

# 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>FMFI.KAMŠ/3-MAM-002/15                                                                                                                                                        |     | <b>Course title:</b><br>Analysis of Models in Financial Mathematics |     |     |     |
| <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> 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: 1                                                                                                                            |     |                                                                     |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                                   | D   | E   | FX  |
| 100,0                                                                                                                                                                                              | 0,0 | 0,0                                                                 | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                               |     |                                                                     |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                                     |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                                     |     |     |     |

## 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.KAMŠ/3-MAM-014/00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     | <b>Course title:</b><br>Asymptotic Methods |     |     |     |
| <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>Continuous assessment: homework, exam during the semester<br>Exam: written and oral<br>Approximate grading scale: A 90%, B 80%, C 70%, D 60%, E 50%<br>Scale of assessment (preliminary/final): 30/70                                                                                                                                                                                                                                                                                                                                       |     |                                            |     |     |     |
| <b>Learning outcomes:</b><br>To give an overview of basic asymptotic methods for solving algebraic and differential problems in applied mathematics.                                                                                                                                                                                                                                                                                                                                                                                                                       |     |                                            |     |     |     |
| <b>Class syllabus:</b><br>Algebraic equations: Iterative method. Algebraic equations: Expansion method. Singular perturbations and rescaling. Logarithmic Poincare's expansions. Convergence and asymptoticity. Asymptotic approximation of integrals. Watson's lemma. The steepest descent method. Regular perturbation problems in differential equations. Singular perturbation problems in differential equations. Method of matched asymptotic expansions. Multiple scale method. WKBJ method. Poincare-Lindstedt method. Radius of convergence and Domb-Sykes plots. |     |                                            |     |     |     |
| <b>Recommended literature:</b><br>Perturbation Methods / E. J. Hinch. Cambridge, Cambridge University Press, 1991<br>Multiple Scale and Singular Perturbation Methods / Kevorkian, J., Cole, J. D. Springer, 1996                                                                                                                                                                                                                                                                                                                                                          |     |                                            |     |     |     |
| <b>Languages necessary to complete the course:</b><br>English                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                            |     |     |     |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                            |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |     |                                            |     |     |     |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | B   | C                                          | D   | E   | FX  |
| 100,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0,0 | 0,0                                        | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Peter Guba, PhD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                            |     |     |     |
| <b>Last change:</b> 01.05.2017                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |     |                                            |     |     |     |

**Approved by:** prof. RNDr. Daniel Ševčovič, DrSc.

## 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.KAMŠ/3-MAM-005/00                                                                                                                                                          |     | <b>Course title:</b><br>Biomathematics |     |     |     |
| <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> 4.                                                                                                                                                                      |     |                                        |     |     |     |
| <b>Educational level:</b> III.                                                                                                                                                                       |     |                                        |     |     |     |
| <b>Prerequisites:</b>                                                                                                                                                                                |     |                                        |     |     |     |
| <b>Course requirements:</b>                                                                                                                                                                          |     |                                        |     |     |     |
| <b>Learning outcomes:</b>                                                                                                                                                                            |     |                                        |     |     |     |
| <b>Class syllabus:</b><br>Deterministic models, population dynamics with discrete and continuous time, biological oscillators, reaction-diffusion systems, epidemiology models, bifurcations, chaos. |     |                                        |     |     |     |
| <b>Recommended literature:</b><br>Murray, J. D.: Mathematical biology, Springer Berlin, 1989.                                                                                                        |     |                                        |     |     |     |
| <b>Languages necessary to complete the course:</b>                                                                                                                                                   |     |                                        |     |     |     |
| <b>Notes:</b>                                                                                                                                                                                        |     |                                        |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 6                                                                                                                              |     |                                        |     |     |     |
| A                                                                                                                                                                                                    | B   | C                                      | D   | E   | FX  |
| 83,33                                                                                                                                                                                                | 0,0 | 16,67                                  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. Mgr. Richard Kollár, PhD., prof. RNDr. Marek Fila, DrSc.                                                                                                                      |     |                                        |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                       |     |                                        |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                               |     |                                        |     |     |     |

