):
   a) evaluation of the general condition of the patient
   b) prevention of infectious diseases
   c) principles and practice of vaccinations
   d) principles and practice of the casual and supportive therapy

e) symptomatic therapy of fever

10. Symptoms of the respiratory tract diseases:
    a) bronchiolitis
    b) acute laryngitis
    c) pneumonia
    d) foreign body in the airways
11. Symptoms and signs of urinary tract diseases; therapeutic principles and indications for hospital admittance:
    a) acute nephritis
    b) nephritic syndrome
    c) urinary tract infections
    d) urinary tract malformations
12. Congenital heart disease: diagnosis and care; symptoms of acute carditis; cardiac decompensation: causes, symptoms, therapy
13. Anaemia in infancy and childhood; differential diagnosis in practice
14. Enterocolitis in infancy: aetiology, severity, therapy
15. Most common endocrine diseases in childhood: symptomatology, early diagnosis (congenital hypothyreosis, hyperthyreosis, adrenal insufficiency, hypopituitarism, AGS, diabetes insipidus)
16. Recognition of childhood malignancy
17. Burns: acute management, indications for hospital admittance; prevention
18. Exogenous intoxication in childhood: incidence, causes, role of the age and environment; symptoms, diagnosis, principles of the treatment
19. Diabetes mellitus in childhood; hypoglycaemic states
20. Most common acute surgical diseases in childhood: symptomatology (with special regards to acute appendicitis, intussusception and ileus)
21. Most common ENT diseases in childhood: symptoms, diagnosis, therapy; paranasal sinusitis, chronic adenoiditis and tonsillitis, acute otitis media, mastoiditis
22. Acute and chronic arthritis and arthropathy in childhood
23. Differential diagnosis of vomiting in infancy and childhood
24. Differential diagnosis of haematochezia and melaena in childhood
25. Recurrent abdominal pain
26. Constipation: causes, diagnosis, treatment
27. Fever of unknown origin: differential diagnosis
28. Convulsions and acute unconsciousness in infancy and childhood
29. Headache in childhood: causes and diagnosis
30. Most common causes of visual and hearing disturbances in childhood; early recognition and the therapeutic possibilities
31. Social paediatrics: significance of the socio-economic background; „neglected child syndrome”; „battered child syndrome”

Checking sheet for the pre-exam practice

Name of the student:
Ward:

Activities to be performed	**Date**	**Name of the teacher**
Intramuscular injection (infant/toddler)		
Blood sample taking		
Measurement of RBC sedimentation rate		
Quantitative and qualitative WBC (peripheral smear)		
Thrombocyte count		
Urine analysis (routine)		
Determination of nutritional and developmental stage		
Taking the blood pressure (infant/child)		
Planning the normal diet of infants		
Planning the drip infusion therapy of the infant and child (maintenance and deficit therapy)		
Other activities, occasionally		
Activities to participate in, to observe	**Date**	**Name of the teacher**
Physical examination of a new patient at the outpatient		
Admittance of a new patient on the ward		
Discharge of a patient from the ward		
Follow-up and check of special clinical activities during duty period		
Monitorization of neonatal ventilation therapy		
Other activities, depending on occasion		

NEUROLOGY OASNEU

Course director: **PROF. DR. SÁMUEL KOMOLY**, professor and chairman
Department of Neurology

4 credits ▪ Rotational module ▪ both semesters ▪ final exam
Number of hours/semester: **0 + 100 + 20 = 120**
Prerequisite: OAKNE2 completed

Topic
The aim of the period is to synthetize the previously obtained knowledge. Students have to perform the neurological physical examinations individually and they have to evaluate the neurological findings. Based on the history taking and physical signs, planning of other necessary examinations to stand up the diagnoses is also expected. Finally, students need to indicate therapy for the examined patients.

Conditions for acceptance of the semester
According to Code of Studies and Examinations

Making up for missed classes
extra scheduled practices.

Exam questions
The final examination

Consists of two parts:

Bedside exam:

- History taking, physical examination, tentative diagnosis
- Planning of the laboratory and instrumental investigations, outline of possible therapeutical modalities.

Theoretical exam (questions):

'A'. Principles, indications, and risks of a neurological diagnostic modality.
'B'. Interpretation of an important neurological disease. The proper definition of the disease, the knowledge of epidemiology, pathomechanism, clinical symptoms and basic therapeutic modalities are required.
'C'. Treatment of a neurological disorder.

