



# Course Package "Financial Innovations in Corporations"

Work Package	WP3: Development of Course Materials for the Reformed MA Programmes, Deliverable 3.1		
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# **Document History**

Version	Date	Author(s)	Description
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2	30.01.2020	Vanine Yeranosyan, Mr Fred Huibers	Draft 2
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#### Disclaimer:

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#### 1. General information about the course

Explanation: Please fill in the table below.

Title of the course (as specified in the reformed curriculum)	Financial Innovations in Corporations
Name of the teacher	Vanine Yeranosyan
Novelty of the course (please select as appropriate)	This course is a newly developed course (new in the curriculum)
Year of the course in the curriculum	1 <sup>st</sup>
Semester of the course in the curriculum	2 <sup>nd</sup>
Language of instruction of the course	Armenian/English (on demand)
Number of ECTS credits	5

# 2. Learning outcomes of the course

Explanation: Please specify the learning outcomes of the course.

The learning outcomes support the final learning outcomes of the master programme and are based on the taxonomy of Bloom (Benjamin Bloom, 1957). The learning outcomes of the course are as follows:

- Be able to describe different aspects of innovation, remember and reproduce its role in the corporations.
- Explain, interpret and summarize the importance of new product development to corporation performance.
- Ability to analyze and recognize the significance of trends in the FinTech environment
- Engage and work effectively in groups.
- Identify and evaluate social, cultural, global, ethical and environmental responsibilities and issues.
- Exercise critical judgment in creating new understanding, evaluate the importance of innovations in economy growth, select and evaluate the best methods for the valuation of financial innovations.
- Identify, formulate and derive problems and identify and create process to solve them.





# 3. Syllabus of the course

Explanation: Please provide a detailed syllabus of the course (broken down in weeks) – maximum 2 pages

Timing	Module/Topic	Assignments and Literature	Assessment
Week 1	Class 1: Course Introduction	Course Syllabus, Google Classroom usage guidebook	Sign in to Google Classroom
	Class 2: Topic 1: Innovations in modern economy Definition of innovations Financial innovation types	Literature:  (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 1  (2) Błach, Joanna. (2011). Financial Innovations and Their Role in the Modern Financial System – Identification	
	Innovation process models Importance of innovations in corporations	and Systematization of the Problem. Financial Internet Quarterly "eFinanse". 7. 13-26. <b>Assignments</b> : Read and analyse the material, write a up to 250 words justification of why Armenia needs skilled employees in Financial Innovations for the next class (non- graded)	
Week 2	Class 3: Topic 1: Innovations in modern economy Definition of innovations Financial innovation types Innovation process models Importance of innovations in corporations	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 1 (2) Błach, Joanna. (2011). Financial Innovations and Their Role in the Modern Financial System – Identification and Systematization of the Problem. Financial Internet Quarterly "eFinanse". 7. 13-26  Assignments: Read and analyse the material	Presentation of assignment in the class, discussion of results, joint formation of conclusions
Week 3	Class 4: Topic 2: Disruptive Innovation The disruptive innovation model History, cases and perspectives Anomalies, Technological change and diffusion in banking	Literature:  (1) Christensen, Clayton M., Raynor, Michael E. and McDonald, Rory. (2015). What is Disruptive Innovation? Harvard Business Review. December 2015  (2) Frame, W. Scott, and White, Lawrence J. (2014). Technological Change, Financial Innovation, and Diffusion in Banking. Chapter prepared for The Oxford  Assignments: read and analyse the scholar article	
Week 3	Class 5: Topic 2: Disruptive Innovation The disruptive innovation model	Literature: (1) Christensen, Clayton M., Raynor, Michael E. and McDonald, Rory. (2015). What is Disruptive Innovation?	discussion in class, presentation,

