

## Course descriptions

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## 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.KJFB/3-FJF-034/15                                                                                                                                                                                         | <b>Course title:</b><br>Accelerator Ion Technologies |
| <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 / 3 <b>per level/semester:</b> 28 / 42<br><b>Form of the course:</b> on-site learning |                                                      |
| <b>Number of credits:</b> 10                                                                                                                                                                                                        |                                                      |
| <b>Recommended semester:</b> 1.                                                                                                                                                                                                     |                                                      |
| <b>Educational level:</b> III.                                                                                                                                                                                                      |                                                      |
| <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: 4                                                                                                                                                             |                                                      |
| ABS                                                                                                                                                                                                                                 | NEABS                                                |
| 100,0                                                                                                                                                                                                                               | 0,0                                                  |
| <b>Lecturers:</b> prof. RNDr. Pavel Povinec, DrSc., RNDr. Miroslav Jeřkovský, 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.KJFB/3-FJF-035/15                                                                                                                                                                                    | <b>Course title:</b><br>Advanced High Energy Physics |
| <b>Educational activities:</b><br><b>Type of activities:</b> lecture / independent work<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> 10                                                                                                                                                                                                   |                                                      |
| <b>Recommended semester:</b> 2.                                                                                                                                                                                                |                                                      |
| <b>Educational level:</b> III.                                                                                                                                                                                                 |                                                      |
| <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: 6                                                                                                                                                        |                                                      |
| ABS                                                                                                                                                                                                                            | NEABS                                                |
| 100,0                                                                                                                                                                                                                          | 0,0                                                  |
| <b>Lecturers:</b> prof. RNDr. Stanislav Tokár, DrSc., Mgr. Pavol Bartoš, 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.KJFB/3-FJF-037/15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Course title:</b><br>Advanced Nuclear Physics |
| <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> 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                  |
| <b>Recommended semester:</b> 2.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                  |
| <b>Educational level:</b> III.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                  |
| <b>Prerequisites:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |
| <b>Course requirements:</b><br>Evaluation during the semester: homeworks<br>Final evaluation: written test and oral exam<br>Scale for final grades: A 90%, B 80%, C 70%, D 60%, E 50%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                  |
| <b>Learning outcomes:</b><br>The student gains more detailed knowledge of the nuclear physics topics, the structure of atomic nuclei and typical projects running nowadays.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                  |
| <b>Class syllabus:</b><br>Summary of nuclear models. Spherical shell model and nuclear excitations, Deformation of the nucleus, magnetic and electric moments of nuclei. Deformed shell model. Shape coexistence. Collective excitations.<br>Nuclear isomers. Decay spectroscopy. Laser spectroscopy. Nuclear fission.<br>Selected topics for various topics. Neutron and proton halo. Influence of nuclear structure on astrophysical reactions. Proton and neutron dripline. Influence of closed-shell on the stability and decay of atomic nuclei. New magic numbers. Production and properties of superheavy elements. Chemistry of superheavy elements.<br>The complete fusion reaction and separation of reaction products. Transfer reactions. Nuclear fragmentation and separation of fragments. Radioactive-ion beam measurements. Post-acceleration of radioactive beams. |                                                  |
| <b>Recommended literature:</b><br>Nuclear structure from a simple perspective / R. F. Casten. Oxford : Oxford University Press, 2000<br>Introductory nuclear physics / Kenneth S. Krane. Hoboken : Wiley, 1988<br>Basic ideas and concepts in nuclear physics an introductory approach / Kris Heyde. Bristol : Institute of Physics Publishing, 1999<br>Cyriel Wagemans, The Nuclear Fission Process, CRC Press, 1991<br>K.S. Krane, Introductory Nuclear Physics, John Wiley & Sons, 1988.                                                                                                                                                                                                                                                                                                                                                                                         |                                                  |
| <b>Languages necessary to complete the course:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                  |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                  |

|                                                     |       |
|-----------------------------------------------------|-------|
| <b>Past grade distribution</b>                      |       |
| Total number of evaluated students: 5               |       |
| ABS                                                 | NEABS |
| 100,0                                               | 0,0   |
| <b>Lecturers:</b> doc. Mgr. Stanislav Antalic, PhD. |       |
| <b>Last change:</b> 20.02.2020                      |       |
| <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.KJFB/3-FJF-029/15                                                                                                                                                        | <b>Course title:</b><br>Advanced Sub-nuclear Physics |
| <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> 10                                                                                                                                                                       |                                                      |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                      |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                      |
| <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                                                                                                                            |                                                      |
| ABS                                                                                                                                                                                                | NEABS                                                |
| 0,0                                                                                                                                                                                                | 0,0                                                  |
| <b>Lecturers:</b> prof. RNDr. Jozef Masarik, DrSc.                                                                                                                                                 |                                                      |
| <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.KJFB/3-FJF-021/15                                                                                                                                                        | <b>Course title:</b><br>Advanced Theory of Nucleus |
| <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> 10                                                                                                                                                                       |                                                    |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                    |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                    |
| <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: 1                                                                                                                            |                                                    |
| ABS                                                                                                                                                                                                | NEABS                                              |
| 100,0                                                                                                                                                                                              | 0,0                                                |
| <b>Lecturers:</b> prof. RNDr. Fedor Šimkovic, CSc.                                                                                                                                                 |                                                    |
| <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.KJFB/3-FJF-301/15                                                                                                                                                                   | <b>Course title:</b><br>Category A Publication |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 30 <b>per level/semester:</b> 420<br><b>Form of the course:</b> on-site learning |                                                |
| <b>Number of credits:</b> 30                                                                                                                                                                                  |                                                |
| <b>Recommended semester:</b> 3.                                                                                                                                                                               |                                                |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                |
| <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: 3                                                                                                                                       |                                                |
