

## Syllabus of the course « Behavioral Finance»

Approved by  
Academic council of the Finance and Credit  
Master's programme  
Protocol № 1 as of 31.08.2017

Author(s)	Porshnev A.V.
ECTS	4
Contact hours	40
Self-study	112
Year	2
Teaching format	Full time

### I. COURSE AIM, LEARNING OUTCOMES AND PREREQUISITES

The aim of the course “Behavioral Finance” is to develop students’ understanding of a behavioral perspective in economics.

Upon the completion of the course the student should:

**know:**

- Key Concepts of Behavioral Economics,
- Possible Applications
- Contemporary research in this field

**be able to:**

- analyze situations,
- apply behavioral finance concepts and models
- read academic literature devoted to the behavioral perspective

**have skills in:**

- identifying situations in which heuristics could cause harm quality of decision
- in regarding economic situations from behavioral perspective
- discussion of interdisciplinary research

The course is based on the following prerequisites:

- General Psychology,
- Microeconomics,
- Econometrics

To successfully complete the course the students should have the following knowledge and competences:

- analysis of decision making situations;
- application behavioral finance concepts and models in financial decisions;
- critical thinking;
- academic reading.

The fundamental principles of the course should be later used in their own studies and accomplishing the master thesis:

### II. COURSE CONTENT

**Topic 1.** Heuristics in information processing (Foundations and Key Concepts).

Foundation of behavioral finance and key concepts: limited cognitive capacity, heuristics, bounded rationality. Differences between traditional and behavioral approaches. The role of the unconscious in financial decisions. Role and properties of heuristics.

Main effects: overconfidence and illusion of control; the representativeness and availability heuristic; familiarity bias, disposition effect; anchoring and adjustment; status quo; loss and regret aversion; ambiguity aversion; mental accounting; framing; other behavioral biases.

Prospect theory (Tversky, Kahneman, 1979). Cumulative prospect theory (Tversky, Kahneman, 1992).

Role of mood and impact of emotions. National culture in financial decisions.

**Topic 2.** Heuristics and biases in business decision making (Applications of behavioral economics).

Efficient-market hypothesis (Fama, 1965), adaptive markets hypothesis (Lo, 2005), and research on market inefficiency (Majumder, 2013).

Role of heuristics in enterprise decision making and financing decisions. Behavioral perspective in capital budgeting, dividend policy decisions, loyalty, agency conflicts, and corporate governance. Comparison of two approaches for model mergers and acquisitions: first, assumes that managers are rational and markets are inefficient (Shleifer and Vishny, 2003); second, suppose that irrational managers operating in efficient markets (e.g. Goel and Thakor, 2009).

Behavioral biases in individual investor trading: disposition effect; the tendency to trade geographically nearby stocks; and role individual learning in trading. Portfolio choice: Rank-dependent expected utility (Quiggin, 1982; Yaari, 1987) and Cumulative prospect theory (Tversky and Kahneman, 1992). Role of age and experience in financial decisions.

**Topic 3.** Contemporary issues.

Neuroeconomics and neurofinance. Origins of nonoptimal economic behavior, from biological perspective. Results obtained using magnetic resonance imaging, serum studies, genetic assays, and electroencephalogram in used in experimental economic research. Smart institutions Gode and Sunder (1993). “Zero-intelligent” traders simulation.

Psychological Influences on Financial Regulation and Policy. Systematic biases of designers of accounting and financial policy—regulators, politicians, voters, and users: limited attention, omission bias, in-group bias, fairness and reciprocity norms, overconfidence, mood effects and attention cascades, and cultural evolution of ideology.

Using textual sentiment in finance. Design of empirical models using text mining. Integration of Data mining, Machine learning, Natural language processing (NLP), Information retrieval (IR) and Knowledge management in financial forecast.

### III. GRADING

The criteria for evaluation of students’ competencies are as follows:

#### **Class work (60%)**

- Individual assignment and presentations
- Article-based presentation 1
- Article-based presentation 2

As regards the presentations, students are expected to analyze a scientific article, provide a clear presentation of its strengths and weaknesses to their peers and discuss possible application of the article content.

#### **Exam test (40%)**

Test consists from 28 questions. Usually its vignettes there student should forecast behavior of majority using course concepts. Some questions could be connected, for example we expect that if students aware of influence of heuristics or emotions should be able to control them and behave in consistent way.

$$G_{\text{final}} = 0.4 \cdot G_{\text{exam}} + 0.6 \cdot G_{\text{activity}}$$

#### IV. SAMPLE ASSESSMENT TOOLS

Tools for ongoing assessment

##### **Sample assignments**

##### **Individual presentation**

Provide analysis detailed analysis of an article for peers. Please use provided layout for presentations:

1. The Big Picture
2. The Big Point
3. The Premise or Hypothesis
4. Data, Sources, or Arguments
5. Theories or Conceptual Approaches
6. Analytical or Research Methods
7. Results of Analysis

##### ***Example of articles for presentations:***

1. Gottlieb, D. (2012). Prospect Theory, Life Insurance, and Annuities. *The Wharton School Research Paper*, (44). Retrieved from <https://bepp.wharton.upenn.edu/bepp/assets/File/AE-SU12-Gottlieb.pdf>
2. Hossain, T., & List, J. A. (2012). The Behavioralist Visits the Factory: Increasing Productivity Using Simple Framing Manipulations. *Management Science*, 58(12), 2151–2167. doi:10.1287/mnsc.1120.1544
3. Kaplan, B. A., & Reed, D. D. (2013). Decision processes in choice overload: A product of delay and probability discounting? *Behavioural Processes*, 97, 21–24. doi:10.1016/j.beproc.2013.04.001
4. Reed, D. D., Kaplan, B. A., & Brewer, A. T. (2012). Discounting the freedom to choose: Implications for the paradox of choice. *Behavioural Processes*, 90(3), 424–427. doi:10.1016/j.beproc.2012.03.017

5. Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338(6107), 682–685.