## 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-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: 50                                                                                                                                                 |     |                                                               |     |     |     |
| A                                                                                                                                                                                                                        | B   | C                                                             | D   | E   | FX  |
| 92,0                                                                                                                                                                                                                     | 2,0 | 0,0                                                           | 0,0 | 6,0 | 0,0 |
| <b>Lecturers:</b> PhDr. Alena Zemanová                                                                                                                                                                                   |     |                                                               |     |     |     |
| <b>Last change:</b> 22.02.2019                                                                                                                                                                                           |     |                                                               |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                                   |     |                                                               |     |     |     |

## 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: 55                                                                                                                                                 |     |                                                               |     |     |     |
| A                                                                                                                                                                                                                        | B   | C                                                             | D   | E   | FX  |
| 100,0                                                                                                                                                                                                                    | 0,0 | 0,0                                                           | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> PhDr. Alena Zemanová                                                                                                                                                                                   |     |                                                               |     |     |     |
| <b>Last change:</b> 22.02.2019                                                                                                                                                                                           |     |                                                               |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                                   |     |                                                               |     |     |     |

## 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.KAMŠ/3-MAM-806/15                                                                                                                                                                 |     | <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>                                                                                                                                                                                |     |                                                             |     |     |     |
| <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                                                                                                                                     |     |                                                             |     |     |     |
| A                                                                                                                                                                                                           | B   | C                                                           | D   | E   | FX  |
| 0,0                                                                                                                                                                                                         | 0,0 | 0,0                                                         | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                           |     |                                                             |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                              |     |                                                             |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                      |     |                                                             |     |     |     |

## 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.KAMŠ/3-MAM-203/10                                                                                                                                                    |     | <b>Course title:</b><br>Department Seminar (1) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning                 |     |                                                |     |     |     |
| <b>Number of credits:</b> 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: 33                                                                                                                       |     |                                                |     |     |     |
| A                                                                                                                                                                                              | B   | C                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                          | 0,0 | 0,0                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Daniel Ševčovič, DrSc., prof. RNDr. Pavol Quittner, DrSc., doc. RNDr. Margaréta Halická, CSc., doc. Mgr. Radoslav Harman, PhD., prof. RNDr. Andrej Pázman, DrSc. |     |                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                 |     |                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                         |     |                                                |     |     |     |

## 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.KAMŠ/3-MAM-204/10                                                                                                                                                    |      | <b>Course title:</b><br>Department Seminar (2) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning                 |      |                                                |     |     |     |
| <b>Number of credits:</b> 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: 28                                                                                                                       |      |                                                |     |     |     |
| A                                                                                                                                                                                              | B    | C                                              | D   | E   | FX  |
| 96,43                                                                                                                                                                                          | 3,57 | 0,0                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Daniel Ševčovič, DrSc., doc. RNDr. Margaréta Halická, CSc., prof. RNDr. Pavol Quittner, DrSc., doc. Mgr. Radoslav Harman, PhD., prof. RNDr. Andrej Pázman, DrSc. |      |                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                 |      |                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                         |      |                                                |     |     |     |

## 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.KAMŠ/3-MAM-205/10                                                                                                                                                    |     | <b>Course title:</b><br>Department Seminar (3) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning                 |     |                                                |     |     |     |
| <b>Number of credits:</b> 5                                                                                                                                                                    |     |                                                |     |     |     |
| <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: 24                                                                                                                       |     |                                                |     |     |     |
| A                                                                                                                                                                                              | B   | C                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                          | 0,0 | 0,0                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Daniel Ševčovič, DrSc., prof. RNDr. Pavol Quittner, DrSc., doc. RNDr. Margaréta Halická, CSc., doc. Mgr. Radoslav Harman, PhD., prof. RNDr. Andrej Pázman, DrSc. |     |                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                 |     |                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                         |     |                                                |     |     |     |

## 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.KAMŠ/3-MAM-206/10                                                                                                                                                    |     | <b>Course title:</b><br>Department Seminar (4) |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning                 |     |                                                |     |     |     |
| <b>Number of credits:</b> 5                                                                                                                                                                    |     |                                                |     |     |     |
| <b>Recommended semester:</b> 8.                                                                                                                                                                |     |                                                |     |     |     |
| <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: 15                                                                                                                       |     |                                                |     |     |     |
| A                                                                                                                                                                                              | B   | C                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                          | 0,0 | 0,0                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Daniel Ševčovič, DrSc., doc. RNDr. Margaréta Halická, CSc., prof. RNDr. Pavol Quittner, DrSc., doc. Mgr. Radoslav Harman, PhD., prof. RNDr. Andrej Pázman, DrSc. |     |                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                 |     |                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                         |     |                                                |     |     |     |