| ABS                                                                                                                                                                                                           | NEABS                                          |
| 100,0                                                                                                                                                                                                         | 0,0                                            |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                |
| <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.KJFB/3-FJF-026/15                                                                                                                                                        | <b>Course title:</b><br>Computer Simulations in Radiation Physics |
| <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> 10                                                                                                                                                                       |                                                                   |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                                   |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                                   |
| <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: 3                                                                                                                            |                                                                   |
| ABS                                                                                                                                                                                                | NEABS                                                             |
| 100,0                                                                                                                                                                                              | 0,0                                                               |
| <b>Lecturers:</b> prof. RNDr. Jozef Masarik, DrSc.                                                                                                                                                 |                                                                   |
| <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.KJP/3-MXX-101/15                                                                                                                                                                               |       |      | <b>Course title:</b><br>Course of English for PhD Studies (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, distance learning |       |      |                                                               |     |      |     |       |
| <b>Number of credits:</b> 5                                                                                                                                                                                              |       |      |                                                               |     |      |     |       |
| <b>Recommended semester:</b> 1.                                                                                                                                                                                          |       |      |                                                               |     |      |     |       |
| <b>Educational level:</b> III.                                                                                                                                                                                           |       |      |                                                               |     |      |     |       |
| <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: 120                                                                                                                                                |       |      |                                                               |     |      |     |       |
| A                                                                                                                                                                                                                        | ABS   | B    | C                                                             | D   | E    | FX  | NEABS |
| 70,0                                                                                                                                                                                                                     | 25,83 | 0,83 | 0,0                                                           | 0,0 | 3,33 | 0,0 | 0,0   |
| <b>Lecturers:</b> PhDr. Alena Zemanová                                                                                                                                                                                   |       |      |                                                               |     |      |     |       |
| <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/3-MXX-102/15                                                                                                                                                                               |       |     | <b>Course title:</b><br>Course of English for PhD Studies (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, distance learning |       |     |                                                               |     |     |     |       |
| <b>Number of credits:</b> 5                                                                                                                                                                                              |       |     |                                                               |     |     |     |       |
| <b>Recommended semester:</b> 2.                                                                                                                                                                                          |       |     |                                                               |     |     |     |       |
| <b>Educational level:</b> III.                                                                                                                                                                                           |       |     |                                                               |     |     |     |       |
| <b>Prerequisites:</b> FMFI.KJP/3-MXX-101/15 - Course of English for PhD Studies (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: 123                                                                                                                                                |       |     |                                                               |     |     |     |       |
| A                                                                                                                                                                                                                        | ABS   | B   | C                                                             | D   | E   | FX  | NEABS |
| 71,54                                                                                                                                                                                                                    | 21,95 | 0,0 | 0,0                                                           | 0,0 | 0,0 | 0,0 | 6,5   |
| <b>Lecturers:</b> PhDr. Alena Zemanová                                                                                                                                                                                   |       |     |                                                               |     |     |     |       |
| <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>FMFL.KJFB/3-FJF-803/15                                                                                                                                                                 | <b>Course title:</b><br>Creation of Teaching Texts and Aids |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 5 <b>per level/semester:</b> 70<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> III.                                                                                                                                                                              |                                                             |
| <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: 1                                                                                                                                     |                                                             |
| ABS                                                                                                                                                                                                         | NEABS                                                       |
| 100,0                                                                                                                                                                                                       | 0,0                                                         |
| <b>Lecturers:</b>                                                                                                                                                                                           |                                                             |
| <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.KJFB/3-FJF-203/15                                                                                                                                                        | <b>Course title:</b><br>Department Seminar (1) |
| <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> 5                                                                                                                                                                        |                                                |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                |
| <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: 7                                                                                                                            |                                                |
| ABS                                                                                                                                                                                                | NEABS                                          |
| 100,0                                                                                                                                                                                              | 0,0                                            |
| <b>Lecturers:</b>                                                                                                                                                                                  |                                                |
| <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.KJFB/3-FJF-204/15                                                                                                                                                        | <b>Course title:</b><br>Department Seminar (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> 5                                                                                                                                                                        |                                                |
| <b>Recommended semester:</b> 2.                                                                                                                                                                    |                                                |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                |
| <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: 7                                                                                                                            |                                                |
| ABS                                                                                                                                                                                                | NEABS                                          |