'A' questions
Investigation of the cerebrospinal fluid
Ultrasonography of the cranial vessels
CT-scan
MRI
EEG
EMG and ENG
Evoked potential
Polysomnography

'B' questions
Acute ischaemic stroke
Haemorrhagic stroke
Subarachnoidal hemorrhage
Sinus thrombosis
Epilepsies
Status epilepticus
Loss of consciousness, syncope
Benign paroxysmal positional vertigo (BPPV)
Neurological significance of the degenerative alterations of the cervical spine

Neurological significance of the degenerative alterations of the lumbar spine
Carpal tunnel syndrome
Primary headaches
Trigeminal neuralgia, postzoster neuralgia
Bell paresis
Herpes simplex encephalitis
Multiplex sclerosis
Myasthenia gravis
Guillain-Barre syndrome, CIDP
Parkinson disease
Progressive supranuclear palsy, ?multiple system atrophy?
Neurological disorders causing dementia
Meningitis
Increased intracranial pressure
Amyotrophic lateralsclerosis (ALS)
Dermatomyositis, polymyositis
Spinocerebellar ataxias, Huntington chorea
Polyneuropathies
Paraneoplastic syndromes
Intracranial tumors
Tumors of the spinal cord
Obstructive sleep apnoe syndrome (OSAS)

'C' questions
Treatment of MS
Treatment of epilepsy
Treatment of status epilepticus
Treatment of myasthenia gravis
Treatment of sleep disorders
Treatment of the headaches
Therapeutic modalities of the polyneuropathies
Treatment of the acute ischaemic stroke
Treatment of the brain hemorrhage
Primary and secondary prevention of the stroke
Treatment of subarachnoidal hemorhage
Risk factors of stroke, and their medical treatment
Acute therapeutic strategy in a case of unconsciousness
Therapy of the brain edema
Treatment of Parkinson disease
Treatment of the herpes infections of the nervous system
Therapy of meningitis
Treatment of the GBS and the CIDP
Treatment of dystonias
Treatment of chronic headache
Treatment of lumboischialgia
Treatment of cervicobrachialgia
Treatment of the sleep disorders
Urinary incontinency
Treatment of acute bacterial meningitis

Reading material

- Gelb D.J. Introduction to Clinical Neurology, third edition Elsevier, ISBN 0-7506-7506-3

Practices

100 hours

Physical examination, ENG and EMG examination, case presentation,
Physical examination, EEG examination, case presentation,
Physical examination, doppler examination of carodid arteries, case presentation,
Physical examination, CT and MRI examination, case presentation

Seminars

1. Diagnostics of CSF I.
2. Diagnostics of CSF II.
3. EP studies in different neurological diseases I.
4. EP studies in different neurological diseases II.
5. EMG studies in different neurological diseases I.
6. EMG studies in different neurological diseases II.
7. ENGstudies in different neurological diseases I.
8. ENG studies in different neurological diseases II.
9. The role of EEG in epilepsy diagnostics I.
10. The role of EEG in epilepsy diagnostics II.
11. Management of headaches in daily clinical practise I.
12. Management of headaches in daily clinical practise II.
13. Extrapyramidal disorders I.
14. Extrapyramidal disorders II.
15. Neuroimmunological diseases I.
16. Neuroimmunological diseases II.
17. Sleep disorders I.
18. Sleep disorders II.
19. Muscle disorders I.
20. Muscle disorders II.

EMERGENCY MEDICINE — OASOXY

Course director: **DR. LAJOS BOGÁR**, professor
Department of Anaesthesiology and Intensive Therapy

2 credit ▪ Rotational module ▪ both semesters ▪ mid-semester grade

Number of hours/semester: **0 + 60 + 0 = 60**

Prerequisite: OASBEL - Parallel (taking up)
OASSET - Parallel (taking up)
OASNEU - Parallel (taking up)

Number of students: **1 – 25**

Topic

Short description of the curriculum:
The sixth year students will have to practice the elements of advanced life support during a 24 hour practice (maintaining free airway, cardiopulmonary resuscitation, treatment of life-threatening rhythm troubles on mannequin, peripheral venue-canulation, oxygen therapy and monitoring of basic parameters in operating theater). The students will have to assist the ambulance team and provide emergency treatment to 10 acutely ill patients at the Ambulance System.