## 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>FMFI.KAMŠ/3-MAM-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> prof. RNDr. Daniel Ševčovič, DrSc.          |                                                     |

## 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.KAMŠ/3-MAM-031/15                                                                                                                                                        |     | <b>Course title:</b><br>Fundamentals of Mathematical Modelling in Empirical Sciences |     |     |     |
| <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: 3                                                                                                                            |     |                                                                                      |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                                                    | D   | E   | FX  |
| 100,0                                                                                                                                                                                              | 0,0 | 0,0                                                                                  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. Mgr. Ján Mačutek, PhD.                                                                                                                                                      |     |                                                                                      |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                                                      |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                                                      |     |     |     |

## 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.KAMŠ/3-MAM-803/15                                                                                                                                                      |     | <b>Course title:</b><br>Guidance of a Final Thesis or of a Project for the Students' Conference |     |     |     |
| <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>                                                                                                                                                                     |     |                                                                                                 |     |     |     |
| <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: 20                                                                                                                         |     |                                                                                                 |     |     |     |
| A                                                                                                                                                                                                | B   | C                                                                                               | D   | E   | FX  |
| 100,0                                                                                                                                                                                            | 0,0 | 0,0                                                                                             | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                |     |                                                                                                 |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                   |     |                                                                                                 |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                           |     |                                                                                                 |     |     |     |

## 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.KAMŠ/3-MAM-804/10                                                                                                                                    |     | <b>Course title:</b><br>Guidance of the Students' Research Project |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning |     |                                                                    |     |     |     |
| <b>Number of credits:</b> 7                                                                                                                                                    |     |                                                                    |     |     |     |
| <b>Recommended semester:</b>                                                                                                                                                   |     |                                                                    |     |     |     |
| <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                                                                                                        |     |                                                                    |     |     |     |
| A                                                                                                                                                                              | B   | C                                                                  | D   | E   | FX  |
| 0,0                                                                                                                                                                            | 0,0 | 0,0                                                                | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                              |     |                                                                    |     |     |     |
| <b>Last change:</b>                                                                                                                                                            |     |                                                                    |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                         |     |                                                                    |     |     |     |

## 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.KAMŠ/3-MAM-101/15                                                                                                                                                                   |     | <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> 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                                                                                                                                       |     |                                                                                |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                                |     |     |     |

## 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.KAMŠ/3-MAM-104/15                                                                                                                                                                   |     | <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> 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: 9                                                                                                                                       |     |                                                                                |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                                |     |     |     |

## 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.KAMŠ/3-MAM-001/15                                                                                                                                                        |     | <b>Course title:</b><br>Interior-point methods in linear programming |     |     |     |
| <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                                                                                                                            |     |                                                                      |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                                    | D   | E   | FX  |
| 0,0                                                                                                                                                                                                | 0,0 | 0,0                                                                  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Margaréta Halická, CSc.                                                                                                                                               |     |                                                                      |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                                      |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                                      |     |     |     |

## 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.KAMŠ/3-MAM-009/15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |     | <b>Course title:</b><br>Models of Fluids Dynamics |     |     |     |
| <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> 3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     |                                                   |     |     |     |
| <b>Educational level:</b> III.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |                                                   |     |     |     |
| <b>Prerequisites:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |     |                                                   |     |     |     |
| <b>Course requirements:</b><br>Continuous assessment: individual work, project preparation<br>Exam: Exam<br>Approximate rating: A 90%, B 80%, C 70%, D 60%, E 50%<br>Scale of assessment (preliminary/final): 30/70                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |                                                   |     |     |     |
| <b>Learning outcomes:</b><br>Teach the students to derive and analyse basic equations describing fluid flow.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |     |                                                   |     |     |     |
| <b>Class syllabus:</b><br>Equations of motion for ideal fluids. Vorticity. Irrotational flow. Vorticity equation.<br>Equations of motion for viscous fluids. Examples of simple viscous flows. Flows with circular streamlines.<br>Convection and diffusion of vorticity. Gravity waves. Dispersion and group velocity. Surface tension effects and capillary waves.<br>Internal gravity waves. Waves with finite amplitude. Hydraulic shocks and solitary waves. Kelvin--Helmholtz instability. Thermal convection. Centrifugal instability. Theorem on the stability of shear flow. General theorem on the stability of viscous flow. Uniqueness of steady viscous flow. Transition to turbulence. |     |                                                   |     |     |     |
| <b>Recommended literature:</b><br>Elementary Fluid Dynamics / D. J. Acheson. Oxford: Clarendon Press, 1990<br>An Introduction to Fluid Dynamics / G. K. Batchelor. Cambridge University Press, 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |     |                                                   |     |     |     |
| <b>Languages necessary to complete the course:</b><br>English                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |                                                   |     |     |     |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |     |                                                   |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |                                                   |     |     |     |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | B   | C                                                 | D   | E   | FX  |
| 100,0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 0,0 | 0,0                                               | 0,0 | 0,0 | 0,0 |

