

SYSTEM REQUIREMENTS

Semmelweis University, Faculty of Medicine			
Name of the Gestor Institute (and any contributing institutes):			
Department of Oncology and Department of Clinical Oncology, Semmelweis University			
Name of the subject: Onkológia és helyreállító plasztikai sebészet			
In English¹: Oncology and reconstructive oncoplastic surgery			
In German¹: Onkologie und rekonstruktive plastische Chirurgie			
Credits: 3			
Total number of hours: 40	lecture: 14	practice: 26	seminar: 0
Course type: <u>obligatory</u>	elective course-unit	optional	
Academic year: 2020/21 1 st semester			
Course code²: AOKONK752_1A			
Name of the person in charge of the subject: Prof. Dr. Polgár Csaba			
Workplace, telephone contact: 06-1-224-8690			
Function: Head of Department			
Date and number of his habilitation: 30.05.2007. Number: 252			
The aim and place of the teaching of the subject in the curriculum of medical education: To get acquainted with the epidemiology, etiology, biological properties, prevention (primary and secondary prevention), diagnostics and multidisciplinary therapy of cancer diseases, to acquire the complex oncological approach. To get acquainted with the modern treatment of the most common solid tumours (surgical, radiation, chemo-, hormone, immunological and biological therapy) and their results. Understanding the possibilities of oncological reconstructive and oncoplastic surgeries. Early and late side effects of oncology treatments, their possible prevention and treatment. Palliative treatment, analgesia, somatic and mental rehabilitation of oncology patients. Oncological emergencies and their treatment. Defining the role of the practitioner in the prevention, early detection of tumours and in the care and care of cancer patients.			
Place of teaching the subject (address of lecture hall, seminar room, etc.): Semmelweis University Department of Oncology, National Institute of Oncology, Budapest, 1122 Ráth György u. 7-9. Semmelweis University Department of Oncology Department of Clinical Oncology, Budapest, 1083, Tömő u. 25-29. IV. floor			
Successful completion of the subject results in the acquisition of competencies: Acquisition of general oncological knowledge in 4 th year medical students, based on preliminary studies, knowledge of the main etiological factors, epidemiology, early detection, diagnosis and 3 main therapeutic modalities of tumours (tumour surgery, radiotherapy, drug treatments) and the main solid tumour type treatment and rehabilitation, including mastering the basics of oncoplastic surgical solutions.			
Prerequisite (s) required for the admission or acquisition of the subject: anatomy, physiology, pathology, microbiology, clinical pharmacology, translational medicine, laboratory medicine, surgery I-II, oral surgery, otolaryngology, internal medicine I.			
Student headcount conditions for starting the course (minimum, maximum), method of selecting students: Based on registration in the NEPTUN system, it is 1/8 of the class			
How to apply for the course: In the NEPTUN system			
Detailed topics of the subject³:			
Classroom lectures (14 hours):			

Block Day 1:

1. Etiology, epidemiology and biology of tumours, methods of prevention and screening. Principles of complex oncotherapy (45 minutes) (Cs. Polgár, J. Lövey, Z. Takácsi-Nagy)
2. Imaging diagnostics of tumours (45 minutes) (M. Gódnéy, P. Manninger)
3. Histological and molecular pathological diagnosis of tumours (Szőke J./Tóth E.)
4. Principles of tumour surgery, surgical reconstruction, oncoplastic options, and oncological rehabilitation options (T. Mersich, F. Oberna, Z. Mátrai)
5. Basics of radiotherapy and radiochemotherapy of tumours (Cs. Polgár, J. Lövey, Z. Takácsi-Nagy)
6. Basics of oncological drug treatments (chemo-, hormone, biological and immunotherapy) (Dank M., Rubovszky G.)