| 100,0                                                                                                                                                                                              | 0,0                                            |
| <b>Lecturers:</b>                                                                                                                                                                                  |                                                |
| <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.KJFB/3-FJF-205/15                                                                                                                                                        | <b>Course title:</b><br>Department Seminar (3) |
| <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> 5                                                                                                                                                                        |                                                |
| <b>Recommended semester:</b> 3.                                                                                                                                                                    |                                                |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                |
| <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                                                                                                                            |                                                |
| ABS                                                                                                                                                                                                | NEABS                                          |
| 0,0                                                                                                                                                                                                | 0,0                                            |
| <b>Lecturers:</b>                                                                                                                                                                                  |                                                |
| <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.KJFB/3-FJF-206/15                                                                                                                                                           | <b>Course title:</b><br>Department Seminar (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> 5                                                                                                                                                                           |                                                |
| <b>Recommended semester:</b> 4.                                                                                                                                                                       |                                                |
| <b>Educational level:</b> III.                                                                                                                                                                        |                                                |
| <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: 1                                                                                                                               |                                                |
| ABS                                                                                                                                                                                                   | NEABS                                          |
| 100,0                                                                                                                                                                                                 | 0,0                                            |
| <b>Lecturers:</b>                                                                                                                                                                                     |                                                |
| <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.KJFB/3-FJF-023/15                                                                                                                                                        | <b>Course title:</b><br>Detection Technique and Monitoring Systems |
| <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> 10                                                                                                                                                                       |                                                                    |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                                    |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                                    |
| <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                                                                                                                            |                                                                    |
| ABS                                                                                                                                                                                                | NEABS                                                              |
| 0,0                                                                                                                                                                                                | 0,0                                                                |
| <b>Lecturers:</b> doc. RNDr. Jaroslav Staníček, PhD., doc. RNDr. Ivan Sýkora, PhD.                                                                                                                 |                                                                    |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |                                                                    |
| <b>Approved by:</b>                                                                                                                                                                                |                                                                    |

## STATE EXAM 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.KJFB/3-FJF-990/15                     | <b>Course title:</b><br>Dissertation Thesis Defense |
| <b>Number of credits:</b> 30                                    |                                                     |
| <b>Recommended semester:</b> 7., 8..                            |                                                     |
| <b>Educational level:</b> III.                                  |                                                     |
| <b>State exam syllabus:</b>                                     |                                                     |
| <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.KJFB/3-FJF-033/15                                                                                                                                                                           | <b>Course title:</b><br>English Seminar on Nuclear and Subnuclear Physics |
| <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> 10                                                                                                                                                                                          |                                                                           |
| <b>Recommended semester:</b> 1.                                                                                                                                                                                       |                                                                           |
| <b>Educational level:</b> III.                                                                                                                                                                                        |                                                                           |
| <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                                                                                                                                               |                                                                           |
| ABS                                                                                                                                                                                                                   | NEABS                                                                     |
| 100,0                                                                                                                                                                                                                 | 0,0                                                                       |
| <b>Lecturers:</b> prof. RNDr. Pavel Povinec, DrSc., prof. RNDr. Jozef Masarik, DrSc.                                                                                                                                  |                                                                           |
| <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.KJFB/3-FJF-804/15                                                                                                                                                      | <b>Course title:</b><br>Guidance of a Project for the Students' Conference or of a Final Thesis |
| <b>Educational activities:</b><br><b>Type of activities:</b> other<br><b>Number of hours:</b><br><b>per week:</b> 5 <b>per level/semester:</b> 70<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> III.                                                                                                                                                                   |                                                                                                 |
| <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: 1                                                                                                                          |                                                                                                 |
| ABS                                                                                                                                                                                              | NEABS                                                                                           |
| 100,0                                                                                                                                                                                            | 0,0                                                                                             |
| <b>Lecturers:</b>                                                                                                                                                                                |                                                                                                 |
| <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.KJFB/3-FJF-111/15                                                                                                                                                                   | <b>Course title:</b><br>Individual Study of Science and Research Resources (1) |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 10 <b>per level/semester:</b> 140<br><b>Form of the course:</b> on-site learning |                                                                                |
| <b>Number of credits:</b> 10                                                                                                                                                                                  |                                                                                |
| <b>Recommended semester:</b> 1.                                                                                                                                                                               |                                                                                |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                                                |