Goals of the course in relation to the medical curriculum:
The discipline will provide final and comprehensive practice on acute life saving methods during the final year of the medical curriculum.

Conditions for acceptance of the semester
Maximum 2 days absence.

Making up for missed classes
The student can join other group for the supplementation.

Exam questions
--

Reading material
Dr. Göbl Gábor: Oxyológia, Medicina, 2001.

Lectures

Seminars

Practices

Endotracheal intubation on mannequin 2 hours

Cardiopulmonary resuscitation practice on mannequin 3 hours

Treatment of life-threatening rhythm troubles. Practice on mannequin 3 hours

Maintaining free airways, peripheral venue-canulation, oxygen therapy and monitoring of basic parameters in operating theater 16 hours

Patients emergencies in the Ambulance System (10 cases) 56 hours

PSYCHIATRY OASPSZ

Course director: **DR. SÁNDOR FEKETE**, professor and head of department
Department of Psychiatry and Psychotherapy

4 credits ▪ Rotational module ▪ both semesters ▪ final exam
Number of hours/semester: **0 + 120 + 0 = 120**
Prerequisite: OAKPS2 completed
Number of students: **5 – 150**

Topic

Requirements
To acquire the knowledge and skills of clinical psychiatry in the general practice
Themes:
The essential psychopathological symptoms and syndromes
The treatment of the ill patient's emotional responses
Psychological first aid and psychiatric emergencies in crisis and stress situations
Exploration, evaluation of the psychiatric patients
Biological and psychological therapeutic interventions
Prevention and postvention of psychiatric disorders
Psychiatric care and mentalhygicnic activity in the general practice
(Psychiatric interview in Hungarian)

Practices (first and second semesters)
Psychiatric evaluation (interview, psychiatric history, mental status examination) /2 x 2 hrs/
Anxiety disorders (amiety, phobias, obsessive compulsive disorder, panic disorder) /2 x 2 hrs/
Conditions which mimic physical disease (somatisation disorders, conversion disorder, hypochondriasis, somatoform pain disorder) /2 x 2 hrs/
Psychosomatic disorders /2 x 2 hrs/
Psychosexual disorders/dysfunction and paraphilia /2 hrs/

Practices:
Observation, description and evaluation of the patients' behaviour

Conditions for acceptance of the semester
According to the Code of Studies and Examinations

Making up for missed classes
According to the Code of Studies and Examinations

Exam questions

1. Psychiatric history (anamnesis)
Panic disorder
Crisis intervention
2. Mental status examination Somatoform disorders Antidepressive pharmacotherapy
3. Disturbances of perception Factitious disorders Lithium therapy
4. Disturbances of orientation Dissociative disorders Antipsychotics
5. Disturbances of memory Adjustment disorder
Somatic treatment (convulsive and coma therapy)
6. Disturbances of thinking Impulse control disorders Psychochirurgy
7. Disturbances of thought content Post-traumatic stress disorder Hypnosis
8. Disturbances of attention Alcohol withdrawal delirium
Client centred psychotherapy (Rogers)
9. Disturbances of mood Group of schizophrenias Behaviour and cognitive therapy
10. Positive and negative symptoms of schizophrenia Paranoid disorders
Family therapy, family intervention
11. Disturbances of psychomotor functions
Mood disorders
Psychoanalytic therapy
12. Catatonic symptoms Psychosomatic disorders Brief psychotherapy
13. Types of delusions Suicide Antianxiety agents
14. Psychiatric emergencies Personality disorders
Treatment of alcohol withdrawal delirium
15. Disturbances of intelligence
Schizoaffective disorder

Mood stabilisers in psychiatric treatments
16. Anxiety (forms and causes) Amphetamine related disorders Treatment of schizophrenia
17. Pre-suicidal syndrome (Ringel) Eating disorders
Group psychotherapy
18. Clinical features of mania Alzheimer's disease Treatment of sexual disorders
19. Clinical features of depression Paraphilias
Treatment of alcohol dependency
20. Ego defences
Mental retardation
Consultation-liaison psychiatry. Short-term psychotherapies
21. Hallucinations Multi-infarct dementia Treatment of personality disorders
22. Opioid related disorders Brief reactive psychosis Treatment of mania
23. Disturbances ofsensorium Aetiology of schizophrenia Treatment of phobias
24. Phobia (forms) Classification in psychiatry Behaviour and cognitive psychotherapies
25. Cannabis related disorders Sexual dysfunctions Treatment of somatoform disorders
26. Cocaine related disorders Obsessive-compulsive disorder Side effects of neuroleptics
27. Disturbances of sleep Child psychiatry Psychodrama
28. Psychoanalytic personality theory Alcoholic hallucinosis Treatment of drug dependency
29. Erikson's psychosocial personality theory Alcohol amnestic disorder
Treatment of mood disorders
30. Alexithymia. Psychosomatic disorders Inhalant related disorders Supportive psychotherapy
31. Common symptoms of organic psychiatric disorders Anorexia nervosa and bulimia nervosa
Insight therapy
32. Symptoms of schizophrenia Aetiology of organic personality disorders Treatment of paranoid disorders
33. Hallucinogen related disorders Conversion disorder Sociotherapies

