STATE EDUCATIONAL INSTITUTION OF HIGHER PROFESSIONAL EDUCATION «RUSSIAN-ARMENIAN (SLAVONIC) UNIVERSITY»

Complied in accordance to state requirements for minimum content and level of graduates' training of the given directions and Regulations on Curriculum in RAU.

CONFIRMED:

Director Aramyan Zh. B.

«2» 18 July 2023

INSTITUTE OF ECONOMICS AND BUSINESS

Chair: Economic Theory and the Issues of Transition Period Economies

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CURRICULUM

Discipline: Evidence-Based Decision-Making

For Master Programs

Specialization: Political Economics

Direction: Economics

YEREVAN 2023

1.1. Abstract

In an increasingly information rich environment, it is important to teach students decision-making alongside information gathering and management methods. This course examines the implementation of evidence-based decision-making in a first year introduction to management course. Students will learn decision awareness, decision-making process creation and decision practice alongside areas of management and basic business principles. Students will perceive increased skill in decision-making, both individually and in groups. This venture has implications for others looking to help students not only learn experientially, but also improve critical thinking in practice.

Teaching management is no longer just about teaching good management methods and where to find quality information for implementation of management methods; it is now also about teaching students how to weave information together with methods to make informed decisions. Teaching evidence-based decision-making is about slowing down the process of decision-making so that students can use their own logical minds to see how their brains might be missing elements of the decision on the way towards elegant answers. Teaching business students how to best use and evaluate the massive amount of information available to them is essential.

Making decisions takes up a high percentage of an executive or manager's time (Mintzberg, 1997), and part of the role of a business school is to prepare students to make informed decisions, many of which can determine if a business will flourish. In previous decades, it was the role of the business school to lead students to appropriate sources of information. While information gathering remains an integral role, it has been equaled, if not overshadowed, by the need to help students sort through the overabundance of information now available, and to help them learn how to use that information to make the best possible decisions.

The focus of this course is to examine the implementation of evidence-based decision-making in a first year introduction to management course and to discuss student perceptions on both group and individual decision-making.

1.2. Requirements for the initial level of students' knowledge and abilities

The course «Evidence-Based Decision Making» refers to the disciplines of the specialization of the Master's program and assumes basic knowledge of the basic principles of macroeconomic policy, especially monetary and fiscal policy, as well as master the basics of management.

2.1. Aim and objectives of the discipline

The idea of evidence-based management has evolved, with the goal of improving the quality of decision making by using critically evaluated evidence from multiple sources, such as organizational data, professional judgment, and the scientific research literature. While this sounds sensible and straightforward, gathering, understanding and using evidence is challenging in many ways and requires a set of specific skills. While there are many courses aimed at developing such skills in medicine and related fields, there are relatively few aimed at students or practitioners in schools of public policy and administration.

This course will develop evidence-based skills of the students and enhance their understanding of how an evidence-based approach can be used to support organizational decision-making and management practice. This course takes a problem-based approach: starting point are the practical issues (problems/opportunities) typically encountered by practitioners rather than the body of knowledge produced by academics.

Grading Policy

The final course grade is calculated from points earned from participation, homework assignments, examinations and a course project, as follows:

Participation 10%

Class assignments 10%

Course project 55%

Final examination 25%

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Total 100%

2.3. The complexity of the discipline and types of educational work (in academic hours and credits)

2.3. 1. Discipline volume and types of training activities in accordance with the working study plan

Types of educational work	Total hours	Hours in semester	
		I semester	II semester
1	2	3	4
1. Total complexity of discipline by semesters, including	**72**	**72**	
1.1. Auditorium learning, including	36	36	

1.1.1. Lectures	18	18	
1.1.2. Practical learning	18	18	
2. Independent work	36	36	
3. Form of the final control: Exam/Credit	**Pass**	**Pass**	

2.3.2. Content of the discipline and weights for the forms of control

Discipline volume distribution on the topics and types of training activities

Sections and topics of discipline	**Total hours**
1	**2**
Part 1. Selection of required data	**8**
Topic 1. Multifactor analysis of the quality assurance and process management in the formation of semi-finished products for the production of innovative products.	3
Topic 2. The structure and elements of the process model with emphasis on production and technological criteria.	3
Topic 3. Justification of the choice of key quality indicators of the process.	2
Part 2. Collecting facts	**8**
Topic 1. Methodology for collecting and analyzing information based on the formation and positioning of integral quality indicators in a multidimensional data warehouse.	4
Topic 2. A three-stage model of the internal audit of the innovation process, taking into account production and technological factors.	4
Part 3. Interpretation of the facts (processing and analysis of the collected statistical material	**12**
Topic 1. Iterative process quality improvement based on numerical methods.	**4**
Topic 2. Comprehensive statistical analysis and process control.	**4**
Topic 3. Control charts based on relative quality indicators	**4**
Part 4. Decision- making	**6**
TOTAL	**36**
Academic credits	2