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	History, cases and perspectives	Harvard Business Review. December 2015	written test, etc.
	Anomalies, Technological change and diffusion in banking	(2) Frame, W. Scott, and White, Lawrence J. (2014). Technological Change, Financial Innovation, and Diffusion in Banking. Chapter prepared for The Oxford	
Week 4	Class 6: Topic 3: Cluster of Innovation What is the cluster of innovation? COI components Manifestations in different infrastructures COI behaviours Silicon Valley case and Emerging Innovation economies	Literature:  (1) Engel, Jerome S. "Global Clusters of Innovation: Lessons from Silicon Valley." California Management Review 57, no. 2 (February 2015): 36–65. doi:10.1525/cmr.2015.57.2.36.  Assignments: Write an essay up to 500 words on the following topic "Armenia as an emerging innovation economy. issues and perspectives" 1st midterm 20% (4 points)	
Week 5	Class 7: Topic 3: Cluster of Innovation What is the cluster of innovation? COI components Manifestations in different infrastructures COI behaviours Silicon Valley case and Emerging Innovation economies	Literature:  (1) Engel, Jerome S. "Global Clusters of Innovation: Lessons from Silicon Valley." California Management Review 57, no. 2 (February 2015): 36–65. doi:10.1525/cmr.2015.57.2.36.	discussion in class, presentation, written essay, etc.
Week 5	Class 8: Topic 4: Innovative economy and intellectual property, legal aspects Issues of formation and development of science and innovation infrastructures The scope of activities of innovative infrastructures in RA	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 2,3 Assignments: read and analyse the Chapters 2,3	
Week 6	Class 9: Topic 4: Innovative economy and intellectual property, legal aspects Issues of formation and development of science and innovation infrastructures The scope of activities of innovative infrastructures in RA	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 2,3	discussion in class, presentation, written test, etc.
Week 7	Class 10: Topic 4: Innovative economy and intellectual property, legal aspects Issues of formation and development of science and innovation infrastructures The scope of activities of innovative infrastructures in RA	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 2,3 Assignments: read and analyse the Chapters 2,3	
Week 7	Class 11: Topic 4: Innovative economy and intellectual property, legal aspects Issues of formation and development of science and innovation infrastructures The scope of activities of innovative infrastructures in RA	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 2,3	discussion in class, presentation, written test, etc.
Week 8	Class 10: Topic 5: Financing resources of innovative	Literature:	

	activities Financial mechanism of innovative activity regulation Issues of venture financing Importance of bank finance in innovation	(1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 4 (2) Nylund, P. A., Arimany-Serrat, N., Ferras-Hernandez, X., Viardot, E., Boateng, H., & Brem, A. (2019). Internal and external financing of innovation. European Journal of Innovation Management. doi:10.1108/ejim-09-2018-0207 (3) Kerr, W. R., & Nanda, R. (2015). Financing Innovation. Annual Review of Financial Economics, 7(1), 445–462. doi:10.1146/annurev-financial-111914-041825 Assignments: Read and analyse the articles, solve the exercises	
Week 9	Class 11: Topic 5: Financing resources of innovative activities Financial mechanism of innovative activity regulation Issues of venture financing Importance of bank finance in innovation	Literature:  (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 4  (2) Nylund, P. A., Arimany-Serrat, N., Ferras-Hernandez, X., Viardot, E., Boateng, H., & Brem, A. (2019). Internal and external financing of innovation. European Journal of Innovation Management. doi:10.1108/ejim-09-2018-0207  (3) Kerr, W. R., & Nanda, R. (2015). Financing Innovation. Annual Review of Financial Economics, 7(1), 445–462. doi:10.1146/annurev-financial-111914-041825	discussion in class, presentation, written test, etc.
Week 9	Class 12: Topic 5: Financing resources of innovative activities Financial mechanism of innovative activity regulation Issues of venture financing Importance of bank finance in innovation	Literature:  (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 4  (2) Nylund, P. A., Arimany-Serrat, N., Ferras-Hernandez, X., Viardot, E., Boateng, H., & Brem, A. (2019). Internal and external financing of innovation. European Journal of Innovation Management. doi:10.1108/ejim-09-2018-0207  (3) Kerr, W. R., & Nanda, R. (2015). Financing Innovation. Annual Review of Financial Economics, 7(1), 445–462. doi:10.1146/annurev-financial-111914-041825  Assignments: Read and analyse the articles, solve the exercises	
Week 10	Class 13: Topic 5: Financing resources of innovative activities Financial mechanism of innovative activity regulation Issues of venture financing Importance of bank finance in innovation	Literature:  (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 4  (2) Nylund, P. A., Arimany-Serrat, N., Ferras-Hernandez, X., Viardot, E., Boateng, H., & Brem, A. (2019). Internal and external financing of innovation. European Journal of Innovation Management. doi:10.1108/ejim-09-2018-0207  (3) Kerr, W. R., & Nanda, R. (2015). Financing Innovation. Annual Review of Financial Economics, 7(1), 445–462. doi:10.1146/annurev-financial-111914-041825	discussion in class, presentation, written test, etc.
Week 11	Class 14: (Module: FinTech, New Developments) Topic 6: Basic Concepts of Fintech Categories of FinTech Supply and Demand Drivers of Financial Innovation Why is there so much hype around FinTech?	Literature:  (1) Zavolokina, L., Dolata, M. & Schwabe, G. Financ Innov (2016) 2: 16. <a href="https://doi.org/10.1186/s40854-016-0036-7">https://doi.org/10.1186/s40854-016-0036-7</a> (2) Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation? The Review of Financial Studies, 32(5), 2062–2106. doi:10.1093/rfs/hhy130  (3) Schindler, John W., Fintech and Financial Innovation: Drivers and Depth (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: https://ssrn.com/abstract=3029731 or <a href="http://dx.doi.org/10.17016/FEDS.2017.081">https://dx.doi.org/10.17016/FEDS.2017.081</a> Assignment: Form working groups (4-5 people) and make a presentation on the following topic "Armenian FinTech. what's next?" (activity grading)	