Reading material

H. I. Kaplan, B. J. Sadock, Grebb: Synopsis of Psychiatry, 7th edition Williams and Wilkins, Baltimore, 1994

Lectures

Seminars

Practices

Examination of Psychiatric Patients

Intervieving of Psychiatric Patients

Psychopathology

Diff.dg. of Psychiatric Patients

Biol therapies of Psychiatric Patients

Psychological therapies of Psychiatric Patients

SURGERY - TRAUMATOLOGY OASSET

Course director: **PROF. DR. ÖRS PÉTER HORVÁTH**, professor and head of department Surgery Clinic

6 credits ▪ Rotational module ▪ both semesters ▪ final exam

Number of hours/semester: **0 + 180 + 0 = 180**

Prerequisite: OARSEB *completed*
OAKSE2 *completed*

Topic

6th year students fulfill their famulature in a rotational system lasting 5 weeks touching on all profiles of the clinic. One additional week is calculated for the final exams, so the famulature includes altogether 6 weeks. Gradually they will be fully authorized to receive new patients on admission, write in the files, and participate in O.P. activities as a second hand. Participation in outpatient ambulance activities and in the duty service is also required.

Conditions for acceptance of the semester

The 5 weeks rotational famulature prior to the final exam is obligatory. To perform it on abroad a special consent is needed from the educational office and the head of the clinic, respectively.

Making up for missed classes

Unfulfillment involves loss of the right to sit up for the final exam.

Exam questions

1. The significance of diagnostic laparoscopy. Indications
2. Pulmonary embolism and its prevention
3. Fluid and electrolyte therapy
4. Haemostasis and surgical bleeding
5. Transfusion
6. Classification, clinical and patho-physiologic manifestations of shock
7. Therapy of shock
8. Infection, general principles (diagnosis, surgical therapy, antibiotic therapy)
9. Principles of antibiotic therapy
10. Streptococcal infections (erysipelas, necrotizing fasciitis)
11. Staphylococcal infections (enteritis etc.)
12. Clostridial infections of the gastrointestinal tract
13. Nosocomial infections
14. Tetanus
15. Gas gangrene
16. Surgical asepsis, antisepsis
17. Artificial feeding (parenteral, enteral etc.) of surgical patients
18. The use of imaging procedures in surgery
19. Principles in the management of wounds
20. Primary wound care
21. Minimal invasive techniques in surgery
22. Laparoscopic surgery
23. Chest injuries
24. Abdominal trauma
25. Types of wounds, wound infections
26. Chronic wound, fistula, ulcer
27. Vascular injuries
28. Surgical diseases of the skin appendages
29. Burn wounds - general therapeutic considerations
30. The evaluation of pain
31. Instrumental diagnostic methods
32. Intra-abdominal abscesses
33. The prospect of laparoscopic interventions in surgery
34. Considerations on the operative risk
35. Oncology - epidemiology, prevention
36. Oncology - pathology
37. Oncology - immunbiology
38. Clinical manifestations of cancer
39. The diagnosis of cancer
40. Therapy of cancer - general considerations
41. Cancer surgery (general principles)
42. Adjuvant and neoadjuvant therapy of cancer
43. Transplantation, histocompatibility
44. Technique of transplantation

