

# Course descriptions

## TABLE OF CONTENTS

1. 2-FFP-211/00 Advanced Laboratory Exercises from Plasma Physics.....	3
2. 2-FFP-213/15 Analytical Methods in Plasma Physics.....	4
3. 2-FBF-132/15 Application of the Quantum Chemistry and Molecular Dynamics Methods to Molecular Systems.....	5
4. 2-FTL-204/15 Diagnostic Methods in Solid State Physics.....	6
5. 2-FFP-914/15 Diploma Thesis (1).....	7
6. 2-FFP-915/15 Diploma Thesis (2).....	8
7. 2-FFP-916/15 Diploma Thesis (3).....	9
8. 2-FFP-991/15 Diploma Thesis Defense ( <b>state exam</b> ).....	10
9. 2-FFP-231/10 Diploma Thesis Seminar (1).....	11
10. 2-FFP-232/10 Diploma Thesis Seminar (2).....	12
11. 2-FFP-110/15 Electrical Discharges in Gases.....	13
12. 2-FFP-112/00 Electron Optics and Mass Spectroscopy.....	14
13. 2-FTL-115/15 Electronic Components and Circuits.....	15
14. 2-FFP-104/00 Elementary Processes in Plasma.....	16
15. 1-MXX-233/13 English Conversation Course (1).....	17
16. 1-MXX-234/13 English Conversation Course (2).....	18
17. 1-MXX-141/00 French Language (1).....	19
18. 1-MXX-142/00 French Language (2).....	20
19. 1-MXX-241/00 French Language (3).....	21
20. 1-MXX-242/00 French Language (4).....	22
21. 1-MXX-151/00 German Language (1).....	23
22. 1-MXX-152/00 German Language (2).....	24
23. 1-MXX-251/00 German Language (3).....	25
24. 1-MXX-252/00 German Language (4).....	26
25. 2-FTL-117/15 Laboratory Practice in Electronics and Solid State Physics.....	27
26. 2-FFP-204/15 Modelling in Plasma Physics.....	28
27. 2-FOL-215/15 Optical Spectroscopy.....	29
28. 2-FOL-115/15 Optics and Lasers.....	30
29. 2-FBF-102/00 Physical Chemistry and Electrochemistry.....	31
30. 2-MXX-110/00 Physical Education and Sport (1).....	33
31. 2-MXX-120/00 Physical Education and Sport (2).....	34
32. 2-MXX-210/00 Physical Education and Sport (3).....	35
33. 2-MXX-220/00 Physical Education and Sport (4).....	36
34. 2-FFP-111/00 Plasma Diagnostics.....	37
35. 2-FFP-954/15 Plasma Physics ( <b>state exam</b> ).....	38
36. 2-FFP-101/15 Plasma Physics (1).....	39
37. 2-FFP-102/15 Plasma Physics (2).....	40
38. 2-FOL-112/15 Plasma Radiation.....	41
39. 2-FFP-205/15 Plasma Utilisation.....	42
40. 2-FFP-234/15 Plasma-chemical Methods of Surface Treatment.....	43
41. 2-FFP-115/15 Practical Exercises in Vacuum and Plasma Physics.....	44
42. 1-MXX-161/00 Russian Language (1).....	45
43. 1-MXX-162/00 Russian Language (2).....	46
44. 1-MXX-261/00 Russian Language (3).....	47
45. 1-MXX-262/00 Russian Language (4).....	48
46. 2-FFP-230/10 Selected Topics in High Temperature Plasma.....	49

47. 2-FFP-123/15 Semester Project.....	50
48. 2-FOL-210/00 Special Practical in Optical Spectroscopy.....	51
49. 2-MXX-115/17 Sports in Natur (1).....	52
50. 2-MXX-116/18 Sports in Natur (2).....	53
51. 2-FBF-141/11 Theoretical Fundamentals of Molecular Spectroscopy.....	54
52. 2-FFP-109/15 Vacuum Physics and Technique.....	55

