

Neuromarketing

Course code	<i>MNG238</i>
Compulsory in the programmes	<i>Business Management and Marketing</i>
Level of studies	<i>Undergraduate</i>
Number of credits and	<i>6 ECTS (48 contact hours + 6 consultation hours, 106 individual work hours)</i>
Course coordinator (title and name)	<i>Dr. Dalia Bagdžiūnaitė and Indrė Razbadauskaitė-Venskė</i>
Prerequisites	<i>Principles of Marketing</i>
Language of instruction	<i>English</i>

THE AIM OF THE COURSE:

This course will introduce contemporary approaches and their application to the marketing mix and design processes. The course literature will cover different topics of consumer decision-making, attention, emotion, motivation, habit formation, and senses providing a better understanding of the underlying conscious and unconscious processes that ultimately drive consumer choices. Relevant theories will be analyzed in reflection on different marketing cases. Furthermore, neural, physiological, and behavioural measurement methods such as eye-tracking, electroencephalography, fMRI, and others, will be introduced and discussed regarding their application to solving different marketing challenges. This understanding will provide a deeper insight into how brand, product design, advertising, and in-store information are processed in consumers' brains and how this knowledge can be used to inform marketing strategy.

To provide students with the fundamental knowledge of neuromarketing principles, methods, and their application to seek for more effective marketing solutions.

MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESSMENT AND TEACHING METHODS

Course level learning outcomes (objectives)	Degree level learning objectives (Number of LO)	Assessment methods	Teaching methods
CLO1. To understand the key concepts of neuromarketing and be able to reflect upon the role of in reaching marketing goals.	BLO1.1.	Lecture, discussions, self-study, group work	Midterm, exam, homework assessment during seminars
CLO2. To discuss processes such as attention, perception, emotion, motivation, habits, senses, and their relevance to marketing-related topics.	BLO1.1.	Lecture, discussions, self-study, group work	Midterm, exam, homework assessment during seminars
CLO3. To be able to reflect upon the course literature and the practical application of the neuromarketing and consumer neuroscience theories and methods to solve specific marketing challenges.	BLO1.1. BLO1.2. BLO2.1	Lecture, discussions, self-study, group work	Midterm, exam, homework assessment during seminars
CLO4. To identify and discuss the limitations of different theoretical and methodological approaches in relation to	BLO4.2.	Lecture, discussions, self-	Midterm and final exam, homework

neuromarketing.		study, group work	assessment during seminars
CLO5. To identify and articulate the marketing research objectives and discuss pros and cons of the traditional approaches in comparison to the modern research approaches application to reach those objectives.	BLO1.1. BLO1.2. BLO2.1.	Lecture, discussions, self-study, group work	Homework assessment during seminars
CLO6. To work in a team, to present work results in written or oral form, to argue decisions.	BLO4.2. BLO 4.3.	Lecture, discussions, self-study, group work	Homework assessment during seminars

ACADEMIC HONESTY AND INTEGRITY

The teaching and testing methods are chosen considering the purpose of the minimization of cheating opportunities. Individual tasks are assigned. Tasks rotate year by year, from student to student. The ISM regulations on academic ethics will be fully applied in the course.

COURSE OUTLINE

Topic	In-class hours	Readings
<p>Introduction to the Course</p> <ul style="list-style-type: none"> Course requirements and procedures. Individual tasks and group work. Reporting requirements. <p>Introduction to Neuromarketing and Consumer Neuroscience</p> <ul style="list-style-type: none"> Defining Neuromarketing and Consumer Neuroscience Introduction to Neurodesign, Neuroleadership, and other related disciplines Neuromarketing principles and their implication Case study examples <p>Models of Consumer Decision-making and Choice</p> <ul style="list-style-type: none"> Value-based, cognitive, and habitual decision-making Cognitive biases Hyper choice and choice paralysis Constraining factors in consumer decision-making time, information, degree of choice, cognitive capacity 	4	See: Session 1 Taught by Dr. Dalia Bagdžiūnaitė
<p>Introduction to Neuromarketing and Consumer Neuroscience Research Methods and Tools</p> <ul style="list-style-type: none"> Defining Neuromarketing and Consumer Neuroscience research methods and tools 	4	See: Session 2 Taught by Dr. Dalia Bagdžiūnaitė