Week 11	Class 15: (Module: FinTech, New Developments) Topic 6: Basic Concepts of Fintech Categories of FinTech Supply and Demand Drivers of Financial Innovation Why is there so much hype around FinTech?	Literature:  (1) Zavolokina, L., Dolata, M. & Schwabe, G. Financ Innov (2016) 2: 16. https://doi.org/10.1186/s40854-016-0036-7  (2) Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation? The Review of Financial Studies, 32(5), 2062–2106. doi:10.1093/rfs/hhy130  (3) Schindler, John W., Fintech and Financial Innovation: Drivers and Depth (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: https://ssrn.com/abstract=3029731 or http://dx.doi.org/10.17016/FEDS.2017.081	discussion in class, presentation.
Week 12	Class 16: (Module: FinTech, New Developments) Topic 6: Basic Concepts of Fintech Categories of FinTech Supply and Demand Drivers of Financial Innovation Why is there so much hype around FinTech?	Literature:  (1) Zavolokina, L., Dolata, M. & Schwabe, G. Financ Innov (2016) 2: 16. <a href="https://doi.org/10.1186/s40854-016-0036-7">https://doi.org/10.1186/s40854-016-0036-7</a> (2) Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation? The Review of Financial Studies, 32(5), 2062–2106. doi:10.1093/rfs/hhy130  (3) Schindler, John W., Fintech and Financial Innovation: Drivers and Depth (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: <a href="https://ssrn.com/abstract=3029731">https://ssrn.com/abstract=3029731</a> or <a href="http://dx.doi.org/10.17016/FEDS.2017.081">https://ssrn.com/abstract=3029731</a> or <a href="http://dx.doi.org/10.17016/FEDS.2017.081">http://dx.doi.org/10.17016/FEDS.2017.081</a> <a href="https://dx.doi.org/10.17016/FEDS.2017.081">https://dx.doi.org/10.17016/FEDS.2017.081</a> <a 10.1186="" doi.org="" href="https:/&lt;/td&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Week 13&lt;/td&gt;&lt;td&gt;Class 17: (Module: FinTech, New Developments) Topic 6: Basic Concepts of Fintech Categories of FinTech Supply and Demand Drivers of Financial Innovation Why is there so much hype around FinTech?&lt;/td&gt;&lt;td&gt;Literature:  (1) Zavolokina, L., Dolata, M. &amp; Schwabe, G. Financ Innov (2016) 2: 16. &lt;a href=" https:="" s40854-016-0036-7"="">https://doi.org/10.1186/s40854-016-0036-7</a> (2) Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation? The Review of Financial Studies, 32(5), 2062–2106. doi:10.1093/rfs/hhy130  (3) Schindler, John W., Fintech and Financial Innovation: Drivers and Depth (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: <a href="https://ssrn.com/abstract=3029731">https://ssrn.com/abstract=3029731</a> or <a href="https://dx.doi.org/10.17016/FEDS.2017.081">https://dx.doi.org/10.17016/FEDS.2017.081</a>	discussion in class, presentation.
Week 13	Class 18: (Module: FinTech, New Developments) Topic 7: Fintech Regulation	Literature:  (1) Regulation and supervision of fintech, KPMG, 2019, https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf  (2) https://fintechnews.ch/fintech/regulation-fintech-europe/24608/  Assignments: Form working groups and discuss the issues Fintech companies can face in RA or globally, create a short presentation on it (2-3 slides)	
Week 14	Class 19: (Module: FinTech, New Developments) Topic 7: Fintech Regulation	Literature:  (1) Regulation and supervision of fintech, KPMG, 2019, <a href="https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf">https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf</a> (2) <a href="https://fintechnews.ch/fintech/regulation-fintech-europe/24608/">https://fintechnews.ch/fintech/regulation-fintech-europe/24608/</a>	discussion in class, presentation.
Week 15	Class 20: Topic 8: State regulation and support of innovative activity State Innovative policy	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 5 (2) RA Legislation on innovative activity and national innovative system	

