

## Course descriptions

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## COURSE DESCRIPTION

|   |       |  |       |       |       |
|---|-------|--|-------|-------|-------|
| <b>University:</b> Comenius University in Bratislava  |       |  |       |       |       |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |       |       |       |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UIN-236/15  |       | <b>Course title:</b><br>Algorithms and Data Structures |       |       |       |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 4 <b>per level/semester:</b> 56<br><b>Form of the course:</b> on-site learning |       |  |       |       |       |
| <b>Number of credits:</b> 5   |       |  |       |       |       |
| <b>Recommended semester:</b> 4.   |       |  |       |       |       |
| <b>Educational level:</b> I., II.   |       |  |       |       |       |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-241/15 - Programming (3)   |       |  |       |       |       |
| <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><br>Total number of evaluated students: 27  |       |  |       |       |       |
| A   | B     | C  | D     | E     | FX    |
| 18,52   | 14,81 | 14,81  | 22,22 | 18,52 | 11,11 |
| <b>Lecturers:</b> doc. RNDr. Zuzana Kubincová, 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><br>FMFL.KJFB/1-UFY-241/10  |       | <b>Course title:</b><br>Atomic and Nuclear Physics |       |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 3 / 1 <b>per level/semester:</b> 42 / 14<br><b>Form of the course:</b> on-site learning |       |  |       |       |      |
| <b>Number of credits:</b> 5  |       |  |       |       |      |
| <b>Recommended semester:</b> 4.  |       |  |       |       |      |
| <b>Educational level:</b> I.   |       |  |       |       |      |
| <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><br>Total number of evaluated students: 115  |       |  |       |       |      |
| A  | B     | C  | D     | E     | FX   |
| 26,09  | 13,04 | 19,13  | 14,78 | 21,74 | 5,22 |
| <b>Lecturers:</b> RNDr. Radoslav Böhm, PhD., doc. RNDr. Jaroslav Staníček, PhD.  |       |  |       |       |      |
| <b>Last change:</b> 02.06.2015   |       |  |       |       |      |
| <b>Approved by:</b>  |       |  |       |       |      |

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|  |     |  |     |      |      |
|--|-----|--|-----|------|------|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |      |      |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UXX-936/13   |     | <b>Course title:</b><br>BSc Thesis in Computer Science Seminar (1) |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 <b>per level/semester:</b> 14<br><b>Form of the course:</b> on-site learning |     |  |     |      |      |
| <b>Number of credits:</b> 1  |     |  |     |      |      |
| <b>Recommended semester:</b> 5.  |     |  |     |      |      |
| <b>Educational level:</b> I.   |     |  |     |      |      |
| <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><br>Total number of evaluated students: 17   |     |  |     |      |      |
| A  | B   | C  | D   | E    | FX   |
| 88,24  | 0,0 | 0,0  | 0,0 | 5,88 | 5,88 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD.   |     |  |     |      |      |
| <b>Last change:</b>  |     |  |     |      |      |
| <b>Approved by:</b>  |     |  |     |      |      |

## COURSE DESCRIPTION

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|--|-----|--|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UXX-935/13   |     | <b>Course title:</b><br>BSc Thesis in Computer Science Seminar (2) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 <b>per level/semester:</b> 14<br><b>Form of the course:</b> on-site learning |     |  |     |     |     |
| <b>Number of credits:</b> 1  |     |  |     |     |     |
| <b>Recommended semester:</b> 6.  |     |  |     |     |     |
| <b>Educational level:</b> I.   |     |  |     |     |     |
| <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><br>Total number of evaluated students: 13   |     |  |     |     |     |
| A  | B   | C  | D   | E   | FX  |
| 100,0  | 0,0 | 0,0  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD.   |     |  |     |     |     |
| <b>Last change:</b>  |     |  |     |     |     |
| <b>Approved by:</b>  |     |  |     |     |     |

## COURSE DESCRIPTION

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|--|-----|---|-----|-----|------|
| <b>University:</b> Comenius University in Bratislava   |     |   |     |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |   |     |     |      |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UXX-937/17   |     | <b>Course title:</b><br>BSc Thesis in Physics Seminar (1) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 <b>per level/semester:</b> 14<br><b>Form of the course:</b> on-site learning |     |   |     |     |      |
| <b>Number of credits:</b> 1  |     |   |     |     |      |
| <b>Recommended semester:</b> 5.  |     |   |     |     |      |
| <b>Educational level:</b> I.   |     |   |     |     |      |
| <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><br>Total number of evaluated students: 24   |     |   |     |     |      |
| A  | B   | C   | D   | E   | FX   |
| 95,83  | 0,0 | 0,0   | 0,0 | 0,0 | 4,17 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD.   |     |   |     |     |      |
| <b>Last change:</b> 06.02.2021   |     |   |     |     |      |
| <b>Approved by:</b>  |     |   |     |     |      |



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|  |     |   |     |     |     |
|--|-----|---|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |   |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |   |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UXX-938/17   |     | <b>Course title:</b><br>BSc Thesis in Physics Seminar (2) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 <b>per level/semester:</b> 14<br><b>Form of the course:</b> on-site learning |     |   |     |     |     |
| <b>Number of credits:</b> 1  |     |   |     |     |     |
| <b>Recommended semester:</b> 6.  |     |   |     |     |     |
| <b>Educational level:</b> I.   |     |   |     |     |     |
| <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><br>Total number of evaluated students: 22   |     |   |     |     |     |
| A  | B   | C   | D   | E   | FX  |
| 100,0  | 0,0 | 0,0   | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Peter Demkanin, PhD.  |     |   |     |     |     |
| <b>Last change:</b> 06.02.2021   |     |   |     |     |     |
| <b>Approved by:</b>  |     |   |     |     |     |

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|---|-------|--|------|-----|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |      |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |      |     |      |
| <b>Course ID:</b><br>FMFL.KAI/1-AIN-407/15  |       | <b>Course title:</b><br>Brain and Mind |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |     |      |
| <b>Number of credits:</b> 3   |       |  |      |     |      |
| <b>Recommended semester:</b> 1., 3., 5.   |       |  |      |     |      |
| <b>Educational level:</b> I.  |       |  |      |     |      |
| <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><br>Total number of evaluated students: 133   |       |  |      |     |      |
| A   | B     | C                                      | D    | E   | FX   |
| 48,87   | 19,55 | 13,53                                  | 9,77 | 1,5 | 6,77 |
| <b>Lecturers:</b> RNDr. Barbora Cimrová, PhD.   |       |  |      |     |      |
| <b>Last change:</b> 22.09.2017  |       |  |      |     |      |
| <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><br>FMFL.KDMFI/1-UFY-160/15  |       | <b>Course title:</b><br>Calculus for Physics Teachers |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |   |      |      |      |
| <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><br>Total number of evaluated students: 48  |       |   |      |      |      |
| A   | B     | C   | D    | E    | FX   |
| 66,67   | 10,42 | 6,25  | 8,33 | 4,17 | 4,17 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD., Mgr. Anna Trúsiková   |       |   |      |      |      |
| <b>Last change:</b> 23.09.2020  |       |   |      |      |      |
| <b>Approved by:</b>   |       |   |      |      |      |