Weights and forms of control	Weights of forms of current controls in the resulting mark of the current control			Weights of forms of intermediate control, and the resulting mark of the current control in the final mark of the intermediate control		
Type of training activities/control	**M1**	**M2**	**M3**	**M1**	**M2**	**M3**
Presentation				0	0,6	0,6
Recitation/Group presentation/Discussions	0	1	1			
Weight of the resulting marks of current controls in the final marks of appropriate intermediate control				0	0,4	0,4
Weight of the final mark of the 1st intermediate control in the resulting mark of intermediate controls						
Weight of the final mark of the 2nd intermediate control in the resulting mark of intermediate controls						
Weight of the final mark of the 3rd intermediate control in the resulting mark of intermediate controls						
Weight of the resulting mark of intermediate controls in the resulting mark of final control						
Exam/Credit (Mark of final control)						
	∑ =1	**∑ =1**	**∑ =1**	**∑ =1**	**∑ =1**	**∑ =1**

2.4. Content of sections and topics of the discipline

Part 1. Selection of required data

Topic 1. Multifactor analysis of the quality assurance and process management in the formation of semi-finished products for the production of innovative products.

Topic 2. The structure and elements of the process model with emphasis on production and technological criteria.

Topic 3. Justification of the choice of key quality indicators of the process.

Part 2. Collecting facts

Topic 1. Methodology for collecting and analyzing information based on the formation and positioning of integral quality indicators in a multidimensional data warehouse.

Topic 2. A three-stage model of the internal audit of the innovation process, taking into account production and technological factors.

Part 3. Interpretation of the facts (processing and analysis of the collected statistical material

Topic 1. Iterative process quality improvement based on numerical methods.

Topic 2. Comprehensive statistical analysis and process control.

Topic 3. Control charts based on relative quality indicators

Part 4. Decision- making

Basic literature for students:

- Association of College & Research Libraries. (1989). Presidential Committee on Information Literacy: Final Report | Association of College & Research Libraries (ACRL). Retrieved from http://www.ala.org/acrl/publications/whitepapers/presidential
- Baepler, P., Walker, J. D., & Driessen, M. (2014). It's not about seat time: Blending, flipping, and efficiency in active learning classrooms. Computers & Education, 78, 227–236. **https://doi.org/10.1016/j.compedu.2014.06.006**
- Barends, E., Rousseau, D. M., & Briner, R. B. (2014). Evidence-Based Management: The Basic Principles. Amsterdam. Retrieved from **http://www.cebma.org**
- Bevan, D., & Kipka, C. (2012). Experiential learning and management education. Journal of Management Development, 31(3), 193–197. **https://doi.org/10.1108/02621711211208943**
- Burke, L., & Rau, B. (2010). The Research-Teaching Gap in Management. Academy of Management Learning & Education. 9(1), 132-143.
- Deslauriers, L., Schelew, E., & Wieman, C. (2011). Improved Learning in a Large-Enrollment Physics Class. Science, 332(6031), 862–864. **https://doi.org/10.1126/science.1201783**
- Everly, M. C. (2013). Are students' impressions of improved learning through active learning methods reflected by improved test scores? Nurse Education Today, 33(2), 148–151. **https://doi.org/10.1016/j.nedt.2011.10.023**
- Fiegen, A. M. (2011). Business Information Literacy: A Synthesis for Best Practices. Journal of Business & Finance Librarianship, 16(4), 267–288. **https://doi.org/10.1080/08963568.2011.606095**