|                                                        |
|--------------------------------------------------------|
| <b>Lecturers:</b> doc. RNDr. Peter Guba, PhD.          |
| <b>Last change:</b> 01.05.2017                         |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc. |

## 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.KAMŠ/3-MAM-007/15                                                                                                                                                        |     | <b>Course title:</b><br>Modern Methods of Convex Optimization |     |     |     |
| <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: 0                                                                                                                            |     |                                                               |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                             | D   | E   | FX  |
| 0,0                                                                                                                                                                                                | 0,0 | 0,0                                                           | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Mária Trnovská, PhD.                                                                                                                                                  |     |                                                               |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                               |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                               |     |     |     |

## 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.KAMŠ/3-MAM-024/10                                                                                                                                                        |      | <b>Course title:</b><br>Nonlinear Statistical Models |     |     |     |
| <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: 5                                                                                                                            |      |                                                      |     |     |     |
| A                                                                                                                                                                                                  | B    | C                                                    | D   | E   | FX  |
| 80,0                                                                                                                                                                                               | 20,0 | 0,0                                                  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Andrej Pázman, DrSc.                                                                                                                                                 |      |                                                      |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |      |                                                      |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |      |                                                      |     |     |     |

## 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.KAMŠ/3-MAM-701/15                                                                                                                                                                   |     | <b>Course title:</b><br>Obtaing the Comenius University Grant for the Young |     |     |     |
| <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> 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                                                                                                                                       |     |                                                                             |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                                           | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                                         | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                             |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                             |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                             |     |     |     |

## 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.KAMŠ/3-MAM-805/10                                                                                                                                    |     | <b>Course title:</b><br>Participation in a Conference Organising Committee |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning |     |                                                                            |     |     |     |
| <b>Number of credits:</b> 3                                                                                                                                                    |     |                                                                            |     |     |     |
| <b>Recommended semester:</b>                                                                                                                                                   |     |                                                                            |     |     |     |
| <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                                                                                                        |     |                                                                            |     |     |     |
| A                                                                                                                                                                              | B   | C                                                                          | D   | E   | FX  |
| 100,0                                                                                                                                                                          | 0,0 | 0,0                                                                        | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                              |     |                                                                            |     |     |     |
| <b>Last change:</b>                                                                                                                                                            |     |                                                                            |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                         |     |                                                                            |     |     |     |

## 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>FMFI.KAMŠ/3-MAM-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> prof. RNDr. Daniel Ševčovič, DrSc.          |                                                          |

## 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.KAMŠ/3-MAM-403/15                                                                                                                                                                 |     | <b>Course title:</b><br>Presentation at a Homeland Conference or Department Seminar |     |     |     |
| <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: 16                                                                                                                                    |     |                                                                                     |     |     |     |
| A                                                                                                                                                                                                           | B   | C                                                                                   | D   | E   | FX  |
| 100,0                                                                                                                                                                                                       | 0,0 | 0,0                                                                                 | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                           |     |                                                                                     |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                              |     |                                                                                     |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                      |     |                                                                                     |     |     |     |

## 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.KAMŠ/3-MAM-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> 8.                                                                                                                                                                               |     |                                                                     |     |     |     |
| <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: 11                                                                                                                                      |     |                                                                     |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                                   | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                                 | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                     |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                     |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                     |     |     |     |