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|   |       |  |      |     |      |
|---|-------|--|------|-----|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |      |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |      |     |      |
| <b>Course ID:</b><br>FMFL.KAI/1-AIN-408/15  |       | <b>Course title:</b><br>Cognitive Laboratory |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |     |      |
| <b>Number of credits:</b> 2   |       |  |      |     |      |
| <b>Recommended semester:</b> 1., 3., 5.   |       |  |      |     |      |
| <b>Educational level:</b> I.  |       |  |      |     |      |
| <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><br>Total number of evaluated students: 38  |       |  |      |     |      |
| A   | B     | C  | D    | E   | FX   |
| 71,05   | 15,79 | 5,26   | 2,63 | 0,0 | 5,26 |
| <b>Lecturers:</b> doc. PhDr. Ján Rybár, PhD.  |       |  |      |     |      |
| <b>Last change:</b> 22.09.2017  |       |  |      |     |      |
| <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><br>FMFL.KDMFI/1-UXX-991/15                    | <b>Course title:</b><br>Colloquium Defence of BSc Thesis |
| <b>Number of credits:</b> 12                                    |  |
| <b>Educational level:</b> I.                                    |  |
| <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><br>FMFL.KDMFI/1-UFY-181/15  |      | <b>Course title:</b><br>Complementary Classes in Mechanics |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |      |  |      |     |      |
| <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><br>Total number of evaluated students: 55  |      |  |      |     |      |
| A   | B    | C  | D    | E   | FX   |
| 89,09   | 3,64 | 1,82   | 3,64 | 0,0 | 1,82 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, PhD.   |      |  |      |     |      |
| <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><br>FMFL.KDMFI/1-UFY-336/15  |     | <b>Course title:</b><br>Constitution of Texts and Tasks for Education in Physics |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |  |     |     |     |
| <b>Number of credits:</b> 2   |     |  |     |     |     |
| <b>Recommended semester:</b> 6.   |     |  |     |     |     |
| <b>Educational level:</b> I.  |     |  |     |     |     |
| <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><br>Total number of evaluated students: 0   |     |  |     |     |     |
| A   | B   | C  | D   | E   | FX  |
| 0,0   | 0,0 | 0,0  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Peter Demkanin, 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><br>FMFL.KDMFI/1-UXX-137/15   |       | <b>Course title:</b><br>Digital Technologies (1) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |      |      |
| <b>Number of credits:</b> 3  |       |  |      |      |      |
| <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>   |       |  |      |      |      |
| <b>Recommended literature:</b>   |       |  |      |      |      |
| <b>Languages necessary to complete the course:</b>   |       |  |      |      |      |
| <b>Notes:</b>  |       |  |      |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 132  |       |  |      |      |      |
| A  | B     | C  | D    | E    | FX   |
| 68,94  | 16,67 | 9,09   | 2,27 | 0,76 | 2,27 |
| <b>Lecturers:</b> RNDr. Monika Dillingerová, 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><br>FMFL.KDMFI/1-UXX-138/15   |       | <b>Course title:</b><br>Digital Technologies (2) |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |     |      |      |
| <b>Number of credits:</b> 3  |       |  |     |      |      |
| <b>Recommended semester:</b> 2.  |       |  |     |      |      |
| <b>Educational level:</b> I., II.  |       |  |     |      |      |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UXX-137/15 - Digital Technologies (1)   |       |  |     |      |      |
| <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><br>Total number of evaluated students: 89   |       |  |     |      |      |
| A  | B     | C  | D   | E    | FX   |
| 64,04  | 25,84 | 7,87   | 0,0 | 1,12 | 1,12 |
| <b>Lecturers:</b> Mgr. Karolína Miková, 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><br>FMFI.KDMFI/1-UXX-236/15   |       | <b>Course title:</b><br>Digital Technologies (3) |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |      |     |
| <b>Number of credits:</b> 3  |       |  |      |      |     |
| <b>Recommended semester:</b> 4.  |       |  |      |      |     |
| <b>Educational level:</b> I., II.  |       |  |      |      |     |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)   |       |  |      |      |     |
| <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><br>Total number of evaluated students: 98   |       |  |      |      |     |
| A  | B     | C  | D    | E    | FX  |
| 70,41  | 15,31 | 5,1  | 3,06 | 1,02 | 5,1 |
| <b>Lecturers:</b> PaedDr. Roman Hrušecký, PhD., PaedDr. Andrea Hrušecká, 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><br>FMFI.KDMFI+KAG/1-UXX-237/15   |       | <b>Course title:</b><br>Digital Technologies (4) |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |      |     |
| <b>Number of credits:</b> 3  |       |  |      |      |     |
| <b>Recommended semester:</b> 5.  |       |  |      |      |     |
| <b>Educational level:</b> I., II.  |       |  |      |      |     |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)   |       |  |      |      |     |
| <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><br>Total number of evaluated students: 66   |       |  |      |      |     |
| A  | B     | C  | D    | E    | FX  |
| 72,73  | 16,67 | 6,06   | 3,03 | 1,52 | 0,0 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD., RNDr. Martina Bátorová, PhD., PaedDr. Lukáš Bartošovič, 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><br>FMFI.KDMFI/1-UXX-341/15   |      | <b>Course title:</b><br>Digital Technologies (5) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |      |  |      |      |      |
| <b>Number of credits:</b> 3  |      |  |      |      |      |
| <b>Recommended semester:</b> 6.  |      |  |      |      |      |
| <b>Educational level:</b> I., II.  |      |  |      |      |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UXX-137/15 - Digital Technologies (1)   |      |  |      |      |      |
| <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><br>Total number of evaluated students: 31   |      |  |      |      |      |
| A  | B    | C  | D    | E    | FX   |
| 58,06  | 9,68 | 16,13  | 9,68 | 3,23 | 3,23 |
| <b>Lecturers:</b> RNDr. Monika Dillingerová, 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><br>FMFL.KDMFI/1-UXX-342/15  |     | <b>Course title:</b><br>Digital Technologies for Learners with Specific Needs |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |   |     |     |     |
| <b>Number of credits:</b> 3   |     |   |     |     |     |
| <b>Recommended semester:</b> 4.   |     |   |     |     |     |
| <b>Educational level:</b> I.  |     |   |     |     |     |
| <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><br>Total number of evaluated students: 50  |     |   |     |     |     |
| A   | B   | C   | D   | E   | FX  |
| 82,0  | 8,0 | 2,0   | 0,0 | 0,0 | 8,0 |
| <b>Lecturers:</b> doc. RNDr. Ľudmila Jašková, 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><br>FMFL.KTF+KDMFI/1-UFY-141/15   |       | <b>Course title:</b><br>Electromagnetism |      |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 3 / 2 <b>per level/semester:</b> 42 / 28<br><b>Form of the course:</b> on-site learning |       |  |      |       |      |
| <b>Number of credits:</b> 6  |       |  |      |       |      |
| <b>Recommended semester:</b> 2.  |       |  |      |       |      |
| <b>Educational level:</b> I.   |       |  |      |       |      |
| <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><br>Total number of evaluated students: 45   |       |  |      |       |      |
| A  | B     | C  | D    | E     | FX   |
| 22,22  | 11,11 | 22,22                                    | 20,0 | 22,22 | 2,22 |
| <b>Lecturers:</b> RNDr. Eduard Masár, PhD., doc. RNDr. Peter Demkanin, 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><br>FMFI.KJP/1-MXX-233/13  |       | <b>Course title:</b><br>English Conversation Course (1) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning   |       |   |      |      |      |
| <b>Number of credits:</b> 2   |       |   |      |      |      |
| <b>Recommended semester:</b> 3., 5.   |       |   |      |      |      |
| <b>Educational level:</b> I., II.   |       |   |      |      |      |
| <b>Prerequisites:</b>   |       |   |      |      |      |
| <b>Course requirements:</b><br>Scale of assessment (preliminary/final): 100/0   |       |   |      |      |      |
| <b>Learning outcomes:</b>   |       |   |      |      |      |
| <b>Class syllabus:</b><br>The content of the course is general English.<br>The language level is B2/C1 (Upper-Intermediate/Lower Advanced).   |       |   |      |      |      |
| <b>Recommended literature:</b><br>Selection of materials from Inside Out Upper-Intermediate, Cutting Edge Upper-Intermediate, New English File Upper-Intermediate, British and American newspapers and journals<br>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><br>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 Klátiková, 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><br>FMFL.KJP/1-MXX-234/13  |       | <b>Course title:</b><br>English Conversation Course (2) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning   |       |   |      |     |      |
| <b>Number of credits:</b> 2   |       |   |      |     |      |
| <b>Recommended semester:</b> 4., 6.   |       |   |      |     |      |
| <b>Educational level:</b> I., II.   |       |   |      |     |      |
| <b>Prerequisites:</b>   |       |   |      |     |      |
| <b>Course requirements:</b><br>Scale of assessment (preliminary/final): 100/0   |       |   |      |     |      |
| <b>Learning outcomes:</b>   |       |   |      |     |      |
| <b>Class syllabus:</b><br>The course is a follow-up to the Conversation Course in English (1). The content of the course is general English.<br>The language level is B2/C1 (Upper-Intermediate/Lower Advanced).  |       |   |      |     |      |
| <b>Recommended literature:</b><br>Selection of materials from Inside Out Upper-Intermediate, Cutting Edge Upper-Intermediate, New English File Upper-Intermediate, British and American newspapers and journals<br>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><br>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 Klátiková, 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><br>FMFI.KJP/1-MXX-131/00   |       | <b>Course title:</b><br>English Language (1) |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.   |       |  |       |      |      |
| <b>Prerequisites:</b>  |       |  |       |      |      |
| <b>Course requirements:</b>  |       |  |       |      |      |
| <b>Learning outcomes:</b>  |       |  |       |      |      |
| <b>Class syllabus:</b><br>On entering the first semester, students' knowledge of English is tested and they are divided into groups according to the results of the placement test. In the groups of pre-intermediate and intermediate students, fundamentals of technical English are taught. Advanced students take classes of technical English for their field of study: English for mathematics, for physics, for computer science, English for management and economic and financial mathematics.  |       |  |       |      |      |
| <b>Recommended literature:</b><br>Zemanová, A.: Anglický jazyk pre študentov FMFI UK. Kurz pre mierne pokročilých. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-2829-6<br>Erdélyi L., Gombárik P.: Anglický jazyk pre študentov FMFI UK. Aplikovaná matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3216-3<br>Gombárik P.: Anglický jazyk pre študentov FMFI UK. Matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3207-1<br>Klátiková E.: Anglický jazyk pre študentov FMFI UK. Informatika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3196-8<br>Alena Zemanová: Anglický jazyk pre študentov FMFI UK. Fyzika. Univerzita Komenského v Bratislave, Bratislava 2014, 92 strán, ISBN: 978-80-223-3477-8. |       |  |       |      |      |
| <b>Languages necessary to complete the course:</b>   |       |  |       |      |      |
| <b>Notes:</b>  |       |  |       |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 5497   |       |  |       |      |      |
| A  | B     | C  | D     | E    | FX   |
| 30,25  | 23,85 | 18,66  | 12,68 | 7,57 | 6,99 |
| <b>Lecturers:</b> PhDr. Elena Klátiková, PhDr. Alena Zemanová, Mgr. Ing. Jana Kočvarová, Mgr. Alexandra Maďarová, Mgr. Ľubomíra Kožehubová, Mgr. Eva Foltánová, Mgr. Aneta Barnes  |       |  |       |      |      |

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| <b>Last change:</b> 22.02.2019 |
| <b>Approved by:</b>            |

## COURSE DESCRIPTION

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|---|-------|--|-------|-------|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |       |       |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |       |       |      |
| <b>Course ID:</b><br>FMFI.KJP/1-MXX-132/00  |       | <b>Course title:</b><br>English Language (2) |       |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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.  |       |  |       |       |      |
| <b>Prerequisites:</b>   |       |  |       |       |      |
| <b>Course requirements:</b>   |       |  |       |       |      |
| <b>Learning outcomes:</b>   |       |  |       |       |      |
| <b>Class syllabus:</b><br>This is a continuation of the course English (1) designed for pre-intermediate students. Fundamental vocabulary is presented through selected topics in mathematics, physics and informatics. The lessons also contain revision of elementary grammar. Generally, it is a necessary preliminary to advanced programs. |       |  |       |       |      |
| <b>Recommended literature:</b><br>Zemanová, A.: Anglický jazyk pre študentov FMFI UK. Kurz pre mierne pokročilých. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-2829-6  |       |  |       |       |      |
| <b>Languages necessary to complete the course:</b>  |       |  |       |       |      |
| <b>Notes:</b>   |       |  |       |       |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 1550  |       |  |       |       |      |
| A   | B     | C  | D     | E     | FX   |
| 22,26   | 20,52 | 24,45  | 15,68 | 10,65 | 6,45 |
| <b>Lecturers:</b> PhDr. Elena Klátiková, PhDr. Alena Zemanová, Mgr. Ing. Jana Kočvarová, Mgr. Alexandra Maďarová, Mgr. Ľubomíra Kožehubová, Mgr. Eva Foltánová, 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><br>FMFI.KJP/1-MXX-231/00   |       | <b>Course title:</b><br>English Language (3) |       |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.   |       |  |       |       |      |
| <b>Prerequisites:</b>  |       |  |       |       |      |
| <b>Course requirements:</b>  |       |  |       |       |      |
| <b>Learning outcomes:</b>  |       |  |       |       |      |
| <b>Class syllabus:</b><br>The subject continues the program of English (2). Students take classes of special English for their field of study: English for mathematics, English for physics, English for computer science, English for management and economic and financial mathematics.<br>The subject requires advanced knowledge of general English.   |       |  |       |       |      |
| <b>Recommended literature:</b><br>Erdélyi L., Gombárik P.: Anglický jazyk pre študentov FMFI UK. Aplikovaná matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3216-3<br>Gombárik P.: Anglický jazyk pre študentov FMFI UK. Matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3207-1<br>Klátiková E.: Anglický jazyk pre študentov FMFI UK. Informatika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3196-8<br>Alena Zemanová: Anglický jazyk pre študentov FMFI UK. Fyzika. Univerzita Komenského v Bratislave, Bratislava 2014, 92 strán, ISBN: 978-80-223-3477-8. |       |  |       |       |      |
| <b>Languages necessary to complete the course:</b>   |       |  |       |       |      |
| <b>Notes:</b>  |       |  |       |       |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 1283   |       |  |       |       |      |
| A  | B     | C  | D     | E     | FX   |
| 16,29  | 19,33 | 22,92  | 18,08 | 17,69 | 5,69 |
| <b>Lecturers:</b> PhDr. Elena Klátiková, PhDr. Alena Zemanová, Mgr. Ing. Jana Kočvarová, Mgr. Alexandra Maďarová, Mgr. Ľubomíra Kožehubová, Mgr. Marián Mancovič, Mgr. Eva Foltánová   |       |  |       |       |      |
| <b>Last change:</b> 02.06.2015   |       |  |       |       |      |
| <b>Approved by:</b>  |       |  |       |       |      |