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-211/00	<b>Course title:</b> Advanced Laboratory Exercises from Plasma Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> laboratory practicals										
<b>Number of hours:</b>										
per week: 6 per level/semester: 84										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 6										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Dissociative attachment of electrons by electronegative molecules. Ionization of selected molecules by electron collision. Optical emission spectroscopy of O <sub>2</sub> - actinometric method. Cavity Ring Down spectroscopy of O <sub>2</sub> metastable states. Activation of polymer surfaces by plasma generated at atmospheric pressure. Influence of electron attachment coefficient on the shape of Trichel pulses. Ozone generation by electric discharges. Modification of electrical and mechanical properties of materials by plasma immersion ion implantation.										
<b>Recommended literature:</b> Actual articles delivered by respective laboratories.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 45										
A	B	C	D	E	FX					
88,89	8,89	2,22	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Miroslav Zahoran, CSc.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-213/15	<b>Course title:</b> Analytical Methods in Plasma Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / excursion										
<b>Number of hours:</b>										
per week: 2 / 1 per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 17										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Miroslav Zahoran, CSc., doc. RNDr. Anna Zahoranová, PhD., doc. RNDr. Karol Hensel, PhD., prof. Dr. Štefan Matejčík, DrSc., RNDr. Ladislav Moravský, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJFB/2-FBF-132/15	<b>Course title:</b> Application of the Quantum Chemistry and Molecular Dynamics Methods to Molecular Systems									
<b>Educational activities:</b>										
<b>Type of activities:</b> seminar										
<b>Number of hours:</b>										
per week: 3 per level/semester: 42										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Antirequisites:</b> FMFI.KJFB/2-FBF-132/11										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 12										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Ing. Pavel Mach, CSc., prof. RNDr. Ján Urban, DrSc., RNDr. Peter Papp, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FTL-204/15	<b>Course title:</b> Diagnostic Methods in Solid State Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 4 per level/semester: 56										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 6										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 41										
A	B	C	D	E	FX					
65,85	26,83	2,44	4,88	0,0	0,0					
<b>Lecturers:</b> prof. RNDr. Andrej Plecenik, DrSc., doc. RNDr. Miroslav Zahoran, CSc., doc. Ing. Maroš Gregor, PhD., doc. RNDr. Tomáš Plecenik, PhD., doc. RNDr. Tomáš Roch, Mgr. Leonid Satrapinskyy, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-914/15	<b>Course title:</b> Diploma Thesis (1)									
<b>Educational activities:</b>										
Type of activities: independent work										
<b>Number of hours:</b>										
per week: 4 per level/semester: 56										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 18										
A	B	C	D	E	FX					
94,44	5,56	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Anna Zahoranová, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-915/15	<b>Course title:</b> Diploma Thesis (2)									
<b>Educational activities:</b>										
Type of activities: independent work										
<b>Number of hours:</b>										
per week: 4 per level/semester: 56										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 18										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b>										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-916/15	<b>Course title:</b> Diploma Thesis (3)									
<b>Educational activities:</b>										
Type of activities: independent work										
<b>Number of hours:</b>										
per week: 4 per level/semester: 56										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 17										
A	B	C	D	E	FX					
88,24	11,76	0,0	0,0	0,0	0,0					
<b>Lecturers:</b>										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## STATE EXAM DESCRIPTION

<b>University:</b> Comenius University in Bratislava	
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics	
<b>Course ID:</b> FMFI.KEF/2-FFP-991/15	<b>Course title:</b> Diploma Thesis Defense
<b>Number of credits:</b> 4	
<b>Educational level:</b> II.	
<b>State exam syllabus:</b>	
<b>Last change:</b> 02.06.2015	
<b>Approved by:</b>	

