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University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** Analysis of Models in Financial Mathematics FMFI.KAMŠ/3-MAM-002/15 **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 **Recommended semester: 3. Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 1 Α C В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 Lecturers: prof. RNDr. Daniel Ševčovič, DrSc. Last change: 02.06.2015

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-014/00 | Asymptotic Methods

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 2.

Educational level: III.

Prerequisites:

Course requirements:

Continuous assessment: homework, exam during the semester

Exam: written and oral

Approximate grading scale: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 30/70

Learning outcomes:

To give an overview of basic asymptotic methods for solving algebraic and differential problems in applied mathematics.

Class syllabus:

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.

Recommended literature:

Perturbation Methods / E. J. Hinch. Cambridge, Cambridge University Press, 1991 Multiple Scale and Singular Perturbation Methods / Kevorkian, J., Cole, J. D. Springer, 1996

Languages necessary to complete the course:

English

Notes:

Past grade distribution

Total number of evaluated students: 9

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Peter Guba, PhD.

Last change: 01.05.2017

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-005/00

Biomathematics

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Deterministic models, population dynamics with discrete and continuous time, biological oscillators, reaction-diffusion systems, epidemology models, bifurcations, chaos.

Recommended literature:

Murray, J. D.: Mathematical biology, Springer Berlin, 1989.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 6

A	В	С	D	Е	FX
83,33	0,0	16,67	0,0	0,0	0,0

Lecturers: doc. Mgr. Richard Kollár, PhD., prof. RNDr. Marek Fila, DrSc.

Last change: 02.06.2015

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

Course ID: Course lile:

FMFI.KJP/3-MXX-101/15 Course of English for PhD Studies (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 28

Form of the course: on-site learning, distance learning

Number of credits: 5

Recommended semester: 1.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 27

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: PhDr. Alena Zemanová

Last change: 02.06.2015

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KJP/3-MXX-102/15 Course of English for PhD Studies (1)

Educational activities:

Type of activities: practicals

Number of hours:

per week: 2 per level/semester: 28

Form of the course: on-site learning, distance learning

Number of credits: 5

Recommended semester: 2.

Educational level: III.

Prerequisites: FMFI.KJP/3-MXX-101/15 - Course of English for PhD Studies (1)

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 38

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: PhDr. Alena Zemanová

Last change: 02.06.2015

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-806/15 Creation of Teaching Texts and Aids **Educational activities:** Type of activities: independent work **Number of hours:** per week: 5 per level/semester: 70 Form of the course: on-site learning **Number of credits: 5 Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 5 C Α В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-203/10 | Department Seminar (1)

Educational activities:

Type of activities: Number of hours:

per week: per level/semester: Form of the course: on-site learning

Number of credits: 5

Recommended semester: 2.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 31

A	В	C	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: 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.

Last change: 02.06.2015

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-204/10

Department Seminar (2)

Educational activities:

Type of activities: Number of hours:

per week: per level/semester: Form of the course: on-site learning

Number of credits: 5

Recommended semester: 4.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 25

A	В	C	D	Е	FX
96,0	4,0	0,0	0,0	0,0	0,0

Lecturers: 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.

Last change: 02.06.2015

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

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-205/10 | Department Seminar (3)

Educational activities:

Type of activities: Number of hours:

per week: per level/semester:
Form of the course: on-site learning

Number of credits: 5

Recommended semester: 6.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 21

A	В	C	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: 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.

Last change: 02.06.2015

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-206/10 | Department Seminar (4)

Educational activities:

Type of activities: Number of hours:

per week: per level/semester: Form of the course: on-site learning

Number of credits: 5

Recommended semester: 8.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 14

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: 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.

Last change: 02.06.2015

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

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KAMŠ/3-MAM-990/15

Dissertation Thesis Defense

Number of credits: 30

Recommended semester: 7., 8..

Educational level: III.

State exam syllabus:

Last change: 02.06.2015

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

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-031/15

Fundamentals of Mathematical Modelling in Empirical Sciences

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

number of credits. 10

Recommended semester: 2.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 3

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Ján Mačutek, PhD.

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-803/15 Guidance of a Final Thesis or of a Project for the Students' Conference **Educational activities: Type of activities:** other **Number of hours:** per week: 5 per level/semester: 70 Form of the course: on-site learning Number of credits: 5 **Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 61 В \mathbf{C} D E FX Α 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-804/10 Guidance of the Students' Research Project **Educational activities: Type of activities: Number of hours:** per week: per level/semester: Form of the course: on-site learning **Number of credits:** 7 **Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 0 \mathbf{C} Α В D E FX 0,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-101/15

Individual Study of Science and Research Resources (1)

Educational activities:

Type of activities: independent work

Number of hours:

per week: 10 per level/semester: 140 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 2.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 57

A	В	С	D	Е	FX
98,25	0,0	0,0	1,75	0,0	0,0

Lecturers:

Last change: 02.06.2015

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

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-104/15

Individual Study of Science and Research Resources (2)

Educational activities:

Type of activities: independent work

Number of hours:

per week: 10 per level/semester: 140 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 54

A	В	С	D	Е	FX
98,15	0,0	0,0	0,0	1,85	0,0

Lecturers:

Last change: 02.06.2015

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

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

FMFI.KAMŠ/3-MAM-001/15

Course title: Interior-point methods in linear programming

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 1.