## COURSE DESCRIPTION

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|--|-------|--|-------|------|------|
| <b>University:</b> Comenius University in Bratislava   |       |  |       |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |       |  |       |      |      |
| <b>Course ID:</b><br>FMFI.KJP/1-MXX-232/10   |       | <b>Course title:</b><br>English Language (4) |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.   |       |  |       |      |      |
| <b>Prerequisites:</b>  |       |  |       |      |      |
| <b>Course requirements:</b>  |       |  |       |      |      |
| <b>Learning outcomes:</b>  |       |  |       |      |      |
| <b>Class syllabus:</b><br>Students take classes of special English for their field of study: English for mathematics, English for physics, English for computer science, English for management and economic and financial mathematics.  |       |  |       |      |      |
| <b>Recommended literature:</b><br>Erdélyi L., Gombárik P.: Anglický jazyk pre študentov FMFI UK. Aplikovaná matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3216-3<br>Gombárik P.: Anglický jazyk pre študentov FMFI UK. Matematika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3207-1<br>Klátiková E.: Anglický jazyk pre študentov FMFI UK. Informatika. Univerzita Komenského v Bratislave, Bratislava 2012, ISBN 978-80-223-3196-8<br>Alena Zemanová: Anglický jazyk pre študentov FMFI UK. Fyzika. Univerzita Komenského v Bratislave, Bratislava 2014, 92 strán, ISBN: 978-80-223-3477-8. |       |  |       |      |      |
| <b>Languages necessary to complete the course:</b>   |       |  |       |      |      |
| <b>Notes:</b>  |       |  |       |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 2833   |       |  |       |      |      |
| A  | B     | C  | D     | E    | FX   |
| 28,45  | 28,49 | 21,07  | 10,87 | 5,65 | 5,47 |
| <b>Lecturers:</b> Mgr. Ing. Jana Kočvarová, Mgr. Alexandra Maďarová, PhDr. Alena Zemanová, PhDr. Elena Klátiková, Mgr. Ľubomíra Kožehubová, Mgr. Marián Mancovič, Mgr. Eva Foltánová   |       |  |       |      |      |
| <b>Last change:</b> 02.06.2015   |       |  |       |      |      |
| <b>Approved by:</b>  |       |  |       |      |      |

## COURSE DESCRIPTION

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|--|------|---|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |      |   |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |      |   |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UFY-351/15   |      | <b>Course title:</b><br>Experimental Methods in Physics |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> laboratory practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |      |   |     |     |     |
| <b>Number of credits:</b> 2  |      |   |     |     |     |
| <b>Recommended semester:</b> 6.  |      |   |     |     |     |
| <b>Educational level:</b> I.   |      |   |     |     |     |
| <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><br>Total number of evaluated students: 26   |      |   |     |     |     |
| A  | B    | C   | D   | E   | FX  |
| 96,15  | 3,85 | 0,0   | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, 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><br>FMFL.KJP/1-MXX-141/00  |       | <b>Course title:</b><br>French Language (1) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>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><br>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><br>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><br>FMFI.KJP/1-MXX-142/00  |       | <b>Course title:</b><br>French Language (2) |       |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The subject continues the program of French language (1) and provides courses of essential and intermediate French language.  |       |   |       |     |     |
| <b>Recommended literature:</b><br>Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2<br>Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983<br>Kolektív Lingea, s.r.o.: Slovensko-francúzsky hovorník, Bratislava 2008 |       |   |       |     |     |
| <b>Languages necessary to complete the course:</b>  |       |   |       |     |     |
| <b>Notes:</b>   |       |   |       |     |     |
| <b>Past grade distribution</b><br>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><br>FMFL.KJP/1-MXX-241/00  |       | <b>Course title:</b><br>French Language (3) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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><br>The subject provides a course of intermediate French language, covering not only general, but also technical language.  |       |   |      |      |      |
| <b>Recommended literature:</b><br>Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2<br>Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983<br>Kolektív Lingea, s.r.o.: Slovensko-francúzsky hovorník, Bratislava 2008 |       |   |      |      |      |
| <b>Languages necessary to complete the course:</b>  |       |   |      |      |      |
| <b>Notes:</b>   |       |   |      |      |      |
| <b>Past grade distribution</b><br>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><br>FMFL.KJP/1-MXX-242/00   |      | <b>Course title:</b><br>French Language (4) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The subject provides a course of intermediate French covering not only general, but also technical French language.  |      |   |      |      |      |
| <b>Recommended literature:</b><br>Pravda, Pravdová: Učebnica francúzštiny pre samoukov a kurzy, SPN Bratislava 1999, ISBN 80-08-00431-2<br>Blažena Srncová: Učebnica francúzštiny pre študentov Matematicko-fyzikálnej fakulty , UK 1983<br>Kolektív Lingea, s.r.o.: Slovensko-francúzsky hovorník, Bratislava 2008<br>Zarha Lahmidi: 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><br>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>  |      |   |      |      |      |

## STATE EXAM DESCRIPTION

|   |  |
|---|--|
| <b>University:</b> Comenius University in Bratislava            |  |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics |  |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UFY-951/15                    | <b>Course title:</b><br>Fundamentals of Physics and Didactics of Physics |
| <b>Number of credits:</b> 2                                     |  |
| <b>Educational level:</b> I.                                    |  |
| <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><br>FMFI.KJP/1-MXX-151/00   |       | <b>Course title:</b><br>German Language (1) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>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><br>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><br>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><br>FMFI.KJP/1-MXX-152/00  |       | <b>Course title:</b><br>German Language (2) |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The course continues the program of German language (1). German language is taught at three levels: beginner, intermediate, advanced.                                       |       |   |       |      |      |
| <b>Recommended literature:</b><br>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><br>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><br>FMFI.KJP/1-MXX-251/00   |       | <b>Course title:</b><br>German Language (3) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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><br>The subject continues the program of German language (2). It provides a course of intermediate and advanced German language.   |       |   |      |      |      |
| <b>Recommended literature:</b><br>Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe.<br>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><br>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><br>FMFI.KJP/1-MXX-252/00  |       | <b>Course title:</b><br>German Language (4) |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The subject continues the program of German language (3). It provides a course of intermediate and advanced German language.  |       |   |       |      |      |
| <b>Recommended literature:</b><br>Vilášek, P.: Nemčina pre študentov FMFI, Na webovej stránke autora v elektronickej podobe.<br>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><br>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>   |       |   |       |      |      |

## STATE EXAM DESCRIPTION

|   |  |
|---|--|
| <b>University:</b> Comenius University in Bratislava            |  |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics |  |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-951/15                    | <b>Course title:</b><br>Informatics for Teachers |
| <b>Number of credits:</b> 2                                     |  |
| <b>Educational level:</b> I.                                    |  |
| <b>State exam syllabus:</b>                                     |  |
| <b>Last change:</b> 20.04.2021                                  |  |
| <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><br>FMFL.KAI/1-MXX-491/15  |       | <b>Course title:</b><br>Integrated Education of People with Disabilities |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |     |     |      |
| <b>Number of credits:</b> 3   |       |  |     |     |      |
| <b>Recommended semester:</b> 1., 3.   |       |  |     |     |      |
| <b>Educational level:</b> I.  |       |  |     |     |      |
| <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><br>Total number of evaluated students: 39  |       |  |     |     |      |
| A   | B     | C  | D   | E   | FX   |
| 87,18   | 10,26 | 0,0  | 0,0 | 0,0 | 2,56 |
| <b>Lecturers:</b> PaedDr. Elena Mendelová, 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><br>FMFI.KDMFI/1-UIN-246/10  |       | <b>Course title:</b><br>Interactive Programming and Visual Modelling |       |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 4 <b>per level/semester:</b> 56<br><b>Form of the course:</b> on-site learning |       |  |       |       |      |
| <b>Number of credits:</b> 4   |       |  |       |       |      |
| <b>Recommended semester:</b> 4.   |       |  |       |       |      |
| <b>Educational level:</b> I., II.   |       |  |       |       |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-241/15 - Programming (3)   |       |  |       |       |      |
| <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><br>Total number of evaluated students: 73  |       |  |       |       |      |
| A   | B     | C  | D     | E     | FX   |
| 36,99   | 15,07 | 8,22   | 15,07 | 15,07 | 9,59 |
| <b>Lecturers:</b> prof. RNDr. Ivan Kalaš, PhD., PaedDr. Andrea Hrušecká, 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><br>FMFL.KDMFI/1-UFY-220/15  |       | <b>Course title:</b><br>Introduction to Class Experiments |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / laboratory practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |     |      |      |
| <b>Number of credits:</b> 5   |       |   |     |      |      |
| <b>Recommended semester:</b> 4.   |       |   |     |      |      |
| <b>Educational level:</b> I., N   |       |   |     |      |      |
| <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><br>Total number of evaluated students: 46  |       |   |     |      |      |
| A   | B     | C   | D   | E    | FX   |
| 60,87   | 17,39 | 17,39   | 0,0 | 2,17 | 2,17 |
| <b>Lecturers:</b> doc. RNDr. Peter Demkanin, PhD., doc. Mgr. PaedDr. Viera Haverlíková, PhD.  |       |   |     |      |      |
| <b>Last change:</b> 06.02.2021  |       |   |     |      |      |
| <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><br>FMFI.KDMFI/1-UFY-310/15   |      | <b>Course title:</b><br>Introduction to Didactics of Physics |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |      |  |     |      |      |
| <b>Number of credits:</b> 5  |      |  |     |      |      |
| <b>Recommended semester:</b> 5.  |      |  |     |      |      |
| <b>Educational level:</b> I.   |      |  |     |      |      |
| <b>Prerequisites:</b> FMFI.KDMFI+KEF/1-UFY-132/15 - School Physics (1)   |      |  |     |      |      |
| <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><br>Total number of evaluated students: 32   |      |  |     |      |      |
| A  | B    | C  | D   | E    | FX   |
| 62,5   | 12,5 | 15,63  | 0,0 | 6,25 | 3,13 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD., Mgr. Simona Gorčáková  |      |  |     |      |      |
| <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><br>FMFI.KDMFI/1-UIN-355/10  |       | <b>Course title:</b><br>Introduction to Web Documents Formation |      |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |   |      |       |      |
| <b>Number of credits:</b> 3   |       |   |      |       |      |
| <b>Recommended semester:</b> 5.   |       |   |      |       |      |
| <b>Educational level:</b> I.  |       |   |      |       |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-241/15 - Programming (3)   |       |   |      |       |      |
| <b>Antirequisites:</b> FMFI.KDMFI/1-AIN-112/15  |       |   |      |       |      |
| <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><br>Total number of evaluated students: 66  |       |   |      |       |      |
| A   | B     | C   | D    | E     | FX   |
| 36,36   | 15,15 | 16,67   | 4,55 | 18,18 | 9,09 |
| <b>Lecturers:</b> doc. RNDr. Ľudmila Jašková, 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><br>FMFL.KAI/1-AIN-406/15  |       | <b>Course title:</b><br>Language and Cognition |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |       |      |      |
| <b>Number of credits:</b> 3   |       |  |       |      |      |
| <b>Recommended semester:</b> 2., 4., 6.   |       |  |       |      |      |
| <b>Educational level:</b> I.  |       |  |       |      |      |
| <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><br>Total number of evaluated students: 95  |       |  |       |      |      |
| A   | B     | C  | D     | E    | FX   |
| 28,42   | 27,37 | 20,0   | 14,74 | 3,16 | 6,32 |
| <b>Lecturers:</b> doc. PhDr. Ján Rybár, PhD.  |       |  |       |      |      |
| <b>Last change:</b> 22.09.2017  |       |  |       |      |      |
| <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><br>FMFL.KDMFI/1-UIN-345/00  |      | <b>Course title:</b><br>Linux |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning   |      |                               |      |      |     |
| <b>Number of credits:</b> 3   |      |                               |      |      |     |
| <b>Recommended semester:</b> 5.   |      |                               |      |      |     |
| <b>Educational level:</b> I.  |      |                               |      |      |     |
| <b>Prerequisites:</b>   |      |                               |      |      |     |
| <b>Course requirements:</b>   |      |                               |      |      |     |
| <b>Learning outcomes:</b>   |      |                               |      |      |     |
| <b>Class syllabus:</b><br>Introduction - Linux versus Windows, brief history, GNU GPL licence, OpenSource, base hierarchy of Linux (kernel, applications, drivers, ...)<br>Environment KDE, configurations - language, appearance, backgrounds, interesting applications, ...<br>File system organisation, concepts users, groups, access rights. Working in a window and working in a command interpreter.<br>Process management - what is process, process environment, process identification, process manipulation, environment variables, ...<br>TCP/IP - basic functionality, IP address, gateway, DNS, ...<br>X-server, X-client, philosophy, the variable DISPLAY, the command xhost<br>Applications: Gimp, Mozilla, OpenOffice, Xfig, wget, ...<br>Education applications: ktuberling, gcompris, ...<br>Installation of applications - compiling, running, ...<br>Linux like a server - tasks, requirements, properties, ... |      |                               |      |      |     |
| <b>Recommended literature:</b><br>On-line manual pages of Linux, KDE a Gnome.<br><a href="http://www.linux.org/">http://www.linux.org/</a> , <a href="http://edu.kde.org/">http://edu.kde.org/</a> , <a href="http://schoolforge.net">http://schoolforge.net</a> , <a href="http://www.linuxforkids.org/">http://www.linuxforkids.org/</a><br><a href="http://www.infovek.sk">http://www.infovek.sk</a>   |      |                               |      |      |     |
| <b>Languages necessary to complete the course:</b>  |      |                               |      |      |     |
| <b>Notes:</b>   |      |                               |      |      |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 41  |      |                               |      |      |     |
| A   | B    | C                             | D    | E    | FX  |
| 85,37   | 2,44 | 0,0                           | 9,76 | 2,44 | 0,0 |
| <b>Lecturers:</b> RNDr. Marek Nagy, 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><br>FMFL.KDMFI/1-UFY-120/15   |       | <b>Course title:</b><br>Mathematical Methods in Physics (1) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 1 <b>per level/semester:</b> 28 / 14<br><b>Form of the course:</b> on-site learning |       |   |      |      |      |
| <b>Number of credits:</b> 4  |       |   |      |      |      |
| <b>Recommended semester:</b> 1.  |       |   |      |      |      |
| <b>Educational level:</b> I.   |       |   |      |      |      |
| <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><br>Total number of evaluated students: 57   |       |   |      |      |      |
| A  | B     | C   | D    | E    | FX   |
| 45,61  | 21,05 | 12,28   | 5,26 | 7,02 | 8,77 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD.   |       |   |      |      |      |
| <b>Last change:</b> 23.09.2020   |       |   |      |      |      |
| <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><br>FMFL.KDMFI/1-UFY-121/15  |       | <b>Course title:</b><br>Mathematical Methods in Physics (2) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |   |      |     |      |
| <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><br>Total number of evaluated students: 49  |       |   |      |     |      |
| A   | B     | C   | D    | E   | FX   |
| 65,31   | 14,29 | 10,2  | 8,16 | 0,0 | 2,04 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD.  |       |   |      |     |      |
| <b>Last change:</b> 23.09.2020  |       |   |      |     |      |
| <b>Approved by:</b>   |       |   |      |     |      |