<ul style="list-style-type: none"> • Pros and cons of traditional and neuromarketing methods • Introduction to different methods and their application for marketing cases • Lab vs. real-life environment; desktop vs. mobile environment <p>Group exercise in class</p>		
<p>Attention and Consciousness</p> <ul style="list-style-type: none"> • Attentional processes and consumer choice • Visual attention, visual saliency • Processing fluency and cognitive load • Consciousness and unconsciousness • Goal-directed choice, priming, subliminal effects <p>Group exercise in class</p>	4	See: Session 3 Taught by Indrė Razbadauskaitė-Venskė
<p>Myths, Experiments, and Ethical Concerns</p> <ul style="list-style-type: none"> • Neuromarketing myths and ethical concerns (Neuroethics) • Regulatory guidelines for ethical research • Concerns about scientific validity • Critics of consumer neuroscience research <p>Neuropricing (price effect)</p> <ul style="list-style-type: none"> • How consumers perceive price • Rounded price effect 	4	See: Session 4 Taught by Indrė Razbadauskaitė-Venskė
<p>Senses and Perception: Sensory Marketing and Perception Process</p> <ul style="list-style-type: none"> • Hedonic consumption + motivational conflict • Sensory marketing vs. digital sensory marketing – 5 senses: smell, touch, sight, hearing, and taste • Psychology of colors. How do we see colors? • Stages in the perception: exposure, attention, interpretation • EXTRA: Behavioral science brand building + branding vs. branding <p>Preparation for the practical group work</p> <p>Detailed explanation of tasks, group setting.</p>	4	See: Session 5 Taught by Indrė Razbadauskaitė-Venskė

<p>Learning and Memory</p> <ul style="list-style-type: none"> • Learning: behavioral learning and cognitive learning theories • Gamification: the new frontier for learning applications • Memory: how our brains encode information • Memory systems • How our memory store information • What makes us to forget? • Nostalgia marketing • EXTRA: the role of dopaminergic reward in processing 	4	<p>See: Session 6 Taught by Indrė Razbadauskaitė-Venskė</p>
<p>Midterm exam</p>		<p>Topics from sessions 1-6 included</p>
<p>Emotions, Feelings, and Motivation</p> <ul style="list-style-type: none"> • Defining emotions • Emotions dimensions: valence, arousal, motivation • Emotions and decision-making • Universal principles of emotional design 	4	<p>See: Session 7 Taught by Indrė Razbadauskaitė-Venskė</p>
<p>Habit formation and hooked model</p> <ul style="list-style-type: none"> • Defining habit • Creating and changing good and bad habits • Defining habit-building products • Hooked model: triggers, action, rewards, investment • Ethical concerns <p>Group exercise in class</p>	4	<p>See: Session 8 Taught by Dr. Dalia Bagdžiūnaitė</p>
<p>Group work presentation and feedback</p>	4	<p>See: Group work assignment Group work presentation, evaluation, and discussion led by Dr. Dalia Bagdžiūnaitė</p>
<p>The Self: Mind, Gender, and Body</p> <ul style="list-style-type: none"> • Self-concept • Real vs. Ideal selves • Embodied cognition • The digital self • Gender identity + Gender marketing • The body: ideals of beauty • EXTRA: enclothed cognition <p>Personality, Lifestyles and Values</p>	4	<p>See: Session 10 Taught by Indrė Razbadauskaitė-Venskė</p>

<ul style="list-style-type: none"> • Trait theory • The influence of personality traits on consumer behavior • Brand personality • Lifestyles and consumer identity • Psychographics • Values – how do values link to consumer behavior? 		
<p>The Effects of Social Media Marketing on Online Consumer Behavior</p> <ul style="list-style-type: none"> • Understanding how online marketing is different • Online social networks and brand communities • Social-psychological roles of consumer in the developmental processes of online consumption communities • E-word of mouth • The power and impact of influencer marketing • EXTRA: Building a perfect website 	4	See: Session 11 Taught by Indrė Razbadauskaitė-Venskė
<p>Wrap-up. Preparation for the Final Exam</p> <p>The future of Neuro (marketing) and more</p>	4	See: Session 12 Taught by Dr. Dalia Bagdžiūnaitė and Indrė Razbadauskaitė-Venskė
Final exam	Total: 48 hours	Topics from sessions 1-12 included
FINAL EXAM	2	

FINAL GRADE COMPOSITION

Type of assignment	%
<i>Group Components 30%</i>	30
<i>Individual Components 70%</i>	
Midterm exam	25
Final exam	45
Total:	100

DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT

MIDTERM EXAM

The Mid-term Exam is given to students to check their theoretical knowledge of concepts, classifications, applications, and correct identifications of practical situations. The mid-term exam will cover topics of sessions 1-6. The accumulative weight of the midterm exam is **25%**

GROUP WORK ASSIGNMENT

Group work assignment consists of practical tasks that are performed in the out-of-class and in-class environments to strengthen skills in the theoretical material covered in the class. During the semester each group must prepare **one** group work assignment. The size of a group is determined by the lecturer when the final group participant list is available.