Tools for final assessment

Yesterday Petrov took part in one of FOREX seminars and now he realize that it is his destiny. His friends Sidorov and Ivanoff tried to convince him that it is no so simple, arguing that they lost approximately \$1000 trading on FOREX. In spite of view of his friends, Petrov feels himself more confident and plan to move from demo into real account tomorrow using \$1500 of family savings. What kind of behavioral effect we could see in this case?

[optimistic bias]

[illusion of control]

[hindsight bias]

[expert judgment]

[dollar effect]

Ivan decided to conduct a study to determine if a predisposition RBC journalists who publish market reports to certain the prognosis (optimistic or pessimistic). What kind of the effect he should also look for?

[prospect theory]

[illusion of control]

[hindsight bias]

[expert judgment]

[frog effect]

Valentina K. often repeats to her husband: “I told you”, “I warned you”. Usually husband of Valentina Nicholas become angry and tries to remember exactly what Valentine said. Sometimes Valentine did gave a good advice , but sometimes her advice led to deterioration of the situation. What kind of behavioral effect we could see in this case?

[prospect theory]

[illusion of control]

[hindsight bias]

[expert judgment]

## V. RESOURCES

### 5.1 Main literature

1. Бернштейн, П. Л. Фундаментальные идеи финансового мира: Эволюция [Электронный ресурс] / П.Л. Бернштейн; пер. с англ. В. Ионова; ЭБС Znanium. – 4-е изд. – М.: Альпина Паблишер, 2017. – 247 с. – ISBN 978-5-9614-6338-5. – Режим доступа: <http://znanium.com/bookread2.php?book=926435>. – Загл. с экрана.

2. Heukelom, F. Behavioral Economics: A History [Электронный ресурс] / F. Heukelom; БД Books 24x7. – Cambridge University Press, 2014. – 238 p. – ISBN 978-1107-03934-6. – Режим доступа: <https://library.books24x7.com/toc.aspx?bookid=62166>. – Загл. с экрана.

## 5.2 Further readings

1. Kolb, R.W. Behavioral Finance: Investors, Corporations, and Markets [Электронный ресурс] / Robert W. Kolb, edited by H. Kent Baker, John R. Nofsinger; БД ebrary. – vol. 6.– John Wiley & Sons, Incorporated, 2010. – 770 p. – (Robert W. Kolb Ser.) – ISBN 978-1118-25841-5. – Режим доступа: <https://ebookcentral.proquest.com/lib/hselibrary-ebooks/reader.action?docID=589050&query=Behavioural+Finance+>. – Загл. с экрана.

2. Behavioral Finance: Investors, Corporations, and Markets // by Н. Kent Baker and John R. Nofsinger// John Wiley & Sons © 2010 (757 pages) ISBN:9780470499115 [access] <http://library.books24x7.com/toc.aspx?bookid=40585>

3. Botti, S., & Hsee, C. K. (2010). Dazed and confused by choice: How the temporal costs of choice freedom lead to undesirable outcomes. *Organizational Behavior and Human Decision Processes*, 112(2), 161–171. doi:10.1016/j.obhdp.2010.03.002

4. Fenton-O’Creevy, M., Nicholson, N., Soane, E., & Willman, P. (2003). Trading on illusions: Unrealistic perceptions of control and trading performance. *Journal of Occupational and Organizational Psychology*, 76(1), 53–68. doi:10.1348/096317903321208880

5. Gino, F., Sharek, Z., & Moore, D. A. (2011). Keeping the illusion of control under control: Ceilings, floors, and imperfect calibration. *Organizational Behavior and Human Decision Processes*, 114(2), 104–114. doi:10.1016/j.obhdp.2010.10.002

6. Gottlieb, D. (2012). Prospect Theory, Life Insurance, and Annuities. *The Wharton School Research Paper*, (44). Retrieved from <https://bepp.wharton.upenn.edu/bepp/assets/File/AE-SU12-Gottlieb.pdf>

7. Junqué de Fortuny, E., De Smedt, T., Martens, D., & Daelemans, W. (2014). Evaluating and understanding text-based stock price prediction models. *Information Processing & Management*, 50(2), 426–441. doi:10.1016/j.ipm.2013.12.002

8. Kaplanski, G., & Levy, H. (2014). Sentiment, irrationality and market efficiency: The case of the 2010 FIFA World Cup. *Journal of Behavioral and Experimental Economics*, 49, 35–43. doi:10.1016/j.socec.2014.02.007

9. Kearney, C., & Liu, S. (2014). Textual sentiment in finance: A survey of methods and models. *International Review of Financial Analysis*, 33, 171–185. doi:10.1016/j.irfa.2014.02.006

## 5.3 Software

№	Name	Access
1.	Microsoft Windows 8.1 Professional RUS	Из внутренней сети университета (договор)
2.	Microsoft Office 2007 Prof +	Из внутренней сети университета (договор)

#### 5.4 Professional database, enquiry systems, internet sources (electronic educational resources)

№ п/п	Name	Access
	<i>Internet sources, electronic educational resources</i>	
1.	TED lecture by leading behavioral economists D.Kahneman, D.Ariely and others	URL: <a href="https://ted.com">https://ted.com</a>

#### 5.5 Course support

Lecture rooms for the course classes are equipped with the necessary tools for the course visual aids demonstration:

- computer with access to the internet (operational system, office software packages, antivirus software);
- multimedia projector with remote control.