## COURSE DESCRIPTION

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|--|-------|---|------|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |       |   |      |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |       |   |      |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UFY-343/15   |       | <b>Course title:</b><br>Mathematical Methods of Theoretical Physics |      |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 <b>per level/semester:</b> 14<br><b>Form of the course:</b> on-site learning |       |   |      |     |     |
| <b>Number of credits:</b> 1  |       |   |      |     |     |
| <b>Recommended semester:</b> 6.  |       |   |      |     |     |
| <b>Educational level:</b> I.   |       |   |      |     |     |
| <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><br>Total number of evaluated students: 26   |       |   |      |     |     |
| A  | B     | C   | D    | E   | FX  |
| 61,54  | 23,08 | 7,69  | 7,69 | 0,0 | 0,0 |
| <b>Lecturers:</b> PaedDr. Lukáš Bartošovič, PhD.   |       |   |      |     |     |
| <b>Last change:</b> 29.11.2017   |       |   |      |     |     |
| <b>Approved by:</b>  |       |   |      |     |     |

## COURSE DESCRIPTION

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|---|-------|--|------|------|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |      |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |      |      |      |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-161/15  |       | <b>Course title:</b><br>Mathematics Classes for Teachers |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |  |      |      |      |
| <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><br>Total number of evaluated students: 29  |       |  |      |      |      |
| A   | B     | C  | D    | E    | FX   |
| 41,38   | 24,14 | 24,14  | 3,45 | 3,45 | 3,45 |
| <b>Lecturers:</b> PaedDr. Daniela Bezáková, PhD.  |       |  |      |      |      |
| <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><br>FMFL.KDMFI+KAI/1-<br>UIN-101/15   |       | <b>Course title:</b><br>Mathematics for Informatics Teachers (1) |      |       |       |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |  |      |       |       |
| <b>Number of credits:</b> 4  |       |  |      |       |       |
| <b>Recommended semester:</b> 1.  |       |  |      |       |       |
| <b>Educational level:</b> I.   |       |  |      |       |       |
| <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><br>Total number of evaluated students: 44   |       |  |      |       |       |
| A  | B     | C  | D    | E     | FX    |
| 25,0   | 20,45 | 20,45  | 9,09 | 11,36 | 13,64 |
| <b>Lecturers:</b> PaedDr. Daniela Bezáková, PhD., Ing. Ján Komara, 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><br>FMFL.KDMFI/1-UIN-102/15   |       | <b>Course title:</b><br>Mathematics for Informatics Teachers (2) |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |  |      |      |     |
| <b>Number of credits:</b> 4  |       |  |      |      |     |
| <b>Recommended semester:</b> 2.  |       |  |      |      |     |
| <b>Educational level:</b> I.   |       |  |      |      |     |
| <b>Prerequisites:</b> FMFL.KDMFI+KAI/1-UIN-101/15 - Mathematics for Informatics Teachers (1)   |       |  |      |      |     |
| <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><br>Total number of evaluated students: 37   |       |  |      |      |     |
| A  | B     | C  | D    | E    | FX  |
| 40,54  | 13,51 | 35,14  | 5,41 | 5,41 | 0,0 |
| <b>Lecturers:</b> PaedDr. Daniela Bezáková, 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><br>FMFL.KDMFI/1-UIN-201/15  |       | <b>Course title:</b><br>Mathematics for Informatics Teachers (3) |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |  |      |      |     |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UIN-102/15 - Mathematics for Informatics Teachers (2)  |       |  |      |      |     |
| <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><br>Total number of evaluated students: 31  |       |  |      |      |     |
| A   | B     | C  | D    | E    | FX  |
| 58,06   | 16,13 | 19,35  | 3,23 | 3,23 | 0,0 |
| <b>Lecturers:</b> RNDr. Michal Winczer, 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><br>FMFL.KDMFI/1-UFY-111/15   |       | <b>Course title:</b><br>Mechanics |      |      |       |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 3 / 2 <b>per level/semester:</b> 42 / 28<br><b>Form of the course:</b> on-site learning |       |                                   |      |      |       |
| <b>Number of credits:</b> 6  |       |                                   |      |      |       |
| <b>Recommended semester:</b> 1.  |       |                                   |      |      |       |
| <b>Educational level:</b> I.   |       |                                   |      |      |       |
| <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><br>Total number of evaluated students: 66   |       |                                   |      |      |       |
| A  | B     | C                                 | D    | E    | FX    |
| 27,27  | 16,67 | 19,7                              | 19,7 | 4,55 | 12,12 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, PhD., doc. RNDr. Peter Demkanin, 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><br>FMFI.KDMFI/1-UFY-342/15   |       | <b>Course title:</b><br>Molecular Physics and Thermodynamics |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture<br><b>Number of hours:</b><br><b>per week:</b> 3 <b>per level/semester:</b> 42<br><b>Form of the course:</b> on-site learning |       |  |     |     |     |
| <b>Number of credits:</b> 3  |       |  |     |     |     |
| <b>Recommended semester:</b> 6.  |       |  |     |     |     |
| <b>Educational level:</b> I.   |       |  |     |     |     |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UFY-111/15 - Mechanics  |       |  |     |     |     |
| <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><br>Total number of evaluated students: 26   |       |  |     |     |     |
| A  | B     | C  | D   | E   | FX  |
| 65,38  | 30,77 | 3,85   | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> PaedDr. Lukáš Bartošovič, PhD.   |       |  |     |     |     |
| <b>Last change:</b> 29.11.2017   |       |  |     |     |     |
| <b>Approved by:</b>  |       |  |     |     |     |

## COURSE DESCRIPTION

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|---|-----|------------------------------------|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava  |     |                                    |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |     |                                    |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-346/15  |     | <b>Course title:</b><br>Multimedia |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |                                    |     |     |     |
| <b>Number of credits:</b> 2   |     |                                    |     |     |     |
| <b>Recommended semester:</b> 5.   |     |                                    |     |     |     |
| <b>Educational level:</b> I.  |     |                                    |     |     |     |
| <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><br>Total number of evaluated students: 0   |     |                                    |     |     |     |
| A   | B   | C                                  | D   | E   | FX  |
| 0,0   | 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><br>FMFI.KAI/1-UXX-231/18  |       | <b>Course title:</b><br>Pedagogic Communication |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |   |       |      |      |
| <b>Number of credits:</b> 3   |       |   |       |      |      |
| <b>Recommended semester:</b> 4.   |       |   |       |      |      |
| <b>Educational level:</b> I., II., N  |       |   |       |      |      |
| <b>Prerequisites:</b>   |       |   |       |      |      |
| <b>Antirequisites:</b> FMFI-Prif.KDPP/1-UXX-231/10  |       |   |       |      |      |
| <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><br>Total number of evaluated students: 184   |       |   |       |      |      |
| A   | B     | C   | D     | E    | FX   |
| 44,02   | 21,74 | 15,22   | 11,41 | 2,72 | 4,89 |
| <b>Lecturers:</b> doc. RNDr. Martin Takáč, PhD.   |       |   |       |      |      |
| <b>Last change:</b> 07.05.2018  |       |   |       |      |      |
| <b>Approved by:</b>   |       |   |       |      |      |

## COURSE DESCRIPTION

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|--|------|--|-----|------|------|
| <b>University:</b> Comenius University in Bratislava   |      |  |     |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |      |  |     |      |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-110/00   |      | <b>Course title:</b><br>Physical Education and Sport (1) |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><b>Form of the course:</b> on-site learning   |      |  |     |      |      |
| <b>Number of credits:</b> 0  |      |  |     |      |      |
| <b>Recommended semester:</b> 1.  |      |  |     |      |      |
| <b>Educational level:</b> I.   |      |  |     |      |      |
| <b>Prerequisites:</b>  |      |  |     |      |      |
| <b>Course requirements:</b>  |      |  |     |      |      |
| <b>Learning outcomes:</b>  |      |  |     |      |      |
| <b>Class syllabus:</b><br>According to the particular sport: practicing of individual game skills in sports like basketball, volleyball, soccer, floorball. Training in the individual sports like swimming, trampoline jumping, rowing and canoeing, aerobic, bodybuiding, command of fundamental technique of sports discipline. To arrange development of coordination abilities, 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><br>Total number of evaluated students: 5336   |      |  |     |      |      |
| A  | B    | C  | D   | E    | FX   |
| 96,03  | 1,65 | 0,09   | 0,0 | 0,06 | 2,17 |
| <b>Lecturers:</b> Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, PaedDr. Dana Mašlejová, 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> 25.05.2016   |      |  |     |      |      |
| <b>Approved by:</b>  |      |  |     |      |      |