The group work assignment should be submitted to the lecturer in written form (as a report) and presented in class (ppt or other presentational technique). Each group will be given a maximum of 8-10 minutes for presentation during seminar sessions. The written report should not exceed 5 pages. The report format has to follow the general format requirements of ISM (APA style). Each report has to have an official title page with a list of contributors. All members of the group should be involved in presentations during the course (being the major presenter at least once).

Use the simplest binding tools (paper clips, transparent envelopes) for environmental reasons. Print on both sides whenever possible. The accumulative weight of the group assignment is **30%**

The group assignment will consist of these parts:

1. Reasoning and argumentation for the choice of the case study.
2. Argumentation for the choice of neuromarketing principles and decision-making models.
3. Application of the theories (e.g., including senses; catching attention; affecting emotions; inducing memory; building a habit, motivating action).
4. Application of the neuromarketing tools to study the effects of the chosen case study.
5. Conclusions and neuromarketing recommendations for the improvement.

Written assignments are due to the professor NO LATER than the beginning of class on the day the presentation is scheduled. Students cannot redo their home assignments or re-defend them after the deadline. Students can indicate group mates that were not contributing to the particular assignment. In this case, the grade for the assignment for non-contributing group mate is not entered and equals 0.

END-SEMESTER INDIVIDUAL WRITTEN FINAL EXAM

The end-semester individual written final exam is given to students to check up on the scope (theoretical and practical) of the course as a whole. The exam will include all material covered during the lectures and seminars. The accumulative weight of the Final Exam is **45%**.

The final grading for the course is calculated according to the accumulative formula as indicated in the Regulation of studies at ISM. Negative grades (below 5) are not included in the accumulative grading system!

RETAKE POLICY

Students who receive a failing final grade shall have the right to **re-take the exam** during the re-sit week, which will comprise **70% of the final grade** and will include all semester material. Home assignments cannot be retaken later.

MISCELLANEOUS

The lecturer reserves a right to minor changes in the course program (for example, changing places of topics without harm to the overall course logic). Also, the lecturer might decide to invite guest speakers – practitioners for a deeper presentation of some practical aspects of marketing. When changes in schedule/program prevail, students will be informed in advance.

READINGS

Sessions	Required readings	Supplemental readings
Session 1	<p>Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). <i>Neuromarketing for dummies</i>. John Wiley & Sons.</p> <ul style="list-style-type: none"> Chapter 1: What Neuromarketing Is and Isn't for? Chapter 2: What we Know Now that We Didn't know Then? <p>Phan, V. (2010). Neuromarketing: Who decides what you buy. <i>The Triple Helix</i>, 2010, 14-16.</p> <p>Brain structure & functions tutorial (videos):</p> <ul style="list-style-type: none"> https://www.youtube.com/watch?V=kmkc8nfpati Neuromarketing: Inside the Mind of the Consumer: https://www.youtube.com/watch?V=zbkyv6axdc0 	<p>Kahneman, D. (2003). A perspective on judgment and choice: mapping bounded rationality. <i>American psychologist</i>, 58(9), 697.</p> <p>Plassmann, H., Ramsøy, T. Z., & Milosavljevic, M. (2012). Branding the brain: A critical review and outlook. <i>Journal of consumer psychology</i>, 22(1), 18-36.</p>
Session 2	<p>Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). <i>Neuromarketing for dummies</i>. John Wiley & Sons.</p> <p>Chapter 16: Neuromarketing Measures: Listening to Signals from the Body and the Brain</p> <p>Neurons Inc. Blog post:</p> <ul style="list-style-type: none"> Which brain measure is best: https://www.neuronsinc.com/insights/neuromethod-2-which-brain-measure-is-best Fast responses and unconscious preferences: https://www.neuronsinc.com/insights/fast-responses-and-unconscious-preferences 	<p>Ariely, D., & Berns, G. S. (2010). Neuromarketing: the hope and hype of neuroimaging in business. <i>Nature reviews neuroscience</i>, 11(4), 284-292.</p> <p>Noble, T. (2013). Neuroscience in practice: The definitive guide for marketers. <i>Admap</i>, 48(3), 28-45.</p>
Session 3	<p>Deangelus, M. & Pelz, J. (2009). <i>Top-down control of eye movements: Yarnbus revisited</i>, <i>Visual Cognition</i>, 17(6-7), pp. 790-811.</p> <p>Milosavljevic, M., & Cerf, M. (2008). First attention then intention: Insights from computational neuroscience of vision. <i>International Journal of advertising</i>, 27(3), 381-398.</p> <p>Karremans, J. C., Stroebe, W., & Claus, J. (2006). Beyond Vicary's fantasies: The impact of subliminal priming and brand choice. <i>Journal of experimental social psychology</i>, 42(6), 792-798</p> <p>Top-down and bottom-up processing: https://www.youtube.com/watch?V=ajy5_p_lahq</p>	<p>Chartrand, T. L., Huber, J., Shiv, B., & Tanner, R. J. (2008). Nonconscious goals and consumer choice. <i>Journal of Consumer Research</i>, 35(2), 189-201</p> <p>Clement, J., Kristensen, T., Grønhaug, K. (2013). <i>Understanding consumers' in-store visual perception: The influence of package design features on visual attention</i>. <i>Journal of Retailing and Consumer Services</i>, 20, (234-239)</p> <p>Dijksterhuis, A., Smith, P. K., Van Baaren, R. B., & Wigboldus, D. H. (2005). The unconscious consumer: Effects of environment on consumer</p>