45. Postoperative complications (wound, cardio-respiratoric etc.)
46. Fat embolism
47. Vascular complications (phlebitis, lymphangitis) including complications of vascular surgery
48. Animal and insect bites
49. Complications of gastrointestinal surgery (technical failures, fistulas etc.)
50. Postoperative monitoring of the surgical patient
51. Wounds and infections of the head
52. Infections of the hand
53. Breast infections
54. Differential diagnosis of breast neoplasm
55. Prophylaxis and treatment of breast cancer
56. Benign lesions of the breast
57. Cysts and fistulas of the neck
58. Differential diagnosis of neck tumours
59. Tumours of the lip and salivary glands
60. Tracheotomy (indication, technique) and tracheostomy
61. Pulmonary oedema
62. Congenital chest-wall deformities
63. Thoracic outlet syndrome
64. Tumours of the chest-wall
65. Surgical considerations of the pleura (empyema,calcification etc.)
66. Spontaneous pneumothorax
67. Pulmonary infections
68. Pulmonary abscesses
69. Tumours of the lung
70. Diseases of the mediastinum
71. Evaluation and postoperative treatment of the thoracic surgical patient
72. Congenital heart disease
73. Acquired heart disease
74. Methods of oesophageal replacement
75. Coronary artery disease (the ways of surgical treatment)
76. Pericardial fluid accumulation
77. Differential diagnosis of palpable masses of the neck
78. Aortic aneurysm
79. Clinical manifestations of peripheral arterial disease
80. Peripheral arterial disease, arteriosclerosis
81. Buerger’s disease
82. Raynaud’s disease
83. Vascular injuries
84. Arterial embolism and thrombosis
85. Therapeutic concepts for arterial occlusive disease
86. Possibilities in the treatment of the vascular diseased patient (indirect interventions)
87. Diabetes and vascular disease
88. Direct arterial reconstruction
89. Minimal invasive techniques in vascular surgery
90. Arterial aneurysm, arteriovenosus fistulas
91. Deep venous thrombosis, pulmonary embolism
92. Anticoagulant therapy
93. Chronic venous insufficiency
94. Treatment of chronic venous insufficiency
95. Lymphedema
96. Renovascular hypertension
97. Hypertension caused by endocreine diseases
98. Abdominal pain, differential diagnostic aspects
99. Abdominal pain caused by extraperitoneal diseases
100. Dysphagia, anorexia, nausea, vomiting, diarrhoea, constipation
101. X-ray signs in the abdomen
102. Gastrointestinal bleeding
103. Differential diagnosis of jaundice
104. Functional disturbances of the oesophagus
105. Gastro-oesophageal reflux and its complications
106. Diaphragmatic hernias
107. Oesophagitis and diverticula
108. Malignant tumours of the oesophagus
109. Oesophageal injury
110. Postgastrectomy syndrome
111. Peptic ulcer

112. Zollinger-Ellison syndrome
113. Acute erosive gastritis
114. Chronic gastric ulcer
115. Vagotomy - indication
116. Gastric malignant tumours
117. Gastric benign tumours, hypertrophic gastritis
118. Surgical procedures for morbid obesity
119. Crohn's disease
120. Malignant lymphomas of the GI tract
121. Cause of ileus, clinical manifestations
122. Treatment of ileus
123. Small intestine - benign neoplasms
124. Small intestine - malignant neoplasms
125. Carcinoid syndrome, carcinoid tumours of the GI-tract
126. Blind loop, short bowel syndrome
127. Ulcerative colitis
128. Ischaemic colitis, radiation enterocolitis, psudomembranous colitis
129. Diverticulois coli and complications
130. Neoplasm of the colon, adenomatous polyps
131. Carcinoma of the colon and rectum: incidence, classification, symptomatology
132. The managemant of liver metastases from colorectal neoplasm
133. Rectal cancer and priciples of the treatment
134. Sigmoid and cecal volvulus, megacolon
135. Anorectal examinations, haemorrhoids
136. Perirectal abscesses, fistula-in-ano, anal fissure
137. Anal incontinence, prolapse of the rectum, pruritus ani, proctitis
138. Pilonidal sinus
139. Acute appendicitis: symptoms and laboratory findings
140. Acute appendicitis: differential diagnosis
141. Acute appendicitis: treatment
142. Liver function tests
143. Radiological studies of the liver and biliary tract
144. Trauma of the liver: diagnostic studies, treatment, haematobilia, hepatorenal syndrome
145. Hepatic abscesses, cysta
146. Benign and malignant tumours of the liver
147. Portal hypertension, hepatic coma
148. Biliary tract anomalies
149. Investigation of the biliary tract
150. Gallstone disease (symptoms, treatment, complications)
151. Inflammatory diseases of the gallbladder and biliary tract
152. Malignant tumours of the biliary tract
153. Operations on the gallbladder and biliary tract
154. Chronic pancreatitis
155. Tumours of the pancreas (including also endocrine tumours)
156. Injuries of the pancreas
157. Rupture of the spleen
158. Causes of splenomegaly, indications for splenectomy
159. Peritonitis: cause, types, symptoms
160. Peritonitis: treatment
161. Acute and chronic bowel ischaemia
162. Surgical disorders of the abdominal wall (desmoid tumour)
163. Acute pancreatitis, surgical options for the treatment
164. Complications of gallstone disease
165. Acute occlusion of the superior mesenteric artery
166. Chronic occlusion of the visceral arteries, intestinal angina
167. Tumours of the mesentery
168. Diseases of the retroperitoneum
169. Hernias
170. Inguinal hernia (symptomatology and treatment)
171. Femoral hernia (symptomatology and treatment)
172. Umbilical hernia (symptomatology and treatment)
173. Surgical diseases of the adrenals
174. Evaluation of patients with thyroid disease
175. Hyperthyroidism
176. Goitre (nodular and diffuse)
177. Thyroiditis (principles of the treatment)
178. Malignant tumours of the thyroid