## 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.KAMŠ/3-MAM-018/10                                                                                                                                                        |     | <b>Course title:</b><br>Probability Theory |     |     |     |
| <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: 10                                                                                                                           |     |                                            |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                          | D   | E   | FX  |
| 80,0                                                                                                                                                                                               | 0,0 | 20,0                                       | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> prof. RNDr. Anatolij Dvurečenskij, DrSc.                                                                                                                                         |     |                                            |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                            |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                            |     |     |     |

## 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.KAMŠ/3-MAM-302/15                                                                                                                                                                   |     | <b>Course title:</b><br>Publication in a Reviewed Periodical or Reviewed Almanac |     |     |     |
| <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> 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: 4                                                                                                                                       |     |                                                                                  |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                                                | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                                              | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                                  |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                                  |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                                  |     |     |     |

## 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.KAMŠ/3-MAM-301/15                                                                                                                                                                   |     | <b>Course title:</b><br>Publication in an A-category Periodical |     |     |     |
| <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> 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: 6                                                                                                                                       |     |                                                                 |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                               | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                             | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                                 |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                                 |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                                 |     |     |     |

## 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.KAMŠ/3-MAM-030/15                                                                                                                                                        |     | <b>Course title:</b><br>Random Dynamic 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> 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: 1                                                                                                                            |     |                                                |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                              | D   | E   | FX  |
| 100,0                                                                                                                                                                                              | 0,0 | 0,0                                            | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Katarína Janková, CSc.                                                                                                                                                |     |                                                |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                |     |     |     |

## 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.KAMŠ/3-MAM-706/15                                                                                                                                                      |     | <b>Course title:</b><br>Response to a 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> 3                                                                                                                                                                      |     |                                                   |     |     |     |
| <b>Recommended semester:</b> 8.                                                                                                                                                                  |     |                                                   |     |     |     |
| <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                                                                                                                          |     |                                                   |     |     |     |
| A                                                                                                                                                                                                | B   | C                                                 | D   | E   | FX  |
| 0,0                                                                                                                                                                                              | 0,0 | 0,0                                               | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                |     |                                                   |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                   |     |                                                   |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                           |     |                                                   |     |     |     |

## 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.KAMŠ/3-MAM-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> 6 <b>per level/semester:</b> 84<br><b>Form of the course:</b> on-site learning |     |                                                                             |     |     |     |
| <b>Number of credits:</b> 6                                                                                                                                                                      |     |                                                                             |     |     |     |
| <b>Recommended semester:</b> 8.                                                                                                                                                                  |     |                                                                             |     |     |     |
| <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                                                                                                                          |     |                                                                             |     |     |     |
| A                                                                                                                                                                                                | B   | C                                                                           | D   | E   | FX  |
| 100,0                                                                                                                                                                                            | 0,0 | 0,0                                                                         | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                |     |                                                                             |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                   |     |                                                                             |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                           |     |                                                                             |     |     |     |

## 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.KAMŠ/3-MAM-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: 8                                                                                                                                       |     |                                                          |     |     |     |
| A                                                                                                                                                                                                             | B   | C                                                        | D   | E   | FX  |
| 100,0                                                                                                                                                                                                         | 0,0 | 0,0                                                      | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                             |     |                                                          |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                |     |                                                          |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                        |     |                                                          |     |     |     |

## 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.KAMŠ/3-MAM-003/00                                                                                                                                                                                                                                                                                                              |     | <b>Course title:</b><br>Selected Topics from Financial Mathematics |     |     |     |
| <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> 4.                                                                                                                                                                                                                                                                                                                          |     |                                                                    |     |     |     |
| <b>Educational level:</b> III.                                                                                                                                                                                                                                                                                                                           |     |                                                                    |     |     |     |
| <b>Prerequisites:</b>                                                                                                                                                                                                                                                                                                                                    |     |                                                                    |     |     |     |
| <b>Course requirements:</b>                                                                                                                                                                                                                                                                                                                              |     |                                                                    |     |     |     |
| <b>Learning outcomes:</b>                                                                                                                                                                                                                                                                                                                                |     |                                                                    |     |     |     |
| <b>Class syllabus:</b><br>- Selected interest rate models<br>- Multi-period models of portfolio theory<br>- Derivative pricing with transaction costs<br>- Portfolio risk management                                                                                                                                                                     |     |                                                                    |     |     |     |
| <b>Recommended literature:</b><br>Wilmott, P., Dewynne, J, Howison, S.: Option Pricing, Mathematical Models and Computations, UK: Oxford Financial Press, 1995<br>Kwok, Y.K.: Mathematical models of financial derivatives, Berlin, Springer Verlag, 1998.<br>Hull, J.: Options, futures and other derivative securities, New York, Prentice Hall, 1989. |     |                                                                    |     |     |     |
| <b>Languages necessary to complete the course:</b>                                                                                                                                                                                                                                                                                                       |     |                                                                    |     |     |     |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                            |     |                                                                    |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 8                                                                                                                                                                                                                                                                                  |     |                                                                    |     |     |     |
| A                                                                                                                                                                                                                                                                                                                                                        | B   | C                                                                  | D   | E   | FX  |
| 100,0                                                                                                                                                                                                                                                                                                                                                    | 0,0 | 0,0                                                                | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. Mgr. Igor Melicherčík, PhD.                                                                                                                                                                                                                                                                                                       |     |                                                                    |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                                                                                                                                                                           |     |                                                                    |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                                                                                                                                                                   |     |                                                                    |     |     |     |

