<table>
<tr><td colspan="2">Annex No. 3</td><td colspan="5">Second Cycle Studies Course Programme</td></tr>
<tr><td>1.</td><td>Course Title</td><td colspan="5">Quantitative methods for financial management</td></tr>
<tr><td>2.</td><td>Code</td><td colspan="5">CFM520</td></tr>
<tr><td>3.</td><td>Study programme</td><td colspan="5">Corporate financial management</td></tr>
<tr><td>4.</td><td>Organizer of the study programme (university unit i.e. institute, chair, department)</td><td colspan="5">Ss. Cyril and Methodius University in Skopje
Faculty of Economics - Skopje
Chair of Corporate financial management</td></tr>
<tr><td>5.</td><td>Level (first, second, third cycle)</td><td colspan="5">Second cycle</td></tr>
<tr><td>6.</td><td>Academic year / semester</td><td>2022-2023 (winter semester</td><td>7.</td><td>Number of ECTS credits</td><td>6</td></tr>
<tr><td>8.</td><td>Professor</td><td colspan="5">Prof. Violeta Cvetkoska, PhD</td></tr>
<tr><td>9.</td><td>Preconditions for enrolment</td><td colspan="5">Completed the first cycle of studies with at least 240 credits</td></tr>
<tr><td>10.</td><td colspan="6">Course Objectives (Competencies):
After taking this course, students should be able to:
- apply the phases of the approach to quantitative analysis in solving problems in the field of corporate financial management.
- use various statistical, optimization, and multi-criteria methods and techniques for analyzing financial problems.
- use the leading non-parametric data envelopment analysis methodology to assess corporate performance.
- develop spreadsheet models using real data sets.
- use software tools for data analysis, modeling, and visualization.
- to interpret the obtained solutions in a wider context of the specific problem and to use the obtained knowledge to make better decisions.</td></tr>
<tr><td>11.</td><td colspan="6">Course content:
1. The role of quantitative analysis in corporate financial management
2. Financial analysis using spreadsheets
3. Modeling and visualization of financial data
4. Data mining
5. Prediction methods and techniques
6. Measuring the performance of organizations with data analysis
7. Simulation modeling
8. Multi-criteria decision making</td></tr>
<tr><td>12.</td><td colspan="6">Learning methods: lectures with presentations, videos, laboratory sessions, interactive case studies, quizzes, guest lecturers, project development, student presentations</td></tr>
<tr><td>13.</td><td>Total hours</td><td colspan="5">6 ECTS x 30 classes = 180 classes</td></tr>
<tr><td>14.</td><td>Allocation of hours per activity</td><td colspan="5">24+16+40+10+90= 180 classes</td></tr>
<tr><td rowspan="2">15.</td><td rowspan="2">Types of teaching activates</td><td>15.1.</td><td colspan="2">Lectures</td><td>24 classes</td></tr>
<tr><td>15.2.</td><td colspan="2">Exercises (laboratory), Seminars, teamwork</td><td>16 classes</td></tr>
<tr><td rowspan="3">16.</td><td rowspan="3">Other types of activities</td><td>16.1.</td><td colspan="2">Project tasks</td><td>40 classes</td></tr>
<tr><td>16.2.</td><td colspan="2">Individual tasks</td><td>10 classes</td></tr>
<tr><td>16.3</td><td colspan="2">Homework</td><td>90 classes</td></tr>
<tr><td rowspan="3">17.</td><td colspan="5">Grading method: 60+30+10=100 points</td></tr>
<tr><td>17.1.</td><td colspan="3">Tests</td><td>60%</td></tr>
<tr><td>17.2.</td><td colspan="3">Individual work / project (presentation: written and oral)</td><td>30 %</td></tr>
</table>

	17.3.	Attendance and class participations		10%
18.	Grading scale		less than 50 points	5 (five) (F)
			from 51 to 60 points	6 (six) (E)
			from 61 to 70 points	7 (seven) (D)
			from 71 to 80 points	8 (eight) (C)
			from 81 to 90 points	9 (nine) (B)
			from 91 to 100 points	10 (ten) (A)
19.	Preconditions for taking the final exam		Realized activities from points 15 and 16	
20.	Language		Macedonian (or English)	
21.	Evaluation method		Internal evaluation and survey	
22.	Literature			
	22.1.	Compulsory literature		

No.	Author	Title	Publisher	Year
1.	Render, B., Stair, R. M. Jr., Hanna, M. E. and Hale, T. S.	Quantitative Analysis for Management (13th ed.)	Pearson	2017
2.	Цветкоска, В.	Примена на повеќекритериумски методи во банкарството	Магор ДОО Скопје	2018

22.2. Additional literature

No.	Author	Title	Publisher	Year
1.	Mu, E. and Pereyra-Rojas, M.	Practical Decision Making: An Introduction to the Analytic Hierarchy Process (AHP) Using Super Decisions v2	Springer	2017
2.	Cooper, W.W., Seiford, L. M. and Tone, K.	Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA Solver-Software	Springer	2007