179. Complications of thyroid surgery
180. Hyperparathyroidism
181. Evaluation of the parathyroid
182. Hypoparathyroidism
183. Tumours of the mediastinum and thymus
184. Diagnostic approach for disseminated and coin lesions of the lungs
185. Malignant lung tumours
186. Benign lesions of the bronchopulmonary system
187. Chronic pleural empyema and its treatment
188. Surgical managemant of metastatic lesions of the lungs and pleura
189. Chest-wall deformities and their surgical correction

Reading material

- Schwartz: Principles of Surgery. Pre-test self-assessment and review. (McGrow Hill Company, NY. 1999.)
- Sabiston D.C.: Textbook of Surgery (Saunders, Philadelphia 1991.)
- Morris-Malt: Oxford Textbook of Surgery (Oxford University Press, 1995. CD-ROM, clinical computers)
- J. Crawford Adams: Outline of fractures (Churchill Livingstone, Edinburgh London)
- J. Crawford Adams: Practical Fracture Treatment (Churchill Livingstone, Edinburgh London)
- R. McRea, M. Esser Practical Fracture Treatment (Churchill Livingstone, Edinburgh London)
- D. Dandy, D. Edwards: Essential Orthopaedics and Trauma(Churchill Livingstone, Edinburgh London)

Lectures

Seminars

Practices

Assisting nursery and postoperative patient care in the thoracic-surgical unit
Installation of wound drainage
Change of wound dressing
Participation in OP theatre activities
Assisting nursery and postoperative patient care in the vascular unit
Rehabilitation of amputated patients
Examination of peripheral limb circulation (Doppler, colour Doppler, anigograms, etc.)
Participation in vascular reconstructive surgery as secund assistent
Assisting nursery and postoperative patient care in general surgery
Postoperative pain killing, administration of antibiotics and laxatives
Catheterism, placing of NG tube and venous cannula
Participation in surgical interventions and attendance to daily rounds
Assisting nursery and postoperative patient care on the ward for colorectal diseases
Preoperative preparation of large bowel
Assisting at colostoma care and change of wound dressing
Participation at large bowel resection, colectomies
Assisting nursery and postoperative patient care on the ward for GI diseases
Postoperative care of gastrectomy patients
Follow up of the clientel operated on for esophageal cancer and carcinoma of the stomach
Participation in OP theatre activities, laparoscopic interventions

Traumatology

Restructuring the traditional trauma curriculum, our students acquire not only the core scientific, and clinical expertise, they need to become successful physicians and also acquire the adaptability skills, and flexible attitudes to become lifelong learners.

These include:

- a problem-based approach to learning in which fundamental medical concepts are mastered, not as much by memorizing textbooks as much as through group investigation and analysis of real patient cases;

- a strong emphasis on exploring the patient-doctor relationship and locating modern medical practices in its social context;

The curriculum of traumatology is designed to assist students in achieving the following educational goals:

- Establish a knowledge base grounded in scientific principles and apply this knowledge effectively for the benefit of patients and populations.

- Acquire the skills and abilities needed to evaluate and treat his/her patients appropriately.