## 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.KAMŠ/3-MAM-032/16                                                                                                                                                        |     | <b>Course title:</b><br>Selected Topics in Probability Distributions |     |     |     |
| <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., 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                                                                                                                            |     |                                                                      |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                                    | D   | E   | FX  |
| 100,0                                                                                                                                                                                              | 0,0 | 0,0                                                                  | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. Mgr. Ján Mačutek, PhD.                                                                                                                                                      |     |                                                                      |     |     |     |
| <b>Last change:</b>                                                                                                                                                                                |     |                                                                      |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                                      |     |     |     |

## 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.KAMŠ/3-MAM-025/10                                                                                                                                                                                                                                                                                                               |     | <b>Course title:</b><br>Simulation Methods |     |     |     |
| <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., 4.                                                                                                                                                                                                                                                                                                                       |     |                                            |     |     |     |
| <b>Educational level:</b> III.                                                                                                                                                                                                                                                                                                                            |     |                                            |     |     |     |
| <b>Prerequisites:</b>                                                                                                                                                                                                                                                                                                                                     |     |                                            |     |     |     |
| <b>Course requirements:</b><br>Preliminary semester evaluation: projects<br>Final examination: oral examination<br>Approximate grade thresholds: A 90%, B 80%, C 70%, D 60%, E 50%<br>Scale of assessment (preliminary/final): 50/50                                                                                                                      |     |                                            |     |     |     |
| <b>Learning outcomes:</b><br>After completing the course, students will be able to use advanced techniques of variance reduction and simulation generation of random vectors and processes.                                                                                                                                                               |     |                                            |     |     |     |
| <b>Class syllabus:</b><br>Selected methods of simulation sampling of random vectors and random processes (uniform and non-uniform generation on the surface and in the interior of multi-dimensional spheres and polyhedrons, sampling of processes used in financial mathematics). Advanced variance reduction techniques and simulation of rare events. |     |                                            |     |     |     |
| <b>Recommended literature:</b><br>Ross S: Simulation, Elsevier Academic Press 2006<br>Fishman GS: Monte Carlo: Concepts, Algorithms and Applications, Springer 1996<br>Selected scientific papers                                                                                                                                                         |     |                                            |     |     |     |
| <b>Languages necessary to complete the course:</b><br>Slovak, English                                                                                                                                                                                                                                                                                     |     |                                            |     |     |     |
| <b>Notes:</b>                                                                                                                                                                                                                                                                                                                                             |     |                                            |     |     |     |
| <b>Past grade distribution</b><br>Total number of evaluated students: 13                                                                                                                                                                                                                                                                                  |     |                                            |     |     |     |
| A                                                                                                                                                                                                                                                                                                                                                         | B   | C                                          | D   | E   | FX  |
| 100,0                                                                                                                                                                                                                                                                                                                                                     | 0,0 | 0,0                                        | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. Mgr. Radoslav Harman, PhD.                                                                                                                                                                                                                                                                                                         |     |                                            |     |     |     |
| <b>Last change:</b> 08.05.2017                                                                                                                                                                                                                                                                                                                            |     |                                            |     |     |     |