## COURSE DESCRIPTION

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|--|-----|--|------|------|------|
| <b>University:</b> Comenius University in Bratislava   |     |  |      |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |      |      |      |
| <b>Course ID:</b><br>FMFI.KTV/1-MXX-120/00   |     | <b>Course title:</b><br>Physical Education and Sport (2) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning  |     |  |      |      |      |
| <b>Number of credits:</b> 0  |     |  |      |      |      |
| <b>Recommended semester:</b> 2.  |     |  |      |      |      |
| <b>Educational level:</b> I.   |     |  |      |      |      |
| <b>Prerequisites:</b>  |     |  |      |      |      |
| <b>Course requirements:</b>  |     |  |      |      |      |
| <b>Learning outcomes:</b>  |     |  |      |      |      |
| <b>Class syllabus:</b><br>Practising offensive and defensive combinations and game at modified rules in collective games such as basketball, volleyball, soccer, floorball. Command of elements of higher difficulty in terms of the level of the activity abilities (crawl stroke, breast stroke, butterfly stroke, trampoline jump, aerobic compositions with steps, fitball, elastic gums, paddling on the running water. |     |  |      |      |      |
| <b>Recommended literature:</b>   |     |  |      |      |      |
| <b>Languages necessary to complete the course:</b>   |     |  |      |      |      |
| <b>Notes:</b>  |     |  |      |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 4404   |     |  |      |      |      |
| A  | B   | C  | D    | E    | FX   |
| 97,66  | 1,7 | 0,05   | 0,02 | 0,02 | 0,54 |
| <b>Lecturers:</b> Mgr. Tomáš Kuchár, PhD., Mgr. Ondrej Podkonický, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Jana Leginusová, 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

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|---|------|--|-----|-----|------|
| <b>University:</b> Comenius University in Bratislava  |      |  |     |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |     |     |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-210/00  |      | <b>Course title:</b><br>Physical Education and Sport (3) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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.  |      |  |     |     |      |
| <b>Prerequisites:</b>   |      |  |     |     |      |
| <b>Course requirements:</b>   |      |  |     |     |      |
| <b>Learning outcomes:</b>   |      |  |     |     |      |
| <b>Class syllabus:</b><br>To practise game combinations, tactical - mechanical elements in basketball, volleyball, soccer, floorball, ice hockey, badminton, competition rules in the sports specialization.                                |      |  |     |     |      |
| <b>Recommended literature:</b>  |      |  |     |     |      |
| <b>Languages necessary to complete the course:</b>  |      |  |     |     |      |
| <b>Notes:</b>   |      |  |     |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 2683  |      |  |     |     |      |
| A   | B    | C  | D   | E   | FX   |
| 98,66   | 0,52 | 0,07   | 0,0 | 0,0 | 0,75 |
| <b>Lecturers:</b> Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, PaedDr. Mikuláš Ortutay, Mgr. Ondrej Podkonický, Mgr. Martin Dovičák, PhD., Mgr. Júlia Raábová, PhD., Mgr. Branislav Nedbálek |      |  |     |     |      |
| <b>Last change:</b> 02.06.2015  |      |  |     |     |      |
| <b>Approved by:</b>   |      |  |     |     |      |

## COURSE DESCRIPTION

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|---|------|--|------|-----|------|
| <b>University:</b> Comenius University in Bratislava  |      |  |      |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |      |     |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-220/00  |      | <b>Course title:</b><br>Physical Education and Sport (4) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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.  |      |  |      |     |      |
| <b>Prerequisites:</b>   |      |  |      |     |      |
| <b>Course requirements:</b>   |      |  |      |     |      |
| <b>Learning outcomes:</b>   |      |  |      |     |      |
| <b>Class syllabus:</b><br>Preparation for sport championships of the Faculty in the chosen sport at modified rules. The selection of talented students into the teams of the University and Faculty leagues and other faculty sport events. |      |  |      |     |      |
| <b>Recommended literature:</b>  |      |  |      |     |      |
| <b>Languages necessary to complete the course:</b>  |      |  |      |     |      |
| <b>Notes:</b>   |      |  |      |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 2370  |      |  |      |     |      |
| A   | B    | C  | D    | E   | FX   |
| 99,16   | 0,17 | 0,04   | 0,04 | 0,0 | 0,59 |
| <b>Lecturers:</b> Mgr. Tomáš Kuchár, PhD., Mgr. Ladislav Mókus, Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ondrej Podkonický, 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

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|---|------|--|-----|-----|------|
| <b>University:</b> Comenius University in Bratislava  |      |  |     |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |     |     |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-310/00  |      | <b>Course title:</b><br>Physical Education and Sport (5) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><b>Form of the course:</b> on-site learning  |      |  |     |     |      |
| <b>Number of credits:</b> 2   |      |  |     |     |      |
| <b>Recommended semester:</b> 5.   |      |  |     |     |      |
| <b>Educational level:</b> I.  |      |  |     |     |      |
| <b>Prerequisites:</b>   |      |  |     |     |      |
| <b>Course requirements:</b>   |      |  |     |     |      |
| <b>Learning outcomes:</b>   |      |  |     |     |      |
| <b>Class syllabus:</b><br>Preparation and participation of individuals and teams in the system of university sport competitions and sport events.   |      |  |     |     |      |
| <b>Recommended literature:</b>  |      |  |     |     |      |
| <b>Languages necessary to complete the course:</b>  |      |  |     |     |      |
| <b>Notes:</b>   |      |  |     |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 1775  |      |  |     |     |      |
| A   | B    | C  | D   | E   | FX   |
| 99,04   | 0,39 | 0,11   | 0,0 | 0,0 | 0,45 |
| <b>Lecturers:</b> Mgr. Tomáš Kuchár, PhD., Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, 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>   |      |  |     |     |      |



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|---|------|--|-----|-----|------|
| <b>University:</b> Comenius University in Bratislava  |      |  |     |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |     |     |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-320/00  |      | <b>Course title:</b><br>Physical Education and Sport (6) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning                                       |      |  |     |     |      |
| <b>Number of credits:</b> 2   |      |  |     |     |      |
| <b>Recommended semester:</b> 6.   |      |  |     |     |      |
| <b>Educational level:</b> I.  |      |  |     |     |      |
| <b>Prerequisites:</b>   |      |  |     |     |      |
| <b>Course requirements:</b>   |      |  |     |     |      |
| <b>Learning outcomes:</b>   |      |  |     |     |      |
| <b>Class syllabus:</b><br>Using the communication in the physical education and sport and organizing the sport championships to achieve expressive motion of the sport and health in a valuable orientation the students.                   |      |  |     |     |      |
| <b>Recommended literature:</b>  |      |  |     |     |      |
| <b>Languages necessary to complete the course:</b>  |      |  |     |     |      |
| <b>Notes:</b>   |      |  |     |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 1534  |      |  |     |     |      |
| A   | B    | C  | D   | E   | FX   |
| 99,15   | 0,26 | 0,13   | 0,0 | 0,0 | 0,46 |
| <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

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| <b>University:</b> Comenius University in Bratislava   |     |   |     |      |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |   |     |      |     |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UFY-335/15   |     | <b>Course title:</b><br>Physics Around Us |     |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |   |     |      |     |
| <b>Number of credits:</b> 2  |     |   |     |      |     |
| <b>Recommended semester:</b> 5.  |     |   |     |      |     |
| <b>Educational level:</b> I.   |     |   |     |      |     |
| <b>Prerequisites:</b> FMFI.KDMFI+KEF/1-UFY-132/15 - School Physics (1)   |     |   |     |      |     |
| <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><br>Total number of evaluated students: 19   |     |   |     |      |     |
| A  | B   | C   | D   | E    | FX  |
| 94,74  | 0,0 | 0,0                                       | 0,0 | 5,26 | 0,0 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, PhD.  |     |   |     |      |     |
| <b>Last change:</b> 02.06.2015   |     |   |     |      |     |
| <b>Approved by:</b>  |     |   |     |      |     |

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|---|-----|---|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava  |     |   |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |     |   |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UFY-360/15  |     | <b>Course title:</b><br>Physics as the Component of Science Education |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |   |     |     |     |
| <b>Number of credits:</b> 2   |     |   |     |     |     |
| <b>Recommended semester:</b> 5.   |     |   |     |     |     |
| <b>Educational level:</b> I.  |     |   |     |     |     |
| <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><br>Total number of evaluated students: 40  |     |   |     |     |     |
| A   | B   | C   | D   | E   | FX  |
| 80,0  | 7,5 | 7,5   | 0,0 | 0,0 | 5,0 |
| <b>Lecturers:</b> doc. Mgr. PaedDr. Viera Haverlíková, PhD.   |     |   |     |     |     |
| <b>Last change:</b> 02.06.2015  |     |   |     |     |     |
| <b>Approved by:</b>   |     |   |     |     |     |

## COURSE DESCRIPTION

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|---|-------|--|------|-----|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |      |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |      |     |      |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-341/15  |       | <b>Course title:</b><br>Principles of Educational Software (1) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |  |      |     |      |
| <b>Number of credits:</b> 2   |       |  |      |     |      |
| <b>Recommended semester:</b> 5.   |       |  |      |     |      |
| <b>Educational level:</b> I., II., N  |       |  |      |     |      |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UIN-246/10 - Interactive Programming and Visual Modelling  |       |  |      |     |      |
| <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><br>Total number of evaluated students: 39  |       |  |      |     |      |
| A   | B     | C  | D    | E   | FX   |
| 48,72   | 38,46 | 7,69   | 2,56 | 0,0 | 2,56 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD.  |       |  |      |     |      |
| <b>Last change:</b> 02.06.2015  |       |  |      |     |      |
| <b>Approved by:</b>   |       |  |      |     |      |

## COURSE DESCRIPTION

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|---|------|--|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava  |      |  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-343/15  |      | <b>Course title:</b><br>Principles of Educational Software (2) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |      |  |     |     |     |
| <b>Number of credits:</b> 2   |      |  |     |     |     |
| <b>Recommended semester:</b> 6.   |      |  |     |     |     |
| <b>Educational level:</b> I., II.   |      |  |     |     |     |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UIN-341/15 - Principles of Educational Software (1)  |      |  |     |     |     |
| <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><br>Total number of evaluated students: 10  |      |  |     |     |     |
| A   | B    | C  | D   | E   | FX  |
| 60,0  | 40,0 | 0,0  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD.  |      |  |     |     |     |
| <b>Last change:</b> 02.06.2015  |      |  |     |     |     |
| <b>Approved by:</b>   |      |  |     |     |     |

## COURSE DESCRIPTION

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|--|-------|---|------|-------|-------|
| <b>University:</b> Comenius University in Bratislava   |       |   |      |       |       |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |       |   |      |       |       |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UIN-140/15   |       | <b>Course title:</b><br>Programming (1) |      |       |       |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |      |       |       |
| <b>Number of credits:</b> 6  |       |   |      |       |       |
| <b>Recommended semester:</b> 1.  |       |   |      |       |       |
| <b>Educational level:</b> I.   |       |   |      |       |       |
| <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><br>Total number of evaluated students: 49   |       |   |      |       |       |
| A  | B     | C                                       | D    | E     | FX    |
| 34,69  | 14,29 | 14,29                                   | 6,12 | 14,29 | 16,33 |
| <b>Lecturers:</b> doc. RNDr. Zuzana Kubincová, PhD.  |       |   |      |       |       |
| <b>Last change:</b> 02.06.2015   |       |   |      |       |       |
| <b>Approved by:</b>  |       |   |      |       |       |