Educational level: III.

Prerequisites:

Antirequisites: FMFI.KAMŠ/3-MAM-001/00

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 11

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Margaréta Halická, CSc.

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics Course ID: Course title: FMFI KAMŠ/3-MAM-009/15 Models of Fluids Dynamics **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 Recommended semester: 3. Educational level: III. **Prerequisites: Antirequisites:** FMFI.KAMŠ/3-MAM-009/00 **Course requirements:** Continuous assessment: individual work, project preparation Approximate rating: A 90%, B 80%, C 70%, D 60%, E 50% Scale of assessment (preliminary/final): 30/70 **Learning outcomes:** Teach the students to derive and analyse basic equations describing fluid flow. Class syllabus: Equations of motion for ideal fluids. Vorticity. Irrotational flow. Vorticity equation. Equations of motion for viscous fluids. Examples of simple viscous flows. Flows with circular streamlines. Convection and diffusion of vorticity. Gravity waves. Dispersion and group velocity. Surface tension effects and capillary waves. 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 **Recommended literature:** Elementary Fluid Dynamics / D. J. Acheson. Oxford: Clarendon Press, 1990 An Introduction to Fluid Dynamics / G. K. Batchelor. Cambridge University Press, 2000 Languages necessary to complete the course:

Strana: 20

English
Notes:

Past grade distribution Total number of evaluated students: 6						
A B C D E FX						
83,33	0,0	16,67	0,0	0,0	0,0	
Lecturers: doc. RNDr. Peter Guba, PhD.						
Last change: 01.05.2017						
Approved by: prof. RNDr. Daniel Ševčovič, DrSc.						

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:

Course title:

FMFI.KAMŠ/3-MAM-007/15

Modern Methods of Convex Optimization

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 2.

Educational level: III.

Prerequisites:

Antirequisites: FMFI.KAMŠ/3-MAM-007/00

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 4

A	В	С	D	Е	FX
75,0	25,0	0,0	0,0	0,0	0,0

Lecturers: doc. RNDr. Margaréta Halická, CSc., doc. RNDr. Mária Trnovská, PhD.

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course title: Course ID:** FMFI.KAMŠ/3-MAM-024/10 Nonlinear Statistical Models **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 **Recommended semester: 2. Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 5 Α \mathbf{C} В D E FX 80,0 20,0 0,0 0,0 0,0 0,0 Lecturers: prof. RNDr. Andrej Pázman, DrSc. Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-701/15 Obtaing the Comenius University Grant for the Young **Educational activities:** Type of activities: independent work **Number of hours:** per week: 20 per level/semester: 280 Form of the course: on-site learning Number of credits: 20 **Recommended semester:** 4. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution

Total number of evaluated students: 24

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers:

Last change: 02.06.2015

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-805/10 Participation in a Conference Organising Committee **Educational activities: Type of activities: Number of hours:** per week: per level/semester: Form of the course: on-site learning Number of credits: 3 **Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 1 Α C В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

STATE EXAM DESCRIPTION

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KAMŠ/3-MAM-950/15

Course title:
Passing Dissertation Examination

Number of credits: 20

Recommended semester: 3., 4..

Educational level: III.

State exam syllabus:

Last change: 02.06.2015

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-403/15 Presentation at a Homeland Conference or Department Seminar **Educational activities:** Type of activities: independent work **Number of hours:** per week: 5 per level/semester: 70 Form of the course: on-site learning Number of credits: 5 **Recommended semester:** 4. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 20 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0

Lecturers:

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-401/15 Presentation at an International Conference **Educational activities:** Type of activities: independent work **Number of hours:** per week: 20 per level/semester: 280 Form of the course: on-site learning Number of credits: 20 **Recommended semester:** 8. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 34 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:**

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course title: Course ID:** FMFI.KAMŠ/3-MAM-018/10 **Probability Theory Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 **Recommended semester:** 1. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 10 Α C В D E FX 80,0 0,0 20,0 0,0 0,0 0,0 Lecturers: prof. RNDr. Anatolij Dvurečenskij, DrSc. Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID:
FMFI.KAMŠ/3-MAM-302/15

Publication in a Reviewed Periodical or Reviewed Almanac

Educational activities:
Type of activities: independent work
Number of hours:
per week: 15 per level/semester: 210
Form of the course: on-site learning

Number of credits: 15

Recommended semester: 6.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

Recommended literature:

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 4

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers:

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-301/15 Publication in an A-category Periodical **Educational activities:** Type of activities: independent work **Number of hours:** per week: 30 per level/semester: 420 Form of the course: on-site learning Number of credits: 30 **Recommended semester:** 6. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 C Α В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015

