Higher education institution: *Slovak Medical University in Bratislava*

Faculty: *Faculty of Medicine*

Course code: *GM 033* | **Course title:** *Radiology and nuclear medicine*

Type, extent and method of educational activity:
Number of hours per semester:
Lectures: 14/1 hours per week
Practices:28/2hours per week

Number of credits: ***3*** *credits*

Recommended semester/trimester: *7.th*

Level of higher education study: *1. + 2.level*

Prerequisite courses (subjects):-

Requirements for completion of the course:
Successful completion – 100% participation in practice – oral examination and 100% participation in practice – oral ***examination*** *A, B, C, D, E, FX*
Student workload is 33 hours.

Learning outcomes:
By completion of the course the student acquires basic knowledge about the diagnostics by means of artificial radionuclides, acquires theoretical knowledge on diagnostic and therapeutic methods of nuclear medicine, therapeutic methods in nuclear medicine. In radiology he deepens knowledge on theoretical and practical knowledge of special examination methods, contrast media, CT, MR, USG, use of radiology in other clinical fields.

Brief content of the course (syllabus):
Principles of nuclear medicine methods. Radiopharmaceuticals, The essentials of radionuclide scintigraphy. Scintigrapy planar amd tomographic. SPECT, PET. Nuclear medicine therapeutical methods. Contrast media – new types, post application reactions, prevention.
Seminar analysis and demonstration of practical methods.
Consultations.
Radiology 10/23 h
Nuclear medicine 4/5 h

Recommended literature:
European Journal of Nuclear Medicine a Molecular Imaging
Learning Radiology: Recognizing the Basics (With STUDENT CONSULT Online Access), 2e Paperback William Herring MD ISBN-13: 978-0323074445 ISBN-10: 0323074448 Edition: 2nd
Robert A. Novelline, Lucy Frank Squire Squire's Fundamentals of Radiology, 5th edition Harvard Univ Pr; c1997. ISBN: 0674833392
Hardcover, 621 pages,
Richard H. Daffner Clinical radiology : the essentials, 2nd ed. Baltimore : Williams a Wilkins, c1999. ISBN: 0683305174
William E. Brant, Clyde A. Helms Fundamentals of diagnostic radiology, 2nd ed. Baltimore : Williams a Wilkins, c1999. ISBN: 0683300938
Ďuriš, I. a spol.: Princípy internej medicíny, I. diel, 2001.
Míková, V.: Nukleární medicína – Průrez vyšetřovacími metodami v odboru nukleární medicína. Galén, 2008.
Vlček, P. a kol.: Praktická cvičení v nukleární medicíny. Univerzita Karlova, nakl. Karlinum, 2010.
Votrubová, J. et al.: Klinické PET a PET/CT. Galén, 2009.
Singgh H Neutze J. A.: Radiology Fundamentals, Springer, 2012 ISBN 978-1-4614-0944-1
Herring W.: Learning Radiology Esevier, 2016. ISBN 978-0-323-32807-4
Daffner R.H. Hartman M. S.: Clinical Radiology Wolter Kluwer/Lippincott, 2014. ISBN 978-1-4511-4250-1
Nekuda a spol.: Radiologie. Universita Karlova, nakl. Karlinum, 2010. ISBN 978-80-246-1819-7
Daneš, J. a kol.: Základy mamografie. Praha: X-Egem 2000. ISBN 80-71990620
Skovajsová, M.: Mamodiagnostika. Integrovaný přístup. Praha Galén, 2003
Weis, J., Bořuta, P.: Úvod do magnetickej rezonancie. GOEN Bratislava, 1998. ISBN 80-967953-8-4
Kausitz, J., Altanet, Č. a kol.: Onkológia. Veda, 2003
Blažek O. a spol.: Klinická rádiodiagnostika, Praha: Avicenum 1980
Ferko, A. Krajina A.: Arteriální aneuryzmata – Základy endovaskulární a chirurgické léčby

Ferda, J: CT angiografie. Galén, 2007. ISBN 80-7262-281-1
Eliáš, P., Žižka J.: Dopplerovská ultrasonografie.

Language requirements:-

Notes:
The course runs in Slovak and English language.

Course assessment
Assessed students in total: *0*

A	B	C	D	E	FX
0%	0%	0%	0%	0%	0%

Lecturers:
doc. MUDr. Peter Bořuta, CSc.
doc. MUDr. Izabela Makaiová, CSc.

Date of last modification: *01.09.2014*

Supervised by: *prof. MUDr. Peter Šimko, CSc.*