	Formation of national innovative system  Legal aspects of innovative activity	Assignments: Review the legislation of RA, compare it to the global experience, create a 2-3 slide presentation with SWOT analysis	
Week 15	Class 21: Topic 8: State regulation and support of innovative activity State Innovative policy Formation of national innovative system Legal aspects of innovative activity	Literature: (1) Karapetyan Ts.J. Innovative activity, Yerevan, 2008, Chapter 5 (2) RA Legislation on innovative activity and national innovative system	discussion in class, presentation.
Week 16	Class 22: Topic 9: Valuation of financial innovations	Literature:  (1) Aswath Damodaran, The dark side of valuation, Valuing difficult-to-value companies, <a href="www.damodaran.com">www.damodaran.com</a> Assignment: Read and interpret the valuation methods, peculiarities. Do the assigned homework exercise?	
Week 17	Class 23: Topic 9: Valuation of financial innovations	Literature: (1) Aswath Damodaran, The dark side of valuation, Valuing difficult-to-value companies, <a href="www.damodaran.com">www.damodaran.com</a>	Class discussion, homework
Week 17	Class 24: Final Group Assignment and Wrap-up	Course Wrap-up and final group assignment. The final group assignment asks groups of students to submit a paper that describes an innovative idea and provide plans to implement the idea.	Grades will be assigned according to the idea, execution, writing, and presentation of the paper.





### 4. Teaching methodology of the course

Explanation: Please explain the teaching methodology and pedagogical approaches of the course – maximum ½ page

Acquisition of learning objectives is achieved through extensive reading, lecturing on indicated topics, discussions and group works. Students will advance the course scope and dig into the topics by reading, participating in course discussions, analysing assignments, non-graded tests after each topic and while the exam preparation. Implementation of open sources learning tools, mainly Moodle or Google classroom, will help to provide effective feedback and communication throughout the course. Non-graded tests are implemented to reveal the effectiveness of each topic and take new actions towards course adjustments and students' motivations.

#### 5. Labour market relevance of the course

Explanation: Please explain the labour market relevance of the course (linked to findings of WP1) – maximum ½ page

The course is enriched with applied seminars, that will allow students to experience the practical application of obtained knowledge with specific examples on RA and international companies. The labour market analysis showed that the market needs a stand-by technologically advanced students, who are familiar with the recent innovations used worldwide and effectively implement it in their everyday career, as well as be ready to develop and set up financial innovations in Armenia.

## 6. Assessment and grading

Explanation: Please explain the form of assessment of the course - maximum ½ page

The total score is 20 points. Two midterm papers (10 points) - 50% (1st midterm 20% (4 points), 2nd paper-30% (6 points)), final paper - 50% (10 points).

Evaluation of papers will be done according to the following criteria: form of the paper - 10%, paper content and relevance to topic - 70%, oral presentation - 20%.

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#### 7. References

Explanation: Please provide the main references and recommended reading for the course – maximum 1 page

The course reading material consists of articles from academic journals and lecture notes based on the articles.