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-231/10	<b>Course title:</b> Diploma Thesis Seminar (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> seminar										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 33										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., doc. RNDr. Anna Zahoranová, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-232/10	<b>Course title:</b> Diploma Thesis Seminar (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> seminar										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 25										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., doc. RNDr. Anna Zahoranová, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-110/15	<b>Course title:</b> Electrical Discharges in Gases									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 3 per level/semester: 42										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 19										
A	B	C	D	E	FX					
57,89	31,58	10,53	0,0	0,0	0,0					
<b>Lecturers:</b> prof. RNDr. Mirko Černák, CSc., doc. Mgr. Dušan Kováčik, PhD., RNDr. Matej Klas, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-112/00	<b>Course title:</b> Electron Optics and Mass Spectroscopy									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Sources of electron and ion beams, electrostatic, magnetostatic lenses, charhe particles monochromators and analysators, time of flight, magnetic, dynamic mass spectrometers, interpretation of mass spectra.										
<b>Recommended literature:</b> C. G. Herbert, R. A. W. Johnstone: Mass spectrometry basics, CRC Press, London, 2003										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 42										
A	B	C	D	E	FX					
97,62	2,38	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., RNDr. Ladislav Moravský, PhD., RNDr. Juraj Országh, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FTL-115/15	<b>Course title:</b> Electronic Components and Circuits									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 4 / 2    per level/semester: 56 / 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 8										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 39										
A	B	C	D	E	FX					
56,41	33,33	7,69	0,0	2,56	0,0					
<b>Lecturers:</b> doc. RNDr. František Kundracík, CSc., doc. RNDr. Michal Maheľ, CSc., prof. RNDr. Andrej Plecník, DrSc.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-104/00	<b>Course title:</b> Elementary Processes in Plasma									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Introduction into kinetics, reaction cross sections, rate coefficients, experimental methods for their estimation, Boltzmann equation. Electron interactions with molecules, electron impact ionization, electron attachment, recombinations of electrons with ions, ion-molecule reactions, interactions of photons with particles in plasma, photoionizations, plasma-wall interactions.										
<b>Recommended literature:</b> E. Illenberger, J. Momigmny: Gaseous Molecular Ions, Springer Verlag, New York, 1985 P. Atkins: Physical Chemistry, 5th edition, Oxford University Press, Oxford, 1985										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 67										
A	B	C	D	E	FX					
94,03	5,97	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., RNDr. Peter Papp, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-233/13	<b>Course title:</b> English Conversation Course (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1., 3.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
Scale of assessment (preliminary/final): 100/0										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The content of the course is general English.										
The language level is B2/C1 (Upper-Intermediate/Lower Advanced).										
<b>Recommended literature:</b>										
Selection of materials from Inside Out Upper-Intermediate, Cutting Edge Upper-Intermediate, New English File Upper-Intermediate, British and American newspapers and journals										
Recordings: authentic and semi-authentic (source: BBC, CNN, coursebook recordings)										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 193										
A	B	C	D	E	FX					
65,28	13,99	7,25	2,07	1,55	9,84					
<b>Lecturers:</b> PhDr. Elena Klátková, Mgr. Aneta Barnes										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-234/13	<b>Course title:</b> English Conversation Course (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2., 4.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
Scale of assessment (preliminary/final): 100/0										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The course is a follow-up to the Conversation Course in English (1). The content of the course is general English.										
The language level is B2/C1 (Upper-Intermediate/Lower Advanced).										
<b>Recommended literature:</b>										
Selection of materials from Inside Out Upper-Intermediate, Cutting Edge Upper-Intermediate, New English File Upper-Intermediate, British and American newspapers and journals										
Recordings: authentic and semi-authentic (source: BBC, CNN, coursebook recordings)										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 118										
A	B	C	D	E	FX					
73,73	15,25	4,24	0,85	0,0	5,93					
<b>Lecturers:</b> PhDr. Elena Klátková, Mgr. Aneta Barnes										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-141/00	<b>Course title:</b> French Language (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> French language is taught at two levels: beginner and intermediate. Students opt for one of them depending on whether they wish to obtain the fundamentals of the language or wish to maintain and/or improve previous knowledge of French.										
<b>Recommended literature:</b> Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 421										
A	B	C	D	E	FX					
45,13	20,43	19,48	9,03	1,9	4,04					
<b>Lecturers:</b> Mgr. Ľubomíra Kožehubová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-142/00	<b>Course title:</b> French Language (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> The subject continues the program of French language (1) and provides courses of essential and intermediate French language.										
<b>Recommended literature:</b> Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2 Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983 Kolektív Lingea, s.r.o.: Slovensko-francúzssky hovorník, Bratislava 2008										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 259										
A	B	C	D	E	FX					
38,22	25,87	20,08	10,42	2,7	2,7					
<b>Lecturers:</b> Mgr. Ľubomíra Kožehubová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-241/00	<b>Course title:</b> French Language (3)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The subject provides a course of intermediate French language, covering not only general, but also technical language.										
<b>Recommended literature:</b>										
Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2										
Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983										
Kolektív Lingea, s.r.o.: Slovensko-francúzssky hovorník, Bratislava 2008										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 101										
A	B	C	D	E	FX					
37,62	28,71	21,78	6,93	0,99	3,96					
<b>Lecturers:</b> Mgr. Ľubomíra Kožehubová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFI.KJP/1-MXX-242/00	<b>Course title:</b> French Language (4)				
<b>Educational activities:</b>					
<b>Type of activities:</b> practicals					