Block Day 2:

7. Oncotherapy of head and neck tumours (Takácsi Nagy Z.)
8. Oncotherapy of gastrointestinal tumours (Lövey J.)

Block Day 3:

9. Oncotherapy of gynecological tumours (Polgár Cs., Vízkeleti J.)
10. Complex treatment of breast tumours (Cs. Polgár, N. Mészáros)

Block Day 4:

11. Complex treatment of lung tumours (Lövey J.)
12. Oncotherapy of urological tumours (Ágoston P., Jorgo K.)

Block Day 5:

13. Treatment of central nervous system / bone and soft tissue tumours (Lövey J./Ágoston P.)
14. Oncological emergencies / Oncological rehabilitation and follow-up (Dank M., Szentmártoni Gy.)

Block practices (26 hours):**Block Day 1:**

Tumour Diagnosis I: Cytological, Histological, Molecular Pathology Practice (2x45 minutes)

Block Day 2:

Tumour Diagnosis II: Imaging Diagnostic Practice 1. (4x45 minutes; 1 hour mammography / UH, 1 hour CT, 1 hour MRI, 1 hour PET-CT)

Tumour Radiation I: Treatment Planning Practice (2x45 minutes)

Block Day 3:

Tumour surgery (surgical practice) (4x45 minutes)

Oncoteam practice (2x45 minutes)

Block Day 4:

Systemic treatment of tumours I: Chemotherapy, hormone therapy (2x45 minutes)

Systemic treatment of tumours II: Targeted biological and immunotherapy (2x45 minutes)

Systemic treatment of tumours III: Supportation, treatment of side effects (2x45 minutes)

Block Day 5:

Radiation Treatment of Tumours II: Practice of External Radiation Treatment (2x45 minutes)

Tumour radiotherapy III: Brachytherapy practice (2x45 minutes)

Consultation (2x45 minutes)

Other subjects concerning the border issues of the given subject (both compulsory and optional subjects!). Possible overlaps of themes:

Urology: diagnosis and surgical treatment of urological tumours

Clinical genetics: hereditary tumours

Special study work required for successful completion of the course⁴:

There is no such

Requirements for participation in classes and the possibility to make up for absences:

According to the study and exam regulations, 75% of the classes are compulsory

How to check the acquired knowledge during the diligence period⁵:

During the short period of education available to us, there is no intermediate, formal examination.

However, the interactive nature of the practices and consultations allow teachers to test the students' knowledge and how they use the information available to them.

At least 75% participation in classes. Checking each session by keeping a catalog.

Type of exam:

Oral exam based on a pre-issued line of items.

Exam requirements⁶:**General oncology and radiotherapy line items**

1. Etiology of cancer
2. Epidemiology of cancer
3. Screening and early detection of tumours
4. Imaging methods and their role in the treatment of tumours
5. Imaging diagnostics of major tumour groups
6. Histological diagnosis of tumours
7. Molecular pathological diagnosis of tumours
8. Methods of treatment of tumours - surgery
9. Methods of treatment of tumours - radiation therapy
10. Methods of treating tumours - medication
11. Physical, chemical and biological bases of radiation therapy
12. Basic concepts of dosimetry
13. Computer treatment planning, significant volumes in radiation therapy
14. Structure and operating principle of teletherapeutic devices
15. Structure and operating principle of brachytherapy devices
16. Brachytherapy applicators
17. Brachytherapy planning system, imaging devices
18. Interstitial brachytherapy
19. Image Guided Radiation
20. Intensity Modulated Radiation Therapy
21. Stereotaxic Radiotherapy and Radiosurgery
22. Basics of chemotherapy
23. Side effects of chemotherapy
24. Basics of simultaneous radio-chemotherapy
25. Basics of targeted, biological therapy
26. Side effects of targeted, biological therapy
27. Basics of immunotherapy
28. Side effects of immunotherapy
29. Basic elements of oncopharmacology
30. Clinical pharmacology studies in cancer
31. Evaluation of objective clinical response and general condition

Detailed line of oncology and radiotherapy items

1. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of head and neck tumours.
2. Radiation therapy, surgical and pharmacological treatment of head and neck tumours.
3. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of oesophageal tumours.
4. Radiation therapy, surgery and systemic treatment of oesophageal tumours.
5. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of gastric tumours.
6. Radiation therapy, surgical and pharmacological treatment of gastric tumours.
7. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of colorectal tumours.
8. Surgical and pharmacological treatment of colorectal tumours.
9. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of rectal tumours.
10. Radiation therapy, surgery and systemic treatment for rectal tumours.
11. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of pancreatic tumours.
12. Radiation therapy, surgical and pharmacological treatment of pancreatic tumours.

13. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of liver tumours.
14. Radiation therapy, surgery and systemic treatment for liver tumours.
15. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of cervical tumours.
16. Radiation therapy, surgery and systemic treatment for cervical tumours.
17. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of uterine tumours.
18. Radiation therapy, surgery and systemic treatment for uterine tumours.
19. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of vulvar, vaginal and ovarian tumours.
20. Radiation therapy, surgery and systemic treatments for tumours of the vulva, vagina and ovaries.
21. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of penis, testis and kidney tumours.
22. Radiation therapy, surgery and systemic treatment for penile, testicular and kidney tumours.
23. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of prostate and bladder tumours.
24. Radiation therapy for prostate and bladder tumours.
25. Surgical and pharmacological treatment of prostate and bladder tumours.
26. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of lung tumours.
27. Radiation therapy of lung tumours.
28. Surgical and pharmacological treatment of lung tumours.
29. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of breast tumours.
30. Radiation therapy of breast tumours.
31. Surgical and pharmacological treatment of breast tumours.
32. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of central nervous system tumours.
33. Radiation therapy of central nervous system tumours.
34. Surgical and pharmacological treatment of central nervous system tumours.
35. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of bone tumours.
36. Radiation therapy, surgical and pharmacological treatment of bone tumours.
37. Epidemiology, etiology, histology, staging, symptoms and pre-treatment examination of soft tissue tumours.
38. Radiation therapy, surgery and medication for soft tissue tumours.
39. Oncological emergencies.
40. Radiation treatment of distant metastases and oncological rehabilitation.
41. Principles of the possibilities of reconstructive plastic surgery.
42. Oncoplastic surgery for head and neck tumours.
43. Oncoplastic surgery for breast tumours.

Method and type of rating⁷:

Activity during the block (20%) + oral exam (80%)

Marks: Excellent above 90%, good 80-89%, satisfactory 70-79%, pass 60-69%, fail 60%

How to apply for the exam:

Students apply for the exam exclusively with the help of the NEPTUN unified study system according to the regulations described in the TVSZ (Study and Examination Regulations-SER).

Options for retaking the exam:

According to the Study and Examination Regulations (SER)

<p>Printed, electronic and online notes, textbooks, aids and literature (html title in case of online material) can be used to acquire the study material: Curriculum: University Note on Oncology and Radiation Therapy (Ed .: Csaba Polgár):</p> <ul style="list-style-type: none"> - in Hungarian, English and German in the form of an electronic note - in Hungarian in print (Semmelweis Publishing House, Budapest, 2018) <p>Recommended reading: Basics of oncology (Ed .: Miklós Kásler), university textbook (2nd edition Medicina Könyvkiadó Zrt., Budapest, 2018</p>
<p>Signature of the habilitated instructor (subject responsible) announcing the subject:</p>
<p>Signature of the director of the gestor institution:</p>
<p>Date of submission: 15 May 2020</p>

<p>OKB opinion:</p>
<p>Dean's Office Note:</p>
<p>Dean's signature:</p>

1 To be provided only if the subject is also advertised in that language.

2 To be completed by the Dean's Office after approval.

3 Theoretical and practical instruction must be broken down into hours (weeks), numbered separately, with the names of the lecturers and the practical instructors. Cannot be attached!

4 Eg. fieldwork, medical analysis, survey, etc.

5 Eg. homework, report, in-house, etc. their subject matter and date, the possibility of their replacement and improvement.

6 In case of a theoretical exam, please indicate the line of items, in case of a practical exam, the topic and method of the examination.

7 How to pass the theoretical and practical exam. Mid-year audits are a way of crediting our results.