## COURSE DESCRIPTION

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|--|-------|---|-------|-----|------|
| <b>University:</b> Comenius University in Bratislava   |       |   |       |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |       |   |       |     |      |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UIN-141/15   |       | <b>Course title:</b><br>Programming (2) |       |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |       |     |      |
| <b>Number of credits:</b> 6  |       |   |       |     |      |
| <b>Recommended semester:</b> 2.  |       |   |       |     |      |
| <b>Educational level:</b> I., II.  |       |   |       |     |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-140/15 - Programming (1)  |       |   |       |     |      |
| <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><br>Total number of evaluated students: 34   |       |   |       |     |      |
| A  | B     | C                                       | D     | E   | FX   |
| 55,88  | 11,76 | 17,65                                   | 11,76 | 0,0 | 2,94 |
| <b>Lecturers:</b> doc. RNDr. Zuzana Kubincová, 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><br>FMFI.KDMFI/1-UIN-241/15   |       | <b>Course title:</b><br>Programming (3) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |      |      |      |
| <b>Number of credits:</b> 4  |       |   |      |      |      |
| <b>Recommended semester:</b> 3.  |       |   |      |      |      |
| <b>Educational level:</b> I., II.  |       |   |      |      |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-141/15 - Programming (2)  |       |   |      |      |      |
| <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><br>Total number of evaluated students: 31   |       |   |      |      |      |
| A  | B     | C                                       | D    | E    | FX   |
| 45,16  | 22,58 | 12,9                                    | 6,45 | 6,45 | 6,45 |
| <b>Lecturers:</b> doc. RNDr. Zuzana Kubincová, 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><br>FMFI.KDMFI/1-UIN-327/15  |      | <b>Course title:</b><br>Programming Etudes (1) |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |      |  |      |      |     |
| <b>Number of credits:</b> 3   |      |  |      |      |     |
| <b>Recommended semester:</b> 5.   |      |  |      |      |     |
| <b>Educational level:</b> I., II.   |      |  |      |      |     |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-246/10 - Interactive Programming and Visual Modelling  |      |  |      |      |     |
| <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><br>Total number of evaluated students: 30  |      |  |      |      |     |
| A   | B    | C  | D    | E    | FX  |
| 76,67   | 3,33 | 6,67   | 6,67 | 6,67 | 0,0 |
| <b>Lecturers:</b> RNDr. Michal Winczer, 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><br>FMFI.KDMFI/1-UIN-325/15  |      | <b>Course title:</b><br>Programming Etudes (2) |       |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |      |  |       |     |     |
| <b>Number of credits:</b> 3   |      |  |       |     |     |
| <b>Recommended semester:</b> 6.   |      |  |       |     |     |
| <b>Educational level:</b> I., II.   |      |  |       |     |     |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-241/15 - Programming (3),FMFI.KDMFI/1-UIN-236/15 - Algorithms and Data Structures  |      |  |       |     |     |
| <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><br>Total number of evaluated students: 26  |      |  |       |     |     |
| A   | B    | C  | D     | E   | FX  |
| 84,62   | 3,85 | 0,0  | 11,54 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, 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><br>FMFL.KDMFI/1-UIN-350/15  |     | <b>Course title:</b><br>Programming in C# |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |   |     |     |     |
| <b>Number of credits:</b> 2   |     |   |     |     |     |
| <b>Recommended semester:</b> 5.   |     |   |     |     |     |
| <b>Educational level:</b> I., II.   |     |   |     |     |     |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UIN-241/15 - Programming (3)   |     |   |     |     |     |
| <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><br>Total number of evaluated students: 25  |     |   |     |     |     |
| A   | B   | C   | D   | E   | FX  |
| 80,0  | 4,0 | 4,0                                       | 4,0 | 0,0 | 8,0 |
| <b>Lecturers:</b> doc. RNDr. Ľubomír Salanci, PhD.  |     |   |     |     |     |
| <b>Last change:</b> 12.10.2016  |     |   |     |     |     |
| <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><br>FMFL.KDMFI/1-UIN-351/17  |       | <b>Course title:</b><br>Programming in JavaScript |     |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |   |     |      |     |
| <b>Number of credits:</b> 2   |       |   |     |      |     |
| <b>Recommended semester:</b> 6.   |       |   |     |      |     |
| <b>Educational level:</b> I., 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><br>Total number of evaluated students: 14  |       |   |     |      |     |
| A   | B     | C   | D   | E    | FX  |
| 71,43   | 14,29 | 7,14  | 0,0 | 7,14 | 0,0 |
| <b>Lecturers:</b> doc. PaedDr. Monika Tomcsányiová, PhD.  |       |   |     |      |     |
| <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><br>FMFL.KDMFI/1-UIN-349/15  |     | <b>Course title:</b><br>Programming of Application for WEB |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |  |       |      |      |
| <b>Number of credits:</b> 2   |     |  |       |      |      |
| <b>Recommended semester:</b> 6.   |     |  |       |      |      |
| <b>Educational level:</b> I., II.   |     |  |       |      |      |
| <b>Prerequisites:</b> FMFL.KDMFI/1-UIN-355/10 - Introduction to Web Documents Formation   |     |  |       |      |      |
| <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><br>Total number of evaluated students: 15  |     |  |       |      |      |
| A   | B   | C  | D     | E    | FX   |
| 46,67   | 0,0 | 6,67   | 33,33 | 6,67 | 6,67 |
| <b>Lecturers:</b> PaedDr. Roman Hrušecký, 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><br>FMFI.KDMFI/1-UIN-250/00   |      | <b>Course title:</b><br>Propedeutics of Informatics Education (1) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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., N   |      |   |      |      |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UXX-134/19 - Theory of Teaching and leboFMFI.KDMFI/1-UXX-134/18 - Theory of Teaching  |      |   |      |      |      |
| <b>Course requirements:</b>  |      |   |      |      |      |
| <b>Learning outcomes:</b>  |      |   |      |      |      |
| <b>Class syllabus:</b><br>Information around us. Different areas of the ICT utilisation (computer as a tool for processing texts, spreadsheets, tables, graphics...; computer as a tool for learning). Computer systems (hardware, operating systems...).  |      |   |      |      |      |
| <b>Recommended literature:</b><br>basic textbook on upper secondary Informatics<br>additional workbooks on upper secondary Informatics on spreadsheets, texts, Internet, graphics etc.<br>web page <a href="http://www.edi.fmph.uniba.sk">http://www.edi.fmph.uniba.sk</a><br>web page <a href="http://www.ucebnica.input.sk">http://www.ucebnica.input.sk</a> |      |   |      |      |      |
| <b>Languages necessary to complete the course:</b>   |      |   |      |      |      |
| <b>Notes:</b>  |      |   |      |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 161  |      |   |      |      |      |
| A  | B    | C   | D    | E    | FX   |
| 80,75  | 4,35 | 6,21  | 3,73 | 0,62 | 4,35 |
| <b>Lecturers:</b> Mgr. Karolína Miková, 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><br>FMFI.KDMFI/1-UIN-251/00   |      | <b>Course title:</b><br>Propedeutics of Informatics Education (2) |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week: 2 per level/semester: 28</b><br><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., N   |      |   |     |      |      |
| <b>Prerequisites:</b> FMFI.KDMFI/1-UIN-250/00 - Propedeutics of Informatics Education (1)  |      |   |     |      |      |
| <b>Course requirements:</b>  |      |   |     |      |      |
| <b>Learning outcomes:</b>  |      |   |     |      |      |
| <b>Class syllabus:</b><br>- Areas of the ICT application - computer as a tool for processing different types of data, computer as a tool for communication and collaboration<br>- Presenting information<br>- Information society, Knowledge economy<br>- ICT ethics<br>- Rules for occupational safety, risk factors of using ICT.                            |      |   |     |      |      |
| <b>Recommended literature:</b><br>basic textbook on upper secondary Informatics<br>additional workbooks on upper secondary Informatics on spreadsheets, texts, Internet, graphics etc.<br>web page <a href="http://www.edi.fmph.uniba.sk">http://www.edi.fmph.uniba.sk</a><br>web page <a href="http://www.ucebnica.input.sk">http://www.ucebnica.input.sk</a> |      |   |     |      |      |
| <b>Languages necessary to complete the course:</b>   |      |   |     |      |      |
| <b>Notes:</b>  |      |   |     |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 138  |      |   |     |      |      |
| A  | B    | C   | D   | E    | FX   |
| 78,99  | 6,52 | 0,72  | 2,9 | 3,62 | 7,25 |
| <b>Lecturers:</b> Mgr. Karolína Miková, 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><br>FMFI-PriF.KDPP/1-<br>UXX-141/15  |       | <b>Course title:</b><br>Psychology for Teachers (1) |       |       |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |       |       |     |
| <b>Number of credits:</b> 4   |       |   |       |       |     |
| <b>Recommended semester:</b> 1.   |       |   |       |       |     |
| <b>Educational level:</b> I., II., N  |       |   |       |       |     |
| <b>Prerequisites:</b>   |       |   |       |       |     |
| <b>Antirequisites:</b> FMFI-PriF.KDPP/1-UXX-131/10  |       |   |       |       |     |
| <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><br>Total number of evaluated students: 542   |       |   |       |       |     |
| A   | B     | C   | D     | E     | FX  |
| 18,63   | 14,02 | 24,54   | 19,93 | 18,08 | 4,8 |
| <b>Lecturers:</b> RNDr. Jana Ciceková, PhD., Mgr. Ľudmila Skačánová   |       |   |       |       |     |
| <b>Last change:</b> 09.09.2019  |       |   |       |       |     |
| <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><br>FMFI.KDMFI/1-UXX-142/15  |       | <b>Course title:</b><br>Psychology for Teachers (2) |       |       |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |   |       |       |      |
| <b>Number of credits:</b> 4   |       |   |       |       |      |
| <b>Recommended semester:</b> 2.   |       |   |       |       |      |
| <b>Educational level:</b> I., II., N  |       |   |       |       |      |
| <b>Prerequisites:</b> FMFI-PriF.KDPP/1-UXX-141/15 - Psychology for Teachers (1)   |       |   |       |       |      |
| <b>Antirequisites:</b> FMFI-PriF.KDPP/1-UXX-135/10  |       |   |       |       |      |
| <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><br>Total number of evaluated students: 482   |       |   |       |       |      |
| A   | B     | C   | D     | E     | FX   |
| 24,07   | 16,18 | 19,09   | 23,44 | 14,11 | 3,11 |
| <b>Lecturers:</b> Mgr. Ľudmila Skačanová, RNDr. Jana Ciceková, 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><br>FMFL.KTV/1-UXX-340/00  |     | <b>Course title:</b><br>Recreation Sports in Dially Routine of Pupils and Students |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning   |     |  |     |     |     |
| <b>Number of credits:</b> 2   |     |  |     |     |     |
| <b>Recommended semester:</b> 5.   |     |  |     |     |     |
| <b>Educational level:</b> I.  |     |  |     |     |     |
| <b>Prerequisites:</b>   |     |  |     |     |     |
| <b>Course requirements:</b>   |     |  |     |     |     |
| <b>Learning outcomes:</b>   |     |  |     |     |     |
| <b>Class syllabus:</b><br>To optimize the daily working programme of the students, the programmes of the sport recreational activities and time-off the students. The sport and health in a value orientation of the students. Using developed elemens in an education physical activity and sport preparation.<br>The programmes of the sport recreational activities as a basic precondition of health strengthening, acquirement of physical capability, fitness, regaining of working energy and readiness of body to confront stress situations and dangerous factors as a basic precondition of health strengthening, acquirement of physical capability, fitness, regaining of working energy and readiness of body to confront stress situations and dangerous factors. |     |  |     |     |     |
| <b>Recommended literature:</b>  |     |  |     |     |     |
| <b>Languages necessary to complete the course:</b>  |     |  |     |     |     |
| <b>Notes:</b>   |     |  |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 44  |     |  |     |     |     |
| A   | B   | C  | D   | E   | FX  |
| 100,0   | 0,0 | 0,0  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> Mgr. Tomáš Kuchár, 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><br>FMFL.KDMFI/1-UIN-354/00   |      | <b>Course title:</b><br>Robotics in Education (1) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning  |      |   |     |     |      |
| <b>Number of credits:</b> 3  |      |   |     |     |      |
| <b>Recommended semester:</b> 6.  |      |   |     |     |      |
| <b>Educational level:</b> I.   |      |   |     |     |      |
| <b>Prerequisites:</b>  |      |   |     |     |      |
| <b>Course requirements:</b>  |      |   |     |     |      |
| <b>Learning outcomes:</b>  |      |   |     |     |      |
| <b>Class syllabus:</b><br>My first robot.<br>Programming in Lego Mindstorms Education.<br>- basics - robot movement, sensor data logging, input reactions,<br>- advanced programming - variables, parallel processes.<br>Data logging, measurement, experiments.<br>Simulations and models.<br>Robotics competition - design, construction, programming and documentation of robot for a given task.<br>Robotics exhibition - design, construction and programming of robot for a given theme. |      |   |     |     |      |
| <b>Recommended literature:</b><br>K možnostiam RoboLabu. P. Cvik. DidInfo 2002, KIFPV UMB Banská Bystrica<br>RoboLab - mikropočítače v škole. P. Cvik. Zborník Infovek 2001, Stará Turá, 2001.<br>Introduction to Robotics. Carnegie Mellon University, Robotics Academy, 2006.<br>Roboadventures: the Good Life. Lego Mindstorms Educational Division, 2002.  |      |   |     |     |      |
| <b>Languages necessary to complete the course:</b>   |      |   |     |     |      |
| <b>Notes:</b>  |      |   |     |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 163  |      |   |     |     |      |
| A  | B    | C   | D   | E   | FX   |
| 95,71  | 1,84 | 0,0   | 0,0 | 0,0 | 2,45 |
| <b>Lecturers:</b> Mgr. Karolína Miková, 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><br>FMFL.KJP/1-MXX-161/00  |       | <b>Course title:</b><br>Russian Language (1) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The subject provides a course in Russian language for beginners.  |       |  |      |     |      |
| <b>Recommended literature:</b><br>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><br>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 Klátiková   |       |  |      |     |      |
| <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><br>FMFL.KJP/1-MXX-162/00  |       | <b>Course title:</b><br>Russian Language (2) |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>The subject continues the program of Russian language (1) and provides a course of Russian for beginners.   |       |  |      |      |      |
| <b>Recommended literature:</b><br>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><br>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 Klátiková   |       |  |      |      |      |
| <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><br>FMFL.KJP/1-MXX-261/00  |       | <b>Course title:</b><br>Russian Language (3) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>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><br>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><br>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 Klátiková   |       |  |      |     |      |
| <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><br>FMFL.KJP/1-MXX-262/00  |       | <b>Course title:</b><br>Russian Language (4) |      |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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><br>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><br>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><br>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 Klátiková   |       |  |      |     |     |
| <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><br>FMFI.KDMFI/1-UFY-320/15   |       | <b>Course title:</b><br>School Experiments in Physics |      |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> laboratory practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |       |   |      |     |     |
| <b>Number of credits:</b> 3  |       |   |      |     |     |
| <b>Recommended semester:</b> 5.  |       |   |      |     |     |
| <b>Educational level:</b> I., N  |       |   |      |     |     |
| <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><br>Total number of evaluated students: 37   |       |   |      |     |     |
| A  | B     | C   | D    | E   | FX  |
| 48,65  | 13,51 | 27,03   | 5,41 | 2,7 | 2,7 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, PhD., PaedDr. Jakub Čevajka, Mgr. Simona Gorčáková   |       |   |      |     |     |
| <b>Last change:</b> 04.12.2019   |       |   |      |     |     |
| <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><br>FMFI.KDMFI/1-UXX-331/18  |       | <b>Course title:</b><br>School Management |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 / 2 <b>per level/semester:</b> 14 / 28<br><b>Form of the course:</b> on-site learning |       |   |      |     |      |
| <b>Number of credits:</b> 4   |       |   |      |     |      |
| <b>Recommended semester:</b> 6.   |       |   |      |     |      |
| <b>Educational level:</b> I., II., N  |       |   |      |     |      |
| <b>Prerequisites:</b>   |       |   |      |     |      |
| <b>Antirequisites:</b> FMFI-Prif.KDPP/1-UXX-331/15  |       |   |      |     |      |
| <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><br>Total number of evaluated students: 93  |       |   |      |     |      |
| A   | B     | C   | D    | E   | FX   |
| 55,91   | 16,13 | 21,51                                     | 3,23 | 0,0 | 3,23 |
| <b>Lecturers:</b> Mgr. Karolína Miková, PhD.  |       |   |      |     |      |
| <b>Last change:</b> 10.01.2020  |       |   |      |     |      |
| <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><br>FMFL.KDMFI+KEF/1-UFY-132/15   |      | <b>Course title:</b><br>School Physics (1) |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / course<br><b>Number of hours:</b><br><b>per week:</b> 1 / 2 <b>per level/semester:</b> 14 / 28<br><b>Form of the course:</b> on-site learning |      |  |      |     |      |
| <b>Number of credits:</b> 4  |      |  |      |     |      |
| <b>Recommended semester:</b> 2.  |      |  |      |     |      |
| <b>Educational level:</b> I.   |      |  |      |     |      |
| <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><br>Total number of evaluated students: 57   |      |  |      |     |      |
| A  | B    | C  | D    | E   | FX   |
| 85,96  | 3,51 | 5,26                                       | 1,75 | 0,0 | 3,51 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, PhD., doc. RNDr. František Kundracik, 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><br>FMFI.KDMFI/1-UFY-232/15   |       | <b>Course title:</b><br>School Physics (2) |       |     |       |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28<br><b>Form of the course:</b> on-site learning |       |  |       |     |       |
| <b>Number of credits:</b> 5  |       |  |       |     |       |
| <b>Recommended semester:</b> 3.  |       |  |       |     |       |
| <b>Educational level:</b> I.   |       |  |       |     |       |
| <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><br>Total number of evaluated students: 46   |       |  |       |     |       |
| A  | B     | C  | D     | E   | FX    |
| 34,78  | 23,91 | 15,22                                      | 15,22 | 0,0 | 10,87 |
| <b>Lecturers:</b> doc. Mgr. PaedDr. Viera Haverlíková, PhD., PaedDr. Lukáš Bartošovič, 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><br>FMFL.KAI/2-IKVa-192/19  | <b>Course title:</b><br>Science, Technology and Humanity: Opportunities and Risks |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 3 <b>per level/semester:</b> 42<br><b>Form of the course:</b> on-site learning   |   |
| <b>Number of credits:</b> 5  |   |
| <b>Recommended semester:</b> 2.  |   |
| <b>Educational level:</b> I., II.  |   |
| <b>Prerequisites:</b>  |   |
| <b>Course requirements:</b><br>Semestral evaluation: active participation<br>Final evaluation: essay<br>Weight of the final evaluation: 60%<br>To achieve an A, 90% is needed, for B at least 80%, for C 70%, for D, 60% and for an E, at least 50% of overall assessment.   |   |
| <b>Learning outcomes:</b><br>The students will gain awareness of the contemporary and potential future challenges posed by scientific and technological innovations and their impact on human behaviour, culture and society.  |   |
| <b>Class syllabus:</b><br>Big data: privacy, politics and power,<br>Internet of things, its usefulness and threats,<br>Assistant AI and its place in future society,<br>Job market and inequality,<br>Enhancements and human rights and the right to change self and others,<br>Initiatives for responsible research,<br>Artificial minds,<br>Hybridization between species and between AI and organic minds,<br>Future of minds and trans-humanism,<br>Artificial emotional intelligence,<br>An after human era.                              |   |
| <b>Recommended literature:</b><br>- S. Russell: Human compatible. Artificial intelligence and the problem of control. Viking, 2019.<br>- J. Havens: Heartificial intelligence. Embracing our humanity to maximize machines. Penguin, 2016.<br>- P. Boddington: Towards a code of ethics for artificial intelligence. Springer, 2017.<br>- M. Shanahan: The technological singularity. MIT Press, 2015.<br>- C. MacKellar, C.: Cyborg Mind: What Brain–Computer and Mind–Cyberspace Interfaces Mean for Cyberneuroethics. Berghahn Books, 2019. |   |