Strana: 31

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course title: Course ID:** FMFI.KAMŠ/3-MAM-030/15 Random Dynamic Systems **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 **Recommended semester: 2. Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 1 Α C В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 Lecturers: doc. RNDr. Katarína Janková, CSc. Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-706/15 Response to a Publication **Educational activities:** Type of activities: other **Number of hours:** per week: 3 per level/semester: 42 Form of the course: on-site learning Number of credits: 3 **Recommended semester:** 8. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 3 Α C В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-704/15 Response to a WoK- or SCOPUS-registered Publication **Educational activities:** Type of activities: other **Number of hours:** per week: 6 per level/semester: 84 Form of the course: on-site learning **Number of credits:** 6 **Recommended semester:** 8. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 6 Α C В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015

Strana: 34

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-702/15 Scientific Project Co-researcher **Educational activities:** Type of activities: independent work **Number of hours:** per week: 10 per level/semester: 140 Form of the course: on-site learning Number of credits: 10 **Recommended semester:** 4. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 9 C Α В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015

Strana: 35

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-003/00 | Selected Topics from Financial Mathematics

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 4.

Educational level: III.

Prerequisites:

Course requirements:

Learning outcomes:

Class syllabus:

- Selected interest rate models
- Multi-period models of portfolio theory
- Derivative pricing with transaction costs
- Portfolio risk management

Recommended literature:

Wilmott, P., Dewynne, J, Howison, S.: Option Pricing, Mathematical Models and Computations, UK: Oxford Financial Press, 1995

Kwok, Y.K.: Mathematical models of financial derivatives, Berlin, Springer Verlag, 1998. Hull, J.: Options, futures and other derivative securities, New York, Prentice Hall, 1989.

Languages necessary to complete the course:

Notes:

Past grade distribution

Total number of evaluated students: 7

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Igor Melicherčík, PhD.

Last change: 02.06.2015

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

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-032/16 Selected Topics in Probability Distributions **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 Recommended semester: 2., 4. **Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 2 A В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0 Lecturers: doc. Mgr. Ján Mačutek, PhD. Last change:

Strana: 37

University: Comenius University in Bratislava

Faculty: Faculty of Mathematics, Physics and Informatics

Course ID: Course title:

FMFI.KAMŠ/3-MAM-025/10 | Simulation Methods

Educational activities:

Type of activities: lecture

Number of hours:

per week: 2 per level/semester: 28 Form of the course: on-site learning

Number of credits: 10

Recommended semester: 2., 4.

Educational level: III.

Prerequisites:

Course requirements:

Preliminary semester evaluation: projects Final examination: oral examination

Approximate grade thresholds: A 90%, B 80%, C 70%, D 60%, E 50%

Scale of assessment (preliminary/final): 50/50

Learning outcomes:

After completing the course, students will be able to use advanced techniques of variance reduction and simulation generation of random vectors and processes.

Class syllabus:

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.

Recommended literature:

Ross S: Simulation. Elsevier Academic Press 2006

Fishman GS: Monte Carlo: Concepts, Algorithms and Applications, Springer 1996

Selected scientific papers

Languages necessary to complete the course:

Slovak, English

Notes:

Past grade distribution

Total number of evaluated students: 12

A	В	С	D	Е	FX
100,0	0,0	0,0	0,0	0,0	0,0

Lecturers: doc. Mgr. Radoslav Harman, PhD.

Last change: 08.05.2017

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-019/10 Stochastic Models in Insurance and Actuarial Science **Educational activities:** Type of activities: lecture **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 10 **Recommended semester: 3. Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 2 Α \mathbf{C} В D E FX 100,0 0,0 0,0 0,0 0,0 0,0

Lecturers: doc. RNDr. Rastislav Potocký, PhD.

Last change: 02.06.2015

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-807/10 Study Stay Abroad **Educational activities: Type of activities: Number of hours:** per week: per level/semester: Form of the course: on-site learning Number of credits: 3 **Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 5 Α \mathbf{C} В D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-802/15 Teaching Practice in the Summer Semester **Educational activities:** Type of activities: other **Number of hours:** per week: 8 per level/semester: 112 Form of the course: on-site learning **Number of credits: 8 Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 100 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-801/15 Teaching Practice in the Winter Semester **Educational activities:** Type of activities: other **Number of hours:** per week: 8 per level/semester: 112 Form of the course: on-site learning **Number of credits: 8 Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 117 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015 Approved by: prof. RNDr. Daniel Ševčovič, DrSc.

University: Comenius University in Bratislava Faculty: Faculty of Mathematics, Physics and Informatics **Course ID: Course title:** FMFI.KAMŠ/3-MAM-808/15 Writing Final Thesis Assessment Protocol **Educational activities:** Type of activities: independent work **Number of hours:** per week: 2 per level/semester: 28 Form of the course: on-site learning Number of credits: 2 **Recommended semester: Educational level: III. Prerequisites: Course requirements: Learning outcomes:** Class syllabus: **Recommended literature:** Languages necessary to complete the course: **Notes:** Past grade distribution Total number of evaluated students: 39 Α В \mathbf{C} D E FX 100,0 0,0 0,0 0,0 0,0 0,0 **Lecturers:** Last change: 02.06.2015

Strana: 44