| <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: 8                                                                                                                                       |                                                                                |
| ABS                                                                                                                                                                                                           | NEABS                                                                          |
| 100,0                                                                                                                                                                                                         | 0,0                                                                            |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                                                |
| <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.KJFB/3-FJF-112/15                                                                                                                                                                   | <b>Course title:</b><br>Individual Study of Science and Research Resources (2) |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 10 <b>per level/semester:</b> 140<br><b>Form of the course:</b> on-site learning |                                                                                |
| <b>Number of credits:</b> 10                                                                                                                                                                                  |                                                                                |
| <b>Recommended semester:</b> 2.                                                                                                                                                                               |                                                                                |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                                                |
| <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: 7                                                                                                                                       |                                                                                |
| ABS                                                                                                                                                                                                           | NEABS                                                                          |
| 100,0                                                                                                                                                                                                         | 0,0                                                                            |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                                                |
| <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.KJFB/3-FJF-701/15                                                                                                                                                        | <b>Course title:</b><br>Obtaining a Grant |
| <b>Educational activities:</b><br><b>Type of activities:</b> other<br><b>Number of hours:</b><br><b>per week:</b> 20 <b>per level/semester:</b> 280<br><b>Form of the course:</b> on-site learning |                                           |
| <b>Number of credits:</b> 20                                                                                                                                                                       |                                           |
| <b>Recommended semester:</b> 4.                                                                                                                                                                    |                                           |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                           |
| <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                                                                                                                            |                                           |
| ABS                                                                                                                                                                                                | NEABS                                     |
| 100,0                                                                                                                                                                                              | 0,0                                       |
| <b>Lecturers:</b>                                                                                                                                                                                  |                                           |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |                                           |
| <b>Approved by:</b>                                                                                                                                                                                |                                           |

## STATE EXAM 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.KJFB/3-FJF-950/15                     | <b>Course title:</b><br>Passing Dissertation Examination |
| <b>Number of credits:</b> 20                                    |                                                          |
| <b>Recommended semester:</b> 3., 4..                            |                                                          |
| <b>Educational level:</b> III.                                  |                                                          |
| <b>State exam syllabus:</b>                                     |                                                          |
| <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.KJFB/3-FJF-402/15                                                                                                                                                          | <b>Course title:</b><br>Presentation at a Home Conference or at Department Seminar |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week: 5 per level/semester: 70</b><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> III.                                                                                                                                                                       |                                                                                    |
| <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: 2                                                                                                                              |                                                                                    |
| ABS                                                                                                                                                                                                  | NEABS                                                                              |
| 100,0                                                                                                                                                                                                | 0,0                                                                                |
| <b>Lecturers:</b>                                                                                                                                                                                    |                                                                                    |
| <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.KJFB/3-FJF-401/15                                                                                                                                                                   | <b>Course title:</b><br>Presentation at an International Conference |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 20 <b>per level/semester:</b> 280<br><b>Form of the course:</b> on-site learning |                                                                     |
| <b>Number of credits:</b> 20                                                                                                                                                                                  |                                                                     |
| <b>Recommended semester:</b> 6.                                                                                                                                                                               |                                                                     |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                                     |
| <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                                                                                                                                       |                                                                     |
| ABS                                                                                                                                                                                                           | NEABS                                                               |
| 100,0                                                                                                                                                                                                         | 0,0                                                                 |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                                     |
| <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.KJFB/3-FJF-305/15                                                                                                                                                                   | <b>Course title:</b><br>Publication in a Reviewed Periodical |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 15 <b>per level/semester:</b> 210<br><b>Form of the course:</b> on-site learning |                                                              |
| <b>Number of credits:</b> 15                                                                                                                                                                                  |                                                              |
| <b>Recommended semester:</b> 4.                                                                                                                                                                               |                                                              |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                              |
| <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: 4                                                                                                                                       |                                                              |
| ABS                                                                                                                                                                                                           | NEABS                                                        |
| 100,0                                                                                                                                                                                                         | 0,0                                                          |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                              |
| <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.KJFB/3-FJF-704/15                                                                                                                                                      | <b>Course title:</b><br>Response to a WoK- or SCOPUS-registered Publication |
| <b>Educational activities:</b><br><b>Type of activities:</b> other<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> 6                                                                                                                                                                      |                                                                             |