<b>Number of hours:</b>					
per week: 2 per level/semester: 28					
<b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 2					
<b>Recommended semester:</b> 4.					
<b>Educational level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
The subject provides a course of intermediate French covering not only general, but also technical French language.					
<b>Recommended literature:</b>					
Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2					
Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983					
Kolektív Lingea, s.r.o.: Slovensko-francúzsky hovorník, Bratislava 2008					
Zarha Lahmudi: Sciences-techniques.com, ISBN 209-0331186-0, CLE international, 2005					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 71					
A	B	C	D	E	FX
39,44	33,8	18,31	2,82	1,41	4,23
<b>Lecturers:</b> Mgr. Ľubomíra Kožehubová					
<b>Last change:</b> 02.06.2015					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-151/00	<b>Course title:</b> German Language (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> German language is taught at three levels: beginner, intermediate and advanced. Students opt for one of them depending on whether they need to learn the fundamentals or maintain and/or improve their previous knowledge.										
<b>Recommended literature:</b> Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 717										
A	B	C	D	E	FX					
35,43	27,62	19,8	9,21	2,79	5,16					
<b>Lecturers:</b> Mgr. Alexandra Maďarová, Mgr. Marián Mancovič										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-152/00	<b>Course title:</b> German Language (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> The course continues the program of German language (1). German language is taught at three levels: beginner, intermediate, advanced.										
<b>Recommended literature:</b> Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 468										
A	B	C	D	E	FX					
35,47	20,51	20,73	13,46	3,42	6,41					
<b>Lecturers:</b> Mgr. Alexandra Maďarová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-251/00	<b>Course title:</b> German Language (3)									
<b>Educational activities:</b>										
Type of activities: practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The subject continues the program of German language (2). It provides a course of intermediate and advanced German language.										
<b>Recommended literature:</b>										
Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe. Aus moderner Technik und Naturwissenschaft, 1999, Max Hueber Verlag, D-85737, ISBN 3-19-001629-1										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 158										
A	B	C	D	E	FX					
39,24	26,58	21,52	6,96	2,53	3,16					
<b>Lecturers:</b> Mgr. Alexandra Maďarová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-252/00	<b>Course title:</b> German Language (4)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> The subject continues the program of German language (3). It provides a course of intermediate and advanced German language.										
<b>Recommended literature:</b> Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe. Vilma Václavíková: Nemčina pre študentov MFF UK, Vysokoškolský učebný text pre potrebu študentov KJP, č. 9793/1982 C VIII/2, 1983										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 85										
A	B	C	D	E	FX					
40,0	25,88	12,94	11,76	3,53	5,88					
<b>Lecturers:</b> Mgr. Alexandra Maďarová										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FTL-117/15	<b>Course title:</b> Laboratory Practice in Electronics and Solid State Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> laboratory practicals										
<b>Number of hours:</b>										
per week: 3 per level/semester: 42										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 31										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. František Kundracík, CSc., RNDr. Ján Greguš, PhD., doc. RNDr. Michal Mahel', CSc.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-204/15	<b>Course title:</b> Modelling in Plasma Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1    per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 23										
A	B	C	D	E	FX					
91,3	8,7	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Mário Janda, PhD., RNDr. Peter Papp, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FOL-215/15	<b>Course title:</b> Optical Spectroscopy									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1    per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 22										
A	B	C	D	E	FX					
63,64	36,36	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. RNDr. Pavel Veis, CSc., doc. RNDr. Mário Janda, PhD., Dr. Alicia Marín Roldán										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FOL-115/15	<b>Course title:</b> Optics and Lasers									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 3 per level/semester: 42										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 5										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 29										
A	B	C	D	E	FX					
51,72	20,69	10,34	6,9	10,34	0,0					
<b>Lecturers:</b> doc. RNDr. Vladimír Mesároš, CSc., RNDr. Dagmar Senderáková, CSc., prof. RNDr. Pavel Veis, CSc., Dr. Alicia Marín Roldán										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava					
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics					
<b>Course ID:</b> FMFI.KJFB+KEF/2- FBF-102/00	<b>Course title:</b> Physical Chemistry and Electrochemistry				
<b>Educational activities:</b>					
<b>Type of activities:</b> lecture <b>Number of hours:</b> per week: 2 per level/semester: 28 <b>Form of the course:</b> on-site learning					
<b>Number of credits:</b> 3					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> I., II.					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b>					
<b>Class syllabus:</b>					
1. Fundamentals of chemical thermodynamics, thermochemistry, reaction enthalpy, enthalpy of formation. 2. Chemical potential and its application to equilibrium processes in one and multicomponent systems. 3. Colligative properties, electrolyte solutions, weak and strong electrolytes. 4. Activity, activity coefficient, electrolyte solutions as special case. Debay-Hückel limiting law. 5. Affinity of the chemical reaction, equilibrium constants. Application to electrolyte solutions: pH, pKa, buffer solutions, Henderson-Hasselbalch equation. 6. Galvanic cell, Nernst equation, standard electrode potentials, its meaning for oxido-reduction processes. 7. Standard electrode potential and activity coefficient from measurement of EMF of galvanic cell. 8. Classification of electrodes, pH measurement. Corrosion from electrochemical point of view. 9. Introduction to chemical kinetics. Reaction order, methods for its determination. Reaction mechanism and its connection with rate law. 10. Gas-phase reactions. Lindemann-Hinshelwood mechanism. Complex mechanisms. 11. Collision and transition state theories of chemical kinetics. 12. Homogeneous and heterogeneous catalysis. Enzymatic catalysis, autocatalysis, chemical oscillations.					
<b>Recommended literature:</b>					
W.J. Moore, Physical Chemistry, SNTL Praha, 1979 (in Czech) P.W. Atkins, Physical Chemistry, Oxford Univ. Press, 2001. P.W. Atkins, Fyzikálna chémia, STU, Bratislava, 1999 (Translation from English).					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b>					
Total number of evaluated students: 91					
A	B	C	D	E	FX
63,74	29,67	4,4	0,0	0,0	2,2