The course is designed to instruct students in the clinical examination, investigation and management of common injuries so that at the end of their period they will be able to deal with common problems and complications, and will realize when more expert help is needed. Students will be involved in the assessment and treatment of widespread traumatological problems as part of the team. They will take part in the ward rounds, conferences and discussions of the unit. Teaching will essentially be informal and carried out by all members of the staff. Students will perform routine musculoskeletal evaluation, make decisions regarding treatment, and participate in emergency and operative care of trauma. Each medical student is required to spend at least 5 evening shifts in Emergency.

Exam questions:

General traumatology

1. Biomechanical conditions of bone healing (primary-, secondary bone healing)
2. Delayed union, pseudoarthrosis, the difference between them and their treatment (dealing with the economic view)
3. Böhler's three rules in fractures treatment (reduction, fixation, physiotherapy)
4. Possibilities of skin transplantation in traumatology (free flap transfer, pedicle flap, tubular flap, jump flap, microsurgery in flap transplantation)
5. Monotrauma, multiple trauma, polytrauma
6. Types of wounds, rules of wound treatment
7. Inactivity atrophy, reflex symphathetic dystrophy
8. Intraarticular fractures. Soft tissue injuries of the joint (ligaments!)
9. Burn disease
10. General rules of non-operative fracture treatment
11. Basic principles of fracture treatment in childhood

Detailed traumatology

1. Dislocations of the shoulder
2. Fractures radii in loco typico, Colles, Smith fracture
3. Examination of the sensory and motor function of the hand. Symptoms of radial, ulnar and median nerve injury.
4. Surgical infections of the hand.
5. Microsurgery.
6. Pelvic fractures and associated injuries.
7. Fractures and dislocations of the hip joint.
8. Fractures of the femoral shaft.
9. Fractures of the tibia and fibula shaft.
10. Posttraumatic infected bone processes of the lower extremity.
11. Injuries of the chest (rib fractures and complications, open chest injuries).
12. Retroperitoneal injuries.

OBSTETRICS AND GYNAECOLOGY — OASSZN

Course director: **PROF. DR. JÓZSEF BÓDIS**, professor
Department of Obstetrics and Gynaecology

6 credits ▪ Rotational module ▪ both semesters ▪ final exam
Number of hours/semester: **0 + 180 + 0 = 180**
Prerequisite: OAKSN2 completed
Number of students: **1 – 20**

Topic

The course takes 180 hours (usually 5 weeks) and covers the all practical aspects of obstetrics and gynaecology. Students take part in the routine work of different wards:
-Intensive care unit
-Gynaecological dept.
-Labour ward, childbed ward, neonatology dept.
-Pathological pregnancy ward
-Outpatient clinic
-Gynaecological oncology pept.
-Operating theaters
The main goal of this course is to improve the students' skill in ob/gyn practice.

Conditions for acceptance of the semester

For obtaining exam licenc a minimum of 180 hours should be compleded. Moreover, the signature of the chief doctor of the diffent wards should also be obtained.

Examination: final exam with two parts (practice and theoretic part)

Making up for missed classes

180 hours should be completed.

Exam questions

1.
a. Abnormal bleeding during labour
b. Elective caesarean section
c. Lactation, galactorrhea
d. Aetiology, pathogenesis, diagnosis and management of various fistulae of gynaecological origin

2.
a. Cervical pregnancy
b. Signs and symptoms of the rupture of the uterus
c. Use of gestagens in the practice of obstetrics and gynaecology
d. Endocrine causes of hirsutism

3.
a. Placental hormones
b. Hormone producing ovarian tumours
c. Fibroid of the uterus
d. Management of urinary incontinence

4.
a. Anaemia in pregnancy
b. Theories regarding the commencement of labour
c. Clinical and endocrinological background of hydatidiform mole
d. Diagnosis of anovulatory cycles

5.
a. Assessment of foetal well-being
b. Forceps delivery, vacuum extraction, caesarean section
c. Classification, diagnosis and management of amenorrhoea
d. Pre- and postoperative radiation therapy

6.

a. Classification, pathogenesis and management of hypertension in pregnancy
b. Chorioadenoma
c. Management of uterine and vaginal vault prolapse in the reproductive age and postmenopause
d. Aetiology and management of uterine bleeding

7.
a. Abnormalities in engagement, rotation, position and presentation
b. Prolonged labour
c. Pathological positioning of the internal genital tract
d. Use of antibiotics in obstetrics and gynaecology