**Approved by:** prof. RNDr. Daniel Ševčovič, DrSc.

## 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.KAMŠ/3-MAM-019/10                                                                                                                                                        |     | <b>Course title:</b><br>Stochastic Models in Insurance and Actuarial Science |     |     |     |
| <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> 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: 2                                                                                                                            |     |                                                                              |     |     |     |
| A                                                                                                                                                                                                  | B   | C                                                                            | D   | E   | FX  |
| 100,0                                                                                                                                                                                              | 0,0 | 0,0                                                                          | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b> doc. RNDr. Rastislav Potocký, PhD.                                                                                                                                               |     |                                                                              |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                     |     |                                                                              |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                             |     |                                                                              |     |     |     |

## 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.KAMŠ/3-MAM-807/10                                                                                                                                    |     | <b>Course title:</b><br>Study Stay Abroad |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b><br><b>Number of hours:</b><br><b>per week: per level/semester:</b><br><b>Form of the course:</b> on-site learning |     |                                           |     |     |     |
| <b>Number of credits:</b> 3                                                                                                                                                    |     |                                           |     |     |     |
| <b>Recommended semester:</b>                                                                                                                                                   |     |                                           |     |     |     |
| <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                                                                                                        |     |                                           |     |     |     |
| A                                                                                                                                                                              | B   | C                                         | D   | E   | FX  |
| 100,0                                                                                                                                                                          | 0,0 | 0,0                                       | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                              |     |                                           |     |     |     |
| <b>Last change:</b>                                                                                                                                                            |     |                                           |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                         |     |                                           |     |     |     |

## COURSE DESCRIPTION

|                                                                                                                                                                                                   |     |                                                                  |     |     |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava                                                                                                                                              |     |                                                                  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics                                                                                                                                   |     |                                                                  |     |     |     |
| <b>Course ID:</b><br>FMFI.KAMŠ/3-MAM-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>                                                                                                                                                                      |     |                                                                  |     |     |     |
| <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: 33                                                                                                                          |     |                                                                  |     |     |     |
| A                                                                                                                                                                                                 | B   | C                                                                | D   | E   | FX  |
| 100,0                                                                                                                                                                                             | 0,0 | 0,0                                                              | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                 |     |                                                                  |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                    |     |                                                                  |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                            |     |                                                                  |     |     |     |

## 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.KAMŠ/3-MAM-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> 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>                                                                                                                                                                      |     |                                                                  |     |     |     |
| <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: 30                                                                                                                          |     |                                                                  |     |     |     |
| A                                                                                                                                                                                                 | B   | C                                                                | D   | E   | FX  |
| 100,0                                                                                                                                                                                             | 0,0 | 0,0                                                              | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                 |     |                                                                  |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                    |     |                                                                  |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                            |     |                                                                  |     |     |     |

## COURSE DESCRIPTION

|                                                                                                                                                                                                             |     |                                                                  |     |     |     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------|-----|-----|-----|
| <b>University:</b> Comenius University in Bratislava                                                                                                                                                        |     |                                                                  |     |     |     |
| <b>Faculty:</b> Faculty of Mathematics, Physics and Informatics                                                                                                                                             |     |                                                                  |     |     |     |
| <b>Course ID:</b><br>FMFI.KAMŠ/3-MAM-808/15                                                                                                                                                                 |     | <b>Course title:</b><br>Writing Final Thesis Assessment Protocol |     |     |     |
| <b>Educational activities:</b><br><b>Type of activities:</b> independent work<br><b>Number of hours:</b><br><b>per week:</b> 2 <b>per level/semester:</b> 28<br><b>Form of the course:</b> on-site learning |     |                                                                  |     |     |     |
| <b>Number of credits:</b> 2                                                                                                                                                                                 |     |                                                                  |     |     |     |
| <b>Recommended semester:</b>                                                                                                                                                                                |     |                                                                  |     |     |     |
| <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: 26                                                                                                                                    |     |                                                                  |     |     |     |
| A                                                                                                                                                                                                           | B   | C                                                                | D   | E   | FX  |
| 100,0                                                                                                                                                                                                       | 0,0 | 0,0                                                              | 0,0 | 0,0 | 0,0 |
| <b>Lecturers:</b>                                                                                                                                                                                           |     |                                                                  |     |     |     |
| <b>Last change:</b> 02.06.2015                                                                                                                                                                              |     |                                                                  |     |     |     |
| <b>Approved by:</b> prof. RNDr. Daniel Ševčovič, DrSc.                                                                                                                                                      |     |                                                                  |     |     |     |