**Lecturers:** prof. Ing. Pavel Mach, CSc.

**Last change:** 02.06.2015

**Approved by:**

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-110/00	<b>Course title:</b> Physical Education and Sport (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
Practicing of the students' game skills in collective sports: basketball, volleyball, football, floorball and hockey. Mastering of the basic technique of a particular sport discipline in other sports. In paddling, basic training on still and slightly flowing water. Development of coordination skills, improvement of articular mobility and cardiovascular system.										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 1594										
A	B	C	D	E	FX					
98,56	0,56	0,06	0,0	0,0	0,82					
<b>Lecturers:</b> PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Júlia Raábová, PhD., Mgr. Branislav Nedbálek										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-120/00	<b>Course title:</b> Physical Education and Sport (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Practicing of offensive and defensive game combinations and playing with modified rules in collective sports such as basketball, volleyball, football, floorball, hockey. Command of elements of higher difficulty in locomotion skills (swimming - crawl stroke, breast stroke, butterfly stroke, trampoline jumping and aerobics – practicing of aerobics compositions, bodybuilding – development of the main muscle groups, paddling on running water. Testing of the level of physical fitness and coordination skills.										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 1458										
A	B	C	D	E	FX					
98,97	0,41	0,07	0,07	0,0	0,48					
<b>Lecturers:</b> Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Branislav Nedbálek, PaedDr. Mikuláš Ortutay, Mgr. Ondrej Podkonický, Mgr. Júlia Raábová, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-210/00	<b>Course title:</b> Physical Education and Sport (3)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
To improve offensive and defensive game combinations in collective sports. Practicing of tactical and technical elements in individual sports. Compensatory exercises to correct wrong body posture. Stretching. Competition rules in sport disciplines.										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 1219										
A	B	C	D	E	FX					
99,02	0,41	0,0	0,0	0,0	0,57					
<b>Lecturers:</b> PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Júlia Raábová, PhD., Mgr. Branislav Nedbálek										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-220/00	<b>Course title:</b> Physical Education and Sport (4)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
Sport training for Faculty Championships in a selected sport with modified rules. Selection of sport-talented students into teams of the Faculty Sport League, University League of Bratislava Faculties, and participation in sport events of the Faculty and University.										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 1056										
A	B	C	D	E	FX					
99,05	0,38	0,09	0,0	0,09	0,38					
<b>Lecturers:</b> PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Jana Leginusová, Mgr. Tomáš Kuchár, PhD., PaedDr. Mikuláš Ortutay, Mgr. Martin Dovičák, PhD., Mgr. Branislav Nedbálek, Mgr. Júlia Raábová, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-111/00	<b>Course title:</b> Plasma Diagnostics									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Functions of plasma diagnostics. The structure of the boundary layer between the volume of plasma and the surface of object inserted into plasma. Theory of electrical probe, characteristics and determining of plasma parameters from experimental data. Dual probe, probes at floating potential. Magnetical probes. Optical diagnostics of plasma, determining electron temperature for spectral line widths. Stark effect. Corpuscular plasma diagnostics. High-frequency diagnostics of plasma.										
<b>Recommended literature:</b> R. H. Huddlestone, S. L. Leonard „Plasma diagnostic techniques, Academic Press, New York, London, 1985 Yu. P. Raizer: Gas discharge physics, Springer, Berlin, 1997										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b> Total number of evaluated students: 57										
A	B	C	D	E	FX					
68,42	19,3	12,28	0,0	0,0	0,0					
<b>Lecturers:</b> prof. RNDr. Pavel Veis, CSc., doc. RNDr. Zdenko Machala, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## STATE EXAM DESCRIPTION