- G. Bel, J. Gemmell: Total Recall, How the e-Memory Revolution will change everything. Dutton, 2009.
- S. Zuboff: The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. PublicAffairs, 2019.
- C. O'Neil: Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy. Crown Publishers, 2016.
- M. Tegmark: Life 3.0. Allen Lane, 2017.

**Languages necessary to complete the course:**

English

**Notes:**

**Past grade distribution**

Total number of evaluated students: 25

| A    | B    | C   | D   | E   | FX  |
|------|------|-----|-----|-----|-----|
| 72,0 | 20,0 | 0,0 | 4,0 | 4,0 | 0,0 |

**Lecturers:** doc. RNDr. Martin Takáč, PhD., PhDr. Ing. Tomáš Gál, PhD.

**Last change:** 28.02.2020

**Approved by:**

## COURSE DESCRIPTION

|   |      |  |     |      |      |
|---|------|--|-----|------|------|
| <b>University:</b> Comenius University in Bratislava  |      |  |     |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |  |     |      |      |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UIN-230/00  |      | <b>Course title:</b><br>Seminar in Mathematical Structures |     |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |      |  |     |      |      |
| <b>Prerequisites:</b>   |      |  |     |      |      |
| <b>Course requirements:</b>   |      |  |     |      |      |
| <b>Learning outcomes:</b>   |      |  |     |      |      |
| <b>Class syllabus:</b><br>Every week we focus on one topic. Either in form of discussion, unplugged activity or exploration a program / computer environment which visualises, models or interactively mediates certain attractive topic if the theoretical computer science and discrete mathematics, like building logical circuits, exploring graph algorithms, exploring formal languages and automata. Students will look for rules, grammars and languages. They will construct translators, L-systems, fractals etc. Each interactive environment used by the students will allow to experiment with various inputs, rules, behaviours etc. By running constructing and/or modifying different visualisations students will gain first tangible experience with several key topics of the theoretical computer science which they will later study in a more formal way. |      |  |     |      |      |
| <b>Recommended literature:</b><br>web page the reader,<br>library of visual interactive programs  |      |  |     |      |      |
| <b>Languages necessary to complete the course:</b>  |      |  |     |      |      |
| <b>Notes:</b>   |      |  |     |      |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 113   |      |  |     |      |      |
| A   | B    | C  | D   | E    | FX   |
| 91,15   | 2,65 | 0,0  | 0,0 | 0,88 | 5,31 |
| <b>Lecturers:</b> RNDr. Michal Winczer, PhD.  |      |  |     |      |      |
| <b>Last change:</b> 16.05.2017  |      |  |     |      |      |
| <b>Approved by:</b>   |      |  |     |      |      |

