Course title: BUSINESS DECISION MAKING

Lecturers	Full Prof. Nina Begičević Ređep, Ph.D.
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Language of instruction	Croatian and English
Study level	Bachelor
Study programme	Information and Business Systems
Semester	2 nd (summer)
ECTS	4
Goal	The objective of the Business Decision Making course is to introduce students with basic concepts of business decision making and with the findings of decision theory that are necessary for quality decision making (problem defining and information gathering) and development of models for analysis and making business decisions. Special attention will be given to the elements of decision quality. Also, the decision-making approaches, decision making styles, and hidden traps in decision making will be addressed. Within the course, students will be introduced with quantitative and qualitative decision-making methods and decision support systems. Students will apply adopted methods as well as systems within the given assignments and case studies in ICT projects.
General and specific learning outcomes	 Identify and understand relevant factors that affect the business operation of an organization and individuals, and apply basic methods and concepts of business planning, management and accounting. Identify key data and information for making rational business decisions. Understand and apply appropriate mathematical methods, models and techniques to solving problems in the information and business systems field. Understand and apply contemporary methodological approaches to developing organizational and information systems, and designing organizations and organizational structures. Understand the basic principles and methods of organizational management and have the ability to successfully work in a team.
Content	 Introduction to business decision making (2 hours) – Introduction to the course objectives and purpose of the course. Concept, definition, and role of the business decision making. Decision making problems. Phases of the decision-making process.
	2. Decision making theories and elements of quality decision making (2 hours) - Structure and type of decisions. Elements of quality decision making. Qualitative and quantitative dimensions of the decision. Normative and descriptive decision theory.
	3. Decision making approaches (2 hours) - Decision making approaches. Group decision making. Techniques of the group decision making. Morphological analysis. Delphi Method. Nominal group Technique. Brainstorming.

- 4. Decision making in an organizational context (2 hours) Importance and influence of organizational structure on decision making in an organization. The influence of organizational culture on the behavior of decision makers. Ethics of decision maker.
- 5. Decision making styles and conflicts in decision making (2 hours) Decision making styles. The Vroom-Yetton decision model. Types of conflicts in an organization. Causes of conflict. Ways of responding to conflicts. Sources of power in an organization and its influence on decision making. Organizational policy.
- **6. Errors in decision making (2 hours)** Approaches to the decision making (behavioral, humanistic, psychodynamic, cognitive). Errors (biases) in decision making: the status quo bias, the anchoring bias, the framing bias, the sunk-cost bias, etc.
- **7. Creative problem solving and critical thinking (2 hours)** The importance of creativity in business. Theories of creativity and the creative problem solving. Creativity Techniques. Elements of critical thinking. Levels of critical thinking.
- **8. Negotiating and decision making (2 hours)** The importance and role of negotiation in decision making and problem solving. Preparation for negotiation. Negotiation Strategies. Types of Negotiators. Analysis of examples.
- 9. Simple methods for multi-criteria decision making (2 hours) The importance of multi-criteria decision-making methods. An overview of basic multi-criteria decision-making methods. Ranking by appraisal of group members. Ranking based on assigning ranks by group members. Basic assumptions of voting theory. Voting Methods. Advantages and disadvantages of simple methods for multi-criteria decision making.
- 10. PrOACT Approach to Decision Making and a rational method for making tradeoffs (2 hours) Elements of PrOACT approach: Problem, Objectives, Alternatives, Consequences, Tradeoffs, Uncertainty, Risk Tolerance, Linked Decisions. A rational method for making tradeoffs (The Even Swap method).
- **11. Simple Additive Weighting Method (2 hours)** Criteria and types of criteria. Criteria values. Scales of criteria values. Criteria weights. Methods for determining the weights of criteria. Direct assessment. SWING method. Rank reciprocal method. Normalization and the role of normalization. Types of normalizations (according to highest, lowest and range of values).
- **12.** Pairwise comparison and basics of AHP method (4 hours) Determining priority of alternatives and weights of criteria based on their pairwise comparison. Saaty's scale of relative importance. Inconsistency in comparison. Approximate solution method. Aggregating the weights of criteria and local priorities of alternatives into global priorities of alternatives. The sensitivity analysis.
- **13.** Information systems as a support to decision making (2 hours) The role and importance of decision support systems. Analysis of examples of application of decision support systems in decision making.
- 14. An overview of the functionalities of decision support systems (2 hours) Analysis of examples of the application of decision support systems in ICT projects. Analysis of decision support systems functionalities and practical work. Application of decision-making methods with the support of decision support systems.

Exercises	The seminars follow the lectures and students analyze concrete problems through the perspective of topics delivered on lectures.
Realization and examination	Classes: Lectures, and seminars Exam: Activities on classes and tests
Related courses	 University of Cambridge, Faculty of Economics and Politics http://www.econ.cam.ac.uk/faculty/sciubba/Teaching/teaching.html University of Oxford, Said Business School, (MBA Programme) http://www.sbs.ox.ac.uk/html/mba_corecourses.asp Sveučilište u Ljubljani, Ekonomski fakultet http://www.uni-lj.si/Clanice/SP03/ef03.pdf
Literature	Basic: Sikavica, Hunjak, Begičiević Ređep, Hernaus: Poslovno odlučivanje, Školska knjiga, Zagreb, 2014. Additional: Albright, Winston. Data Analysis and Decision Making. Cengage Learning. 2015. Sauter. Decision Support Systems for Business Intelligence. Wiley. 2011.Kesić, T.: Marketinška komunikacija, MATE, Zagreb, 1997.