| <b>Recommended semester:</b> 4.                                                                                                                                                                  |                                                                             |
| <b>Educational level:</b> III.                                                                                                                                                                   |                                                                             |
| <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                                                                                                                          |                                                                             |
| ABS                                                                                                                                                                                              | NEABS                                                                       |
| 0,0                                                                                                                                                                                              | 0,0                                                                         |
| <b>Lecturers:</b>                                                                                                                                                                                |                                                                             |
| <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.KJFB/3-FJF-702/15                                                                                                                                                                   | <b>Course title:</b><br>Scientific Project Co-researcher |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 10 <b>per level/semester:</b> 140<br><b>Form of the course:</b> on-site learning |                                                          |
| <b>Number of credits:</b> 10                                                                                                                                                                                  |                                                          |
| <b>Recommended semester:</b> 4.                                                                                                                                                                               |                                                          |
| <b>Educational level:</b> III.                                                                                                                                                                                |                                                          |
| <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: 6                                                                                                                                       |                                                          |
| ABS                                                                                                                                                                                                           | NEABS                                                    |
| 100,0                                                                                                                                                                                                         | 0,0                                                      |
| <b>Lecturers:</b>                                                                                                                                                                                             |                                                          |
| <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.KJFB/3-FJF-025/15                                                                                                                                                        | <b>Course title:</b><br>Selected Topics in Radiation Physics |
| <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> 10                                                                                                                                                                       |                                                              |
| <b>Recommended semester:</b> 1.                                                                                                                                                                    |                                                              |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                              |
| <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                                                                                                                            |                                                              |
| ABS                                                                                                                                                                                                | NEABS                                                        |
| 0,0                                                                                                                                                                                                | 0,0                                                          |
| <b>Lecturers:</b> doc. RNDr. Karol Holý, CSc., RNDr. Radoslav Böhm, 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.KJFB/3-FJF-036/15                                                                                                                                                        | <b>Course title:</b><br>Subnuclear Physics Experiment Modelling and Data Analysis |
| <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> 10                                                                                                                                                                       |                                                                                   |
| <b>Recommended semester:</b> 2.                                                                                                                                                                    |                                                                                   |
| <b>Educational level:</b> III.                                                                                                                                                                     |                                                                                   |
| <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: 6                                                                                                                            |                                                                                   |
| ABS                                                                                                                                                                                                | NEABS                                                                             |
| 100,0                                                                                                                                                                                              | 0,0                                                                               |
| <b>Lecturers:</b> prof. RNDr. Stanislav Tokár, DrSc., Mgr. Michal Dubovský, PhD., Mgr. Oliver Majerský, 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.KJFB/3-FJF-802/15                                                                                                                                                       | <b>Course title:</b><br>Teaching Practice in the Summer Semester |
| <b>Educational activities:</b><br><b>Type of activities:</b> other<br><b>Number of hours:</b><br><b>per week:</b> 8 <b>per level/semester:</b> 112<br><b>Form of the course:</b> on-site learning |                                                                  |
| <b>Number of credits:</b> 8                                                                                                                                                                       |                                                                  |
| <b>Recommended semester:</b> 2.                                                                                                                                                                   |                                                                  |
| <b>Educational level:</b> III.                                                                                                                                                                    |                                                                  |
| <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: 2                                                                                                                           |                                                                  |
| ABS                                                                                                                                                                                               | NEABS                                                            |
| 100,0                                                                                                                                                                                             | 0,0                                                              |
| <b>Lecturers:</b>                                                                                                                                                                                 |                                                                  |
| <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.KJFB/3-FJF-801/15                                                                                                                                                      | <b>Course title:</b><br>Teaching Practice in the Winter Semester |
| <b>Educational activities:</b><br><b>Type of activities:</b> other<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> 8                                                                                                                                                                      |                                                                  |
| <b>Recommended semester:</b> 1.                                                                                                                                                                  |                                                                  |
| <b>Educational level:</b> III.                                                                                                                                                                   |                                                                  |
| <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: 3                                                                                                                          |                                                                  |
| ABS                                                                                                                                                                                              | NEABS                                                            |
| 100,0                                                                                                                                                                                            | 0,0                                                              |
| <b>Lecturers:</b>                                                                                                                                                                                |                                                                  |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                   |                                                                  |
| <b>Approved by:</b>                                                                                                                                                                              |                                                                  |