<b>University:</b> Comenius University in Bratislava	
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics	
<b>Course ID:</b> FMFI.KEF/2-FFP-954/15	<b>Course title:</b> Plasma Physics
<b>Number of credits:</b> 6	
<b>Educational level:</b> II.	
<b>State exam syllabus:</b>	
<b>Last change:</b> 17.05.2017	
<b>Approved by:</b>	

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-101/15	<b>Course title:</b> Plasma Physics (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1 per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 30										
A	B	C	D	E	FX					
43,33	20,0	16,67	6,67	3,33	10,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., Mgr. Michal Stano, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-102/15	<b>Course title:</b> Plasma Physics (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1    per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 18										
A	B	C	D	E	FX					
83,33	5,56	11,11	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Mário Janda, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FOL-112/15	<b>Course title:</b> Plasma Radiation									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 23										
A	B	C	D	E	FX					
91,3	4,35	4,35	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Anna Zahoranová, PhD., doc. RNDr. Mário Janda, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-205/15	<b>Course title:</b> Plasma Utilisation									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1 per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 19										
A	B	C	D	E	FX					
73,68	15,79	10,53	0,0	0,0	0,0					
<b>Lecturers:</b> doc. RNDr. Miroslav Zahoran, CSc., doc. RNDr. Anna Zahoranová, PhD., doc. RNDr. Karol Hensel, PhD., doc. RNDr. Zdenko Machala, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-234/15	<b>Course title:</b> Plasma-chemical Methods of Surface Treatment									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 16										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> doc. Mgr. Dušan Kováčik, PhD., doc. RNDr. Anna Zahoranová, PhD., RNDr. Veronika Medvecká, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-115/15	<b>Course title:</b> Practical Exercises in Vacuum and Plasma Physics									
<b>Educational activities:</b>										
<b>Type of activities:</b> laboratory practicals										
<b>Number of hours:</b>										
per week: 3 per level/semester: 42										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 17										
A	B	C	D	E	FX					
76,47	17,65	0,0	5,88	0,0	0,0					
<b>Lecturers:</b> Mgr. Michal Stano, PhD., RNDr. Juraj Országh, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-161/00	<b>Course title:</b> Russian Language (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The subject provides a course in Russian language for beginners.										
<b>Recommended literature:</b>										
The textbook has not been published. It is at students' disposal in an electronic format.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 685										
A	B	C	D	E	FX					
58,98	16,35	10,51	4,53	1,9	7,74					
<b>Lecturers:</b> PhDr. Elena Klátková										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-162/00	<b>Course title:</b> Russian Language (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The subject continues the program of Russian language (1) and provides a course of Russian for beginners.										
<b>Recommended literature:</b>										
The textbook has not been published. It is at students' disposal in an electronic format.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 414										
A	B	C	D	E	FX					
65,94	15,22	8,7	3,86	0,97	5,31					
<b>Lecturers:</b> PhDr. Elena Klátková										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-261/00	<b>Course title:</b> Russian Language (3)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 3.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The course "Russian for Intermediate Students" is a follow-up to "Russian for Beginners". The subject of the course is general Russian in the range appropriate to the given level.										
<b>Recommended literature:</b>										
The textbook has not been published. It is at students' disposal in an electronic format.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 197										
A	B	C	D	E	FX					
70,05	17,77	8,63	2,54	0,0	1,02					
<b>Lecturers:</b> PhDr. Elena Klátková										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJP/1-MXX-262/00	<b>Course title:</b> Russian Language (4)									
<b>Educational activities:</b>										
<b>Type of activities:</b> practicals										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> I., II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
The course "Russian for Intermediate Students" is a follow-up to "Russian for Beginners". The subject of the course is general Russian in the range appropriate to the given level.										
<b>Recommended literature:</b>										
The textbook has not been published. It is at students' disposal in an electronic format.										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 142										
A	B	C	D	E	FX					
75,35	13,38	7,04	2,82	0,7	0,7					
<b>Lecturers:</b> PhDr. Elena Klátková										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-230/10	<b>Course title:</b> Selected Topics in High Temperature Plasma									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 22										
A	B	C	D	E	FX					
90,91	4,55	4,55	0,0	0,0	0,0					
<b>Lecturers:</b> RNDr. Radomír Pánek, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-123/15	<b>Course title:</b> Semester Project									
<b>Educational activities:</b>										
<b>Type of activities:</b> independent work										
<b>Number of hours:</b>										
per week: 4 per level/semester: 56										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 21										
A	B	C	D	E	FX					
90,48	4,76	0,0	0,0	0,0	4,76					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FOL-210/00	<b>Course title:</b> Special Practical in Optical Spectroscopy									
<b>Educational activities:</b>										
<b>Type of activities:</b> laboratory practicals										
<b>Number of hours:</b>										
per week: 6 per level/semester: 84										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 6										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b> Visible and infrared spectroscopy – prism and grating spectrometers, photomultiplier, CCD detector, calibration of a spectrometer, time-resolved spectroscopy, actinometry, determination of rotational and vibrational temperatures of diatomic molecules. Spectroscopy in vacuum ultraviolet range. Cavity ring-down spectroscopy. Echelett spectrometer.										
<b>Recommended literature:</b> A. Beiser, Úvod do moderní fyziky, Academia, Praha 1978 G.V. Maar: Plasma Spectroscopy, Elsevier Amsterdam 1968 Scientific papers										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 21										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> Mgr. Michaela Horňáčková, PhD., Mgr. Michal Anguš, PhD., Dr. Alicia Marín Roldán										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-115/17	<b>Course title:</b> Sports in Natur (1)									
<b>Educational activities:</b>										
<b>Type of activities:</b>										
<b>Number of hours:</b>										
per week: per level/semester:										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 68										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> Mgr. Branislav Nedbálek										
<b>Last change:</b>										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KTV/2-MXX-116/18	<b>Course title:</b> Sports in Natur (2)									
<b>Educational activities:</b>										
<b>Type of activities:</b>										
<b>Number of hours:</b>										
per week: per level/semester:										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 2										
<b>Recommended semester:</b> 2.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 35										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> Mgr. Branislav Nedbálek										
<b>Last change:</b>										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KJFB/2-FBF-141/11	<b>Course title:</b> Theoretical Fundamentals of Molecular Spectroscopy									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture										
<b>Number of hours:</b>										
per week: 2 per level/semester: 28										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 3										
<b>Recommended semester:</b> 4.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 7										
A	B	C	D	E	FX					
100,0	0,0	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Ing. Pavel Mach, CSc., prof. RNDr. Ján Urban, DrSc.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										

