



SVEUČILIŠTE U RIJECI

Filozofski fakultet

Sveučilišna avenija 4
51 000 Rijeka

Division of Cognitive Sciences

Masters in Cognitive Sciences:

Cognition and the Mind

SYLLABUSES

Winter and Summer Semester

Academic Year 2026/2027

Rijeka, September 2026

LIST OF COURSES IN THE FIRST SEMESTER

Mandatory courses

Introduction to the Disciplines and Work in Cognitive Sciences

Interdisciplinary Modules in Cognitive Sciences 