## COURSE DESCRIPTION

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|--|------|---|------|------|-----|
| <b>University:</b> Comenius University in Bratislava   |      |   |      |      |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |      |   |      |      |     |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UXX-332/10   |      | <b>Course title:</b><br>Social Aspects of Informatics |      |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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>Antirequisites:</b> FMFI.KDMFI/1-INF-175/00   |      |   |      |      |     |
| <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><br>Total number of evaluated students: 99   |      |   |      |      |     |
| A  | B    | C   | D    | E    | FX  |
| 94,95  | 3,03 | 0,0   | 1,01 | 1,01 | 0,0 |
| <b>Lecturers:</b> RNDr. Michal Winczer, PhD.   |      |   |      |      |     |
| <b>Last change:</b> 02.06.2015   |      |   |      |      |     |
| <b>Approved by:</b>  |      |   |      |      |     |

## COURSE DESCRIPTION

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|--|-----|--|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |     |     |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-115/15   |     | <b>Course title:</b><br>Sports in Nature (1) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week:   per level/semester:</b><br><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.   |     |  |     |     |     |
| <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><br>Total number of evaluated students: 221  |     |  |     |     |     |
| A  | B   | C  | D   | E   | FX  |
| 99,55  | 0,0 | 0,45   | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Branislav Nedbálek |     |  |     |     |     |
| <b>Last change:</b> 25.05.2016   |     |  |     |     |     |
| <b>Approved by:</b>  |     |  |     |     |     |



## COURSE DESCRIPTION

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|--|-----|--|-----|-----|------|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |     |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |     |      |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-215/15   |     | <b>Course title:</b><br>Sports in Nature (2) |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><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.   |     |  |     |     |      |
| <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><br>Total number of evaluated students: 153  |     |  |     |     |      |
| A  | B   | C  | D   | E   | FX   |
| 99,35  | 0,0 | 0,0  | 0,0 | 0,0 | 0,65 |
| <b>Lecturers:</b> Mgr. Martin Dovičák, PhD., Mgr. Tomáš Kuchár, PhD., Mgr. Jana Leginusová, PaedDr. Dana Mašlejová, Mgr. Ladislav Mókus, Mgr. Ondrej Podkonický, Mgr. Branislav Nedbálek |     |  |     |     |      |
| <b>Last change:</b> 25.05.2016   |     |  |     |     |      |
| <b>Approved by:</b>  |     |  |     |     |      |

## COURSE DESCRIPTION

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|--|-----|--|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |     |     |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-216/18   |     | <b>Course title:</b><br>Sports in Nature (3) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning |     |  |     |     |     |
| <b>Number of credits:</b> 1  |     |  |     |     |     |
| <b>Recommended semester:</b> 3.  |     |  |     |     |     |
| <b>Educational level:</b> I.   |     |  |     |     |     |
| <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><br>Total number of evaluated students: 19   |     |  |     |     |     |
| 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

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|--|-----|--|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |  |     |     |     |
| <b>Course ID:</b><br>FMFL.KTV/1-MXX-217/18   |     | <b>Course title:</b><br>Sports in Nature (4) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning |     |  |     |     |     |
| <b>Number of credits:</b> 1  |     |  |     |     |     |
| <b>Recommended semester:</b> 4.  |     |  |     |     |     |
| <b>Educational level:</b> I.   |     |  |     |     |     |
| <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><br>Total number of evaluated students: 5  |     |  |     |     |     |
| 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

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|---|-------|--|-----|------|-----|
| <b>University:</b> Comenius University in Bratislava  |       |  |     |      |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |     |      |     |
| <b>Course ID:</b><br>FMFL.KJP/1-MXX-133/18  |       | <b>Course title:</b><br>Supplementary English Course (1) |     |      |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |  |     |      |     |
| <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><br>Total number of evaluated students: 17  |       |  |     |      |     |
| A   | B     | C  | D   | E    | FX  |
| 52,94   | 35,29 | 5,88   | 0,0 | 5,88 | 0,0 |
| <b>Lecturers:</b> Mgr. Ing. Jana Kočvarová  |       |  |     |      |     |
| <b>Last change:</b>   |       |  |     |      |     |
| <b>Approved by:</b>   |       |  |     |      |     |

## COURSE DESCRIPTION

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|---|-------|--|-------|------|------|
| <b>University:</b> Comenius University in Bratislava  |       |  |       |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |       |  |       |      |      |
| <b>Course ID:</b><br>FMFL.KJP/1-MXX-134/18  |       | <b>Course title:</b><br>Supplementary English Course (2) |       |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> practicals<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><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.  |       |  |       |      |      |
| <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><br>Total number of evaluated students: 22  |       |  |       |      |      |
| A   | B     | C  | D     | E    | FX   |
| 54,55   | 18,18 | 0,0  | 13,64 | 4,55 | 9,09 |
| <b>Lecturers:</b> Mgr. Ing. Jana Kočvarová  |       |  |       |      |      |
| <b>Last change:</b>   |       |  |       |      |      |
| <b>Approved by:</b>   |       |  |       |      |      |

## COURSE DESCRIPTION

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|--|-----|---|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava   |     |   |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics  |     |   |     |     |     |
| <b>Course ID:</b><br>FMFL.KDMFI/1-UXX-831/15   |     | <b>Course title:</b><br>Teaching Practice in Computer Science (1) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> practice<br><b>Number of hours:</b><br><b>per week:</b> <b>per level/semester:</b> 30s<br><b>Form of the course:</b> on-site learning |     |   |     |     |     |
| <b>Number of credits:</b> 2  |     |   |     |     |     |
| <b>Recommended semester:</b> 6.  |     |   |     |     |     |
| <b>Educational level:</b> I.   |     |   |     |     |     |
| <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><br>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> RNDr. Michal Winczer, PhD.   |     |   |     |     |     |
| <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><br>FMFL.KDMFI/1-UXX-821/15   |     | <b>Course title:</b><br>Teaching Practice in Physics (1) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> practice<br><b>Number of hours:</b><br><b>per week:</b> <b>per level/semester:</b> 30s<br><b>Form of the course:</b> on-site learning |     |  |     |     |     |
| <b>Number of credits:</b> 2  |     |  |     |     |     |
| <b>Recommended semester:</b> 6.  |     |  |     |     |     |
| <b>Educational level:</b> I.   |     |  |     |     |     |
| <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><br>Total number of evaluated students: 26   |     |  |     |     |     |
| A  | B   | C  | D   | E   | FX  |
| 100,0  | 0,0 | 0,0  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> PaedDr. Peter Horváth, PhD.  |     |  |     |     |     |
| <b>Last change:</b>  |     |  |     |     |     |
| <b>Approved by:</b>  |     |  |     |     |     |

## COURSE DESCRIPTION

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|---|------|---|------|------|------|
| <b>University:</b> Comenius University in Bratislava  |      |   |      |      |      |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics   |      |   |      |      |      |
| <b>Course ID:</b><br>FMFI.KDMFI/1-UXX-132/18  |      | <b>Course title:</b><br>Theoretical Fundaments of Education |      |      |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / seminar<br><b>Number of hours:</b><br><b>per week:</b> 1 / 1 <b>per level/semester:</b> 14 / 14<br><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>Antirequisites:</b> FMFI-Prif.KDPP/1-UXX-132/10  |      |   |      |      |      |
| <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><br>Total number of evaluated students: 196   |      |   |      |      |      |
| A   | B    | C   | D    | E    | FX   |
| 32,65   | 35,2 | 19,9  | 8,16 | 1,53 | 2,55 |
| <b>Lecturers:</b> Mgr. Ľudmila Skačánová  |      |   |      |      |      |
| <b>Last change:</b> 05.09.2019  |      |   |      |      |      |
| <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><br>FMFI.KDMFI/1-UXX-134/19  |       | <b>Course title:</b><br>Theory of Teaching |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> course<br><b>Number of hours:</b><br><b>per week:</b> 3 <b>per level/semester:</b> 42<br><b>Form of the course:</b> on-site learning |       |  |      |     |      |
| <b>Number of credits:</b> 4   |       |  |      |     |      |
| <b>Recommended semester:</b> 3.   |       |  |      |     |      |
| <b>Educational level:</b> I., II., N  |       |  |      |     |      |
| <b>Prerequisites:</b>   |       |  |      |     |      |
| <b>Antirequisites:</b> FMFI.KDMFI/1-UXX-134/18  |       |  |      |     |      |
| <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><br>Total number of evaluated students: 93  |       |  |      |     |      |
| A   | B     | C  | D    | E   | FX   |
| 46,24   | 25,81 | 8,6  | 9,68 | 4,3 | 5,38 |
| <b>Lecturers:</b> Mgr. Karolína Miková, PhD.  |       |  |      |     |      |
| <b>Last change:</b> 01.09.2019  |       |  |      |     |      |
| <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><br>FMFL.KDMFI/1-UFY-265/15   |     | <b>Course title:</b><br>Unconventional Physics |     |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> seminar<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |  |     |     |      |
| <b>Number of credits:</b> 2  |     |  |     |     |      |
| <b>Recommended semester:</b> 6.  |     |  |     |     |      |
| <b>Educational level:</b> I.   |     |  |     |     |      |
| <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><br>Total number of evaluated students: 36   |     |  |     |     |      |
| A  | B   | C  | D   | E   | FX   |
| 97,22  | 0,0 | 0,0  | 0,0 | 0,0 | 2,78 |
| <b>Lecturers:</b> doc. PaedDr. Klára Velmovská, 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><br>FMFI.KEF/1-UFY-210/00  |       | <b>Course title:</b><br>Waves and Optics |      |     |      |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / practicals<br><b>Number of hours:</b><br><b>per week:</b> 3 <b>per level/semester:</b> 42 / 13s<br><b>Form of the course:</b> on-site learning   |       |  |      |     |      |
| <b>Number of credits:</b> 5   |       |  |      |     |      |
| <b>Recommended semester:</b> 3.   |       |  |      |     |      |
| <b>Educational level:</b> I.  |       |  |      |     |      |
| <b>Prerequisites:</b>   |       |  |      |     |      |
| <b>Course requirements:</b>   |       |  |      |     |      |
| <b>Learning outcomes:</b>   |       |  |      |     |      |
| <b>Class syllabus:</b><br>Oscillations and oscillating systems (modes, resonators, oscillations and waves, Fourier analysis of oscillations). Waves (harmonic waves, complex notation, wave superposition, wave polarization, Doppler effect, wave diffraction, waves in physics, and waves at boundaries). Wave optics (light interference, light diffraction, holography, light dispersion in dielectrics, dispersion, polarization by reflection and refraction, spreading of light in anisotropic conditions). Geometrical optics and basics of optical projection. Photo metrics. Contemporary problems in optics. |       |  |      |     |      |
| <b>Recommended literature:</b><br>Main I. G.: Kmity a vlny ve fyzice, Academia Praha 1990<br>Feynman R. P., Leighton R. B., Sands M.: Feynmanove prednášky z fyziky 2, Alfa Bratislava 1982<br>Z. Chorvátová: Kmity a vlny, skriptum MFF UK, Bratislava 1994<br>Štrba A., Mesaroš V., Senderáková D.: Optika s príkladmi I, skriptum MFF UK, Bratislava 1996<br>Hecht E.: Optics, Addison-Wenslez Publishing Company, Inc. 1987   |       |  |      |     |      |
| <b>Languages necessary to complete the course:</b>  |       |  |      |     |      |
| <b>Notes:</b>   |       |  |      |     |      |
| <b>Past grade distribution</b><br>Total number of evaluated students: 93  |       |  |      |     |      |
| A   | B     | C  | D    | E   | FX   |
| 24,73   | 20,43 | 32,26                                    | 12,9 | 8,6 | 1,08 |
| <b>Lecturers:</b> prof. RNDr. Pavel Veis, CSc.  |       |  |      |     |      |
| <b>Last change:</b> 02.06.2015  |       |  |      |     |      |
| <b>Approved by:</b>   |       |  |      |     |      |