- Błach, Joanna. (2011). Financial Innovations and Their Role in the Modern Financial System – Identification and Systematization of the Problem. Financial Internet Quarterly "eFinanse". 7. 13-26.
- Chen, M. A., Wu, Q., & Yang, B. (2019). How Valuable Is FinTech Innovation? The Review of Financial Studies, 32(5), 2062–2106. doi:10.1093/rfs/hhy130
- Christensen, Clayton M., Raynor, Michael E. and McDonald, Rory. (2015). What is Disruptive Innovation? Harvard Business Review. December 2015
- Engel, Jerome S. "Global Clusters of Innovation: Lessons from Silicon Valley."
   California Management Review 57, no. 2 (February 2015): 36–65.
   doi:10.1525/cmr.2015.57.2.36.
- Engel, Jerome S. "Global Clusters of Innovation: Lessons from Silicon Valley."
   California Management Review 57, no. 2 (February 2015): 36–65.
   doi:10.1525/cmr.2015.57.2.36.
- Financial Innovation ISSN: 2199-4730 (Online)
- Frame, W. Scott, and White, Lawrence J. (2014). Technological Change, Financial Innovation, and Diffusion in Banking. Chapter prepared for The Oxford
- https://fintechnews.ch/fintech/regulation-fintech-europe/24608/
- Karapetyan Ts.J. Innovative activity, Yerevan, 2008, 228 pages
- Kerr, W. R., & Nanda, R. (2015). Financing Innovation. Annual Review of Financial Economics, 7, 445–462. doi:10.1146/annurev-financial-111914-041825
- Nylund, P. A., Arimany-Serrat, N., Ferras-Hernandez, X., Viardot, E., Boateng, H., & Brem, A. (2019). Internal and external financing of innovation. European Journal of Innovation Management. doi:10.1108/ejim-09-2018-0207
- RA Legislation on innovative activity and national innovative system
- Regulation and supervision of fintech, KPMG, 2019, https://assets.kpmg/content/dam/kpmg/xx/pdf/2019/03/regulation-and-supervision-of-fintech.pdf
- Schindler, John W., Fintech and Financial Innovation: Drivers and Depth (2017-08-10). FEDS Working Paper No. 2017-081. Available at SSRN: https://ssrn.com/abstract=3029731 or http://dx.doi.org/10.17016/FEDS.2017.081
- Zavolokina, L., Dolata, M. & Schwabe, G. Financ Innov (2016) 2: 16. https://doi.org/10.1186/s40854-016-0036-7

# 8. Course assignments

Explanation: Please provide two assignments for the course (e.g. group work, project, essay, case study, homework).

#### 8.1 Assignment 1

The students should write an essay up to 500 words on the following topic:

#### "Armenia as an emerging innovation economy. issues and perspectives"

The essay must be typed on a computer and comply with the following requirements: Font: Times New Roman, font size 12 and a line spacing of 1.5.

Word count: The length of the essay should not exceed 500 words.

The essay that exceeds the mentioned word count will not be reviewed and graded. Footnotes should be included in the word count of the main text.

Not included in this count: the front page (with name and title etc.), summary, table of

Technically the paper be well organized in titles and subtitles, footnotes and references.

The paper should follow the following recommended structure for each question:

- (1) Table of contents
- (2) Introduction. The introduction is to be placed in the beginning of the paper and should contain the following:
- Interpretation of essay question

contents and references (bibliography).

- Clarification of terms (or definitions) if necessary
- Presentation of the structure of the text (an overview of the chapters).
- (3) Methodology (optional). If relevant, a discussion of methodological issues that the research question raises and how you want to address these issues, including a description of the main sources that you will use in your assignment (e.g., an overview over applicable legal standards, procedures and sources).
- (4) Main text (body) This is the section where you develop the arguments.
- (5) Conclusion
- (6) Annex: List of references (bibliography)

Rules on cheating and plagiarism. When you take facts, thoughts, ideas, viewpoints and short or long quotations from others and use them in your own work, the sources you have used must be clearly stated. In other words, you must not give the impression that others' thoughts, ideas, viewpoints and results are your own if they are not. For example, using word-for-word or even paraphrasing the language of a UN Report without attributing the source of that language is plagiarism. Using another's idea without attributing the idea to the person who conceived it is also plagiarism. Avoid quoting long excerpts and articles; short citations are preferred, and instead provide an evaluation of the literature that is necessary to defend your points of view. Be sure that you are familiar with the use of sources and the rules for citing/quoting from others' work when writing assignments and theses<sup>1</sup>.

https://www.uio.no/studier/emner/jus/humanrights/HUMR5508/v13/undervisningsmateriale/humr5508-instructions-term-paper-v13.pdf

# 8.2 Assignment 2

The final group assignment asks groups of students to submit a paper that describes an innovative idea and provide plans to implement the idea.

The students must make a presentation of idea with sound financial justification of its efficiency and implementation models.

Grades will be assigned according to the idea, execution, writing, and presentation of the paper.

# **Annex: Presentation slides**

Explanation: Please provide presentation slides for your course (this can be done in a separate document, e.g. Power Point (Minimum: 25 slides)

Please see attached