1. Course (module) name	2. Code
Business Mathematics	N200AM16BNVM005

3. Lecturer (s)	4. Division(s)
Coordinator: Lect. Justas Mundeikis **Other (s):**	Business School

5. Cycle of studies	6. Course (module) level	7. Course (module) type
First	Course is not divided into parts	Mandatory

8. Delivery form	9. Delivery period	10. Delivery language (s)
Full-time	Semester 2	English

11. Requirements for students	
Preliminary requirements:	**Associated requirements (if any):**
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12. Scope of course (module) in ECTS credits	13. Full workload of a student (hours)	14. Contact work hours	15. Independent work hours
6	160	40	120

16. Course (module) purpose: competences developer by the course program
This course introduces students to the mathematical concepts and applications necessary for successful business careers. The course includes topics as linear and non-linear equations, differentiation and matrix calculations.

17. Relation of the course targets with the expected results of studies and evaluation methods of studies and student achievement

Results (targets) of the course	Results of the course	Methods of studies	Evaluation methods of academic achievements
Students have to acquire and apply analytical, creative and critical thinking skills in order to operate successfully in various fields of aviation management.	Students will be able to: - Solve simultaneous linear equations graphically and algebraically - Solve a system of two simultaneous linear equations in two unknowns - Determine the equilibrium price and quantity for a multi commodity market by solving simultaneous linear equations - Solve and sketch quadratic equations - Use the natural logarithm function to solve equation - Differentiate - Evaluate and interpret second-order derivatives - Represent a system of linear equations in matrix notation - Use matrix inverses to solve systems of linear equations arising in economics.	Group discussions, lectures, lots of practice. The objective is to promote the understanding of mathematic concepts and to enable students to apply them in a meaningful way. Students are encouraged to rely on logical thinking, rather than on memorization.	3 tests during the course and the final exam.

18. Course content

Topics	Contact work hours and learning method							Time of independent studies and tasks	
	Lectures	Consultations	Seminars	Exercises	Laboratory work	Practice	All contact work	Independent work	Tasks
Linear Equations	3	-	3	-	-	-	**6**	18	Home assignments and self-study.
Non-linear Equations	5	-	5	-	-	-	**10**	30	Home assignments and self-study.
Mathematics of Finance	4	-	4	-	-	-	**8**	24	Home assignments and self-study.
Differentiation	4	-	4	-	-	-	**8**	24	Home assignments and self-study.
Matrices	4	-	4	-	-	-	**8**	24	Home assignments and self-study.
Linear Programming	0	-	0	-	-	-	**0**	0	Home assignments and self-study.
Total	**20**	-	**20**	-	-	-	**40**	**120**	Home assignments and self-study.

19. Strategy and criteria of student assessment

Assessment method	Per cent	Delivery time	Evaluation criteria
Tests	45	3 x 20 min.	Short test covering discussed topics. Each test delivers up to 15 points. Only one test can be retaken at the end of the course. Graphical and algebraic solutions will be required. Tests are unannounced.
Exam	55	90 min.	Exam covers all topics discussed in lectures and independent work. Graphical and algebraic solutions will be required. Exam delivers 55 points.

20. Sources of study, literature

Mandatory sources of study, literature

Ian Jacques, Mathematics for Economics and Business 5th edition

21.Grading scale and class attendance

Points		Grade	Rounded grade
From	To		
96	100	10,0	10
91	95	9,5	
86	90	9,0	9
81	85	8,5	
78	80	8,0	8
75	77	7,5	
72	74	7,0	7
69	71	6,5	
66	68	6,0	6
63	65	5,5	
60	62	5,0	5
0	59	Failed	Failed

Attendance at all class sessions is important.
Only students with 75 % class attendance will be allowed to take the exam.

22. Slides and other lectures materials
Students have to send an email to lektorius@gmx.com to be invited to a shared dropbox folder.

23. Class policy
Students are not allowed to use their laptops or cellphones in the classroom.