- Gantz, J., & Reinsel, D. (2012). The Digital Universe in 2020: Big Data, Bigger Digital Shadows, and Biggest Growth in the Far East. Retrieved from **https://www.emc.com/collateral/analyst-reports/idc-the-digital-universe-in-2020.pdf**
- Haak, D. C., HilleRisLambers, J., Pitre, E., & Freeman, S. (2011). Increased Structure and Active Learning Reduce the Achievement Gap in Introductory Biology. Science, 332(6034), 1213–1216. **https://doi.org/10.1126/science.1204820**
- Herrington, J. D., & Arnold, D. R. (2013). Undergraduate business education: It's time to think outside the box. Journal of Education for Business, 88(4), 202–209.
- Highhouse, S. (2008). Stubborn reliance on intuition and subjectivity in employee selection. Industrial and Organizational Psychology, 1(3), 333–342.
- Jelley, R. B., Carroll, W. R., & Rousseau, D. M. (2012). Reflections on teaching evidence-based management. Oxford Handbook of Evidence-Based Management, 337–355.
- Jones, R. C. (2014). Making Better (Investment) Decisions. Journal of Portfolio Management, 40(2), 17,128-143. Retrieved from **http://search.proquest.com/docview/1496996059?accountid=13360**
- Kahneman, D. (2011). Thinking, fast and slow (1st ed. .). New York: New York : Farrar, Straus and Giroux.
- Kerr, N. L., MacCoun, R. J., & Kramer, G. P. (1996). Bias in judgment: Comparing individuals and groups. Psychological Review, 103(4), 687.
- Kolb, D. A. (2015). Experential Learning: Experience as the Source of Learning and Development (Second). Pearson Education Inc. Kolb, D. A., & Fry, R. (1975). Toward an applied theory of experiential learning. In C. Cooper (Ed.), Theories of Group Process (pp. 33–57). London: John Wiley. Running Head: Evidence-Based Decision-Making 16
- Leigh, J. S. A., & Gibbon, C. A. (2008). Information literacy and the introductory management classroom. Journal of Management Education, 32(4), 509–530.
- Lyon, D. C., & Lagowski, J. J. (2008). Effectiveness of Facilitating Small-Group Learning in Large Lecture Classes. Journal of Chemical Education, 85(11), 1571. **https://doi.org/10.1021/ed085p1571**
- Mazur, E. (2009). Farewell, Lecture? Science, 323(5910), 50–51. https://doi.org/10.1126/science.1168927 McCarthy, P. R., &
- McCarthy, H. M. (2006). When Case Studies Are Not Enough: Integrating Experiential Learning Into Business Curricula. Journal of Education for Business, 81(4), 201–204. Retrieved from **http://search.proquest.com/docview/202820805?accountid=13360**
- Meehl, P. E. (1954). Clinical versus statistical prediction: A theoretical analysis and a review of the evidence. Mintzberg, H. (1997). The manager's job: Folklore and fact. Leadership: Understanding the Dynamics of Power and Influence in Organizations, 35–53.
- Missildine, K., Fountain, R., Summers, L., & Gosselin, K. (2013). Flipping the Classroom to Improve Student Performance and Satisfaction. Journal of Nursing Education, 52(10), 597–599. **https://doi.org/10.3928/01484834-20130919-03**
- Purdue Data Digest. (2017). Retrieved August 14, 2017, from https://www.purdue.edu/datadigest/ Rousseau, D. M. (2012). Envisioning evidence-based management. The Oxford Handbook of Evidence-Based Management, 3–24.
- Rousseau, D. M., & Mccarthy, S. (2007). Educating Managers from an Evidence-Based Perspective. Source: Academy of Management Learning & Education, 6(1), 84–101. Retrieved from **http://www.jstor.org/stable/40214519**
- Rynes, S. L., Bartunek, J. M. (2017). Evidence-Based Management: Foundations, Development, Controversies and Future. Annual Review of Organizational Psychology and Organizational Behavior, 4(1), 235-261.

- Salipante, P., & Kowal Smith, A. (2012). From the 3 Rs to the 4 Rs: Toward doctoral education that encourages evidence-based management through problem-focused research. The Oxford Handbook of Evidence-Based Management, 1049–1104.
- Senecal, K., & Fratantuano, M. J. (1994). Active Learning. College & Undergraduate Libraries, 1(2), 139–150. **https://doi.org/10.1300/J106v01n02_13**
- Stonebraker, I. (2015). Flipping the business information literacy classroom: Redesign, implementation, and assessment of a case study. Journal of Business & Finance Librarianship, 20(4), 283-301.
- Stonebraker, I. (2016). Toward informed leadership: Teaching students to make better decisions using information. Journal of Business & Finance Librarianship, 21(3–4), 229–238. **https://doi.org/10.1080/08963568.2016.1226614**
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a Methodology for Developing Evidence-Informed Management Knowledge by Meas of Systematic Review. British Journal of Management, 14, 207-222. https://doi.org/10.1111/1467-8551.00375