8.
a. Prenatal genetics. Genetic counselling
b. Prerequisites and indications of forceps delivery
c. Indications of extended abdominal hysterectomy
d. Significance of colposcopy in gynaecology

9.
a. Ectopic pregnancy
b. Placenta previa
c. Foetal weight percentile and its significance
d. Pelvic inflammatory diseases

10.
a. Bacteriuria and pyelonephritis during pregnancy
b. Differential diagnosis of placenta previa and abruptio placentae
c. Therapy of cervical cancer
d. Diagnosis and therapy of anovulatory cycle

11.
a. Definition and significance of the 'foetoplacental unit'
b. Intravascular coagulopathies in obstetrics
c. Aetiology, clinical presentation and therapy of polycystic ovary syndrome
d. Infectious diseases of the lower genital tract

12.
a. Threatened abortion
b. Intrapartum monitoring of the foetus
c. Congenital abnormalities of the female genital tract
d. Glandular cystic hyperplasia of the endometrium

13.
a. Management of breech delivery
b. Screening for cervical cancer
c. Significance of ultrasound diagnostics
d. Abnormal bleeding in postmenopause

14.
a. Causes of abortion and its clinical classification
b. Prenatal care
c. Family planning
d. Operative procedures for improving the position of the reproductive organs

15.
a. Pregnancy complicated with diabetes mellitus
b. Principles in the management of premature delivery
c. Juvenile metrorrhagia
d. Chemotherapy in gynaecologic malignancies

16.
a. Aetiology, diagnosis and management of cervical incompetence
b. Definition and diagnosis of intrauterine growth retardation
c. Dysmenorrhoea and premenstrual syndrome
d. Pruritus and kraurosis vulvae

17.
a. Intrauterine diagnosis of foetal hydrocephalus
b. Diagnostic significance of amniotic fluid examination
c. Hormone replacement therapy
d. Dysfunctional uterine bleeding
18.
a. Significance of RH and ABO isoimmunisation
b. Indications of caesarean section
c. Premenopause and menopause
d. Turner's syndrome
19.
a. Perinatal mortality
b. Bleeding in the second and third trimester of pregnancy
c. Induction and inhibition of lactation
d. Diagnosis and management of ovarian cancer
20.
a. Post-term delivery and its management
b. Tuberculosis of the genital tract
c. Significance of hysteroscopy
d. Significance of the genetic examinations in the field of gynaecological endocrinology
21.
a. Premature labour and its clinical significance in perinatal mortality
b. Analgesia and anaesthesia during labour and delivery
c. Therapy of anovulatory cycles
d. Management of endometrial cancer
22.
a. Significance of premature rupture of the membranes
b. Biological and immunological assays for the diagnosis of pregnancy
c. Sterility and infertility
d. Perinatal genetics
23.
a. Twin pregnancy, twin delivery
b. Obstetrical significance of the bony pelvis
c. Preoperative preparation of the patient and postoperative care
d. Carcinoma of the vulva
24.
a. Significance of HCG excretion in the first trimester of pregnancy
b. Resuscitation of the newborn
c. Malignant tumours during pregnancy
d. Hormonal cytodiagnosis
25.
a. Diagnosis of the intrauterine positioning of the foetus in the last trimester
b. Missed abortion and its treatment
c. Endometriosis
d. Dysgerminoma
26.
a. Intrauterine death of the foetus
b. Teratogen ovarian tumours
c. Prostaglandins and their significance in obstetrics and gynaecology
d. Early separation of the placenta. Diagnosis and management
27.
a. Foetal pulmonary maturation
b. Intrauterine contraceptive device
c. Labour induction
d. Foetal hypoxia during labour
28.

a. Puerperium and its complications
b. Acute abdomen during pregnancy
c. Assisted reproductive techniques
d. Postpartum pituitary necrosis (Sheehan's syndrome)

29.
a. Climacteric
b. Sterilisation. Surgical contraception
c. Laparoscopy in gynaecology
d. Forelying and prolapsed umbilical cord
30.
a. Management of labour after caesarean section
b. Amniotic fluid infusion (embolism)
c. Infectious diseases during pregnancy
d. Hyperemesis gravidarum

Reading material

- Wilson- Carrington: Obstetrics and Gynaecology, 9th edition, Mosby Year Book Inc. 1991
- Hart-Normann: Gynaecology Illustrated, 5th edition; Churchill Livingstone, 2000

Lectures

Seminars

Practices