## COURSE DESCRIPTION

<b>University:</b> Comenius University in Bratislava										
<b>Faculty:</b> Faculty of Mathematics, Physics and Informatics										
<b>Course ID:</b> FMFI.KEF/2-FFP-109/15	<b>Course title:</b> Vacuum Physics and Technique									
<b>Educational activities:</b>										
<b>Type of activities:</b> lecture / practicals										
<b>Number of hours:</b>										
per week: 2 / 1    per level/semester: 28 / 14										
<b>Form of the course:</b> on-site learning										
<b>Number of credits:</b> 4										
<b>Recommended semester:</b> 1.										
<b>Educational level:</b> II.										
<b>Prerequisites:</b>										
<b>Course requirements:</b>										
<b>Learning outcomes:</b>										
<b>Class syllabus:</b>										
<b>Recommended literature:</b>										
<b>Languages necessary to complete the course:</b>										
<b>Notes:</b>										
<b>Past grade distribution</b>										
Total number of evaluated students: 42										
A	B	C	D	E	FX					
88,1	11,9	0,0	0,0	0,0	0,0					
<b>Lecturers:</b> prof. Dr. Štefan Matejčík, DrSc., Mgr. Michal Stano, PhD.										
<b>Last change:</b> 02.06.2015										
<b>Approved by:</b>										