	<p>Gestalt Principles: https://www.youtube.com/watch?V=20n53kharxa</p>	<p>behavior. Journal of consumer psychology, 15(3), 193-202</p> <p>Milosavljevic M., Navalpakkam V., Koch Ch., Rangel A., 2011, <i>Relative visual saliency differences induce sizable bias in consumer choice</i>. Society for Consumer Psychology 22, (67-74).</p>
Session 4	<p>Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). <i>Neuromarketing for dummies</i>. John Wiley & Sons.</p> <ul style="list-style-type: none"> • Chapter 22: Neuromarketing Ethics, Standards, and Public Policy Implications • Chapter 23: Ten Mistaken Beliefs about Neuromarketing <p>How Brands Are Influencing Your Decisions Neuromarketing Spark - https://www.youtube.com/watch?V=svpsr5xjinw&t=420s</p> <p>Pricing Effect: Why A Higher Price Tag Makes Wine Taste Better Why Are We All So Stupid? _ https://www.youtube.com/watch?v=Wb3PsQFB3fU</p> <p>How Restaurants Use Psychology to Make You Spend More Money - https://www.youtube.com/watch?v=l4WzImgnP4w</p>	<p>P. Kotler. (2017). <i>Consumer Neuroscience</i>. The Mit press.</p> <ul style="list-style-type: none"> • Chapter 15 – Ethics in Consumer Neuroscience • Chapter 11 – Pricing
Session 5	<p>5 Examples of Sensory Branding in Retail – https://blog.hubspot.com/marketing/sensory-branding</p> <p>Behavioral science brand building - https://www.research-live.com/article/news/behavioural-science-brand-building/id/5049912</p> <p>Dunkin' Donuts Flavor Radio - https://www.youtube.com/watch?v=v2tp-fan6u8</p> <p>How Scent Can Influence Your Purchasing Habits Your Brain On Shopping Racked - https://www.youtube.com/watch?v=u6m5ud5_cba</p>	<p>P. Kotler. (2017). <i>Consumer Neuroscience</i>. The Mit press.</p> <ul style="list-style-type: none"> • Chapter 3 – Sensation and Perception
Session 6	<p>Memory, explained Narrated by Emma Stone - https://www.youtube.com/watch?V=d95doh-7GHM</p> <p>Narrative - <u>What do we mean when we talk about storytelling in advertising?</u></p> <p>How free games are designed to make money - https://www.youtube.com/watch?v=fKK9nVLvhGM</p>	<p>P. Kotler. (2017). <i>Consumer Neuroscience</i>. The Mit press.</p> <ul style="list-style-type: none"> • Chapter 6 – Memory

Session 7	<p>Berridge, K. C., & Robinson, T. E. (2003). Parsing reward. Trends in neurosciences, 26(9), 507-513.</p> <p>Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). <i>Neuromarketing for dummies</i>. John Wiley & Sons.</p> <ul style="list-style-type: none"> • Chapter 6: The Central Role of Emotions in Consumer Responses • Chapter 10: Creating Products and Packages That Please Consumers' Brains 	<p>Bagozzi, R.P., M. Gopinath & P.U.Nyer (1999): <i>The role of emotions in marketing</i>. Journal of the Academy of Marketing Science, 27 (2), (184-206).</p> <p>Dolan, R., (2002). <i>Emotion, Cognition, and Behaviour</i>. Neuroscience and Psychology, 298 (8)., (1191-1194).</p> <p>Groeppe-Klein (2005), Arousal and consumer in-store behaviour. Brain Research Bulletin 67, (428-437).</p>
Session 8	<p>Eyal, N. (2014). <i>Hooked: How to build habit-forming products</i>. Penguin. Workbook: https://www.nirandfar.com/download/hooked-workbook.pdf</p> <p>How to Break Bad Habits - Hooked: How to Build Habit-Forming Products by Nir Eyal: https://www.youtube.com/watch?v=hvdn2mijpb8</p> <p>Behavioural Fogg Model: http://www.behaviormodel.org/index.html</p>	<p>Wood, W., & Neal, D. T. (2009). The habitual consumer. Journal of Consumer Psychology, 19(4), 579-592.</p>
Session 10	<p>Yes, Marketing Is Still Sexist - https://www.nytimes.com/2021/08/26/us/marketing-industry-sexism-brandsplaining.html</p> <p>How Fashion Affects Your Brain ELLE- https://www.youtube.com/watch?v=zqaM7bQFFic</p> <p>Gendered marketing - https://www.youtube.com/watch?v=3JDmb_f3E2c&t=173s</p>	<p>M.R. Solomon (2018). Consumer Behavior: Buying, Having and Being. 12th edition. Pearson.</p> <ul style="list-style-type: none"> • Chapter 6: The self: mind, gender, and body • Chapter 7: Personality, Lifestyles, and Values
Session 11	<p>Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). <i>Neuromarketing for dummies</i>. John Wiley & Sons.</p> <ul style="list-style-type: none"> • Chapter 13: When Consumers' Brains Go Online 	<p>P. Kotler. (2017). <i>Consumer Neuroscience</i>. The Mit press.</p> <ul style="list-style-type: none"> • Chapter 12 – Social Marketing

EXTRA: Neuromarketing Books: The Ultimate Reading List –

<https://www.neurosciencemarketing.com/blog/articles/neuromarketing-books-reading-list.htm>

Recommended to buy:

Genco, S. J., Pohlmann, A. P., & Steidl, P. (2013). *Neuromarketing for dummies*. John Wiley & Sons.

DEGREE LEVEL LEARNING OBJECTIVES

Learning objectives for the Bachelor of Business Management

Programmes:

*International Business and Communication,
Business Management and Marketing,
Finance,
Industrial Technology Management,
Entrepreneurship and Innovation*

Learning Goals	Learning Objectives
Students will be critical thinkers	BLO1.1. Students will be able to understand core concepts and methods in the business disciplines
	BLO1.2. Students will be able to conduct a contextual analysis to identify a problem associated with their discipline, to generate managerial options and propose viable solutions
Students will be socially responsible in their related discipline	BLO2.1. Students will be knowledgeable about ethics and social responsibility
Students will be technology agile	BLO3.1. Students will demonstrate proficiency in common business software packages
	BLO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	BLO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	BLO4.2. Students will be able to convey their ideas effectively through an oral presentation
	BLO4.3. Students will be able to convey their ideas effectively in a written paper

Learning objectives for the Bachelor of Social Science

Programmes:

*Economics and Data Analytics,
Economics and Politics*

Learning Goals	Learning Objectives
Students will be critical thinkers	ELO1.1. Students will be able to understand core concepts and methods in the key economics disciplines
	ELO1.2. Students will be able to identify underlying assumptions and logical consistency of causal statements
Students will have skills to employ economic thought for the common good	ELO2.1. Students will have a keen sense of ethical criteria for practical problem-solving
Students will be technology agile	ELO3.1. Students will demonstrate proficiency in common business software packages
	ELO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	ELO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	ELO4.2. Students will be able to convey their ideas effectively through an oral presentation
	ELO4.3. Students will be able to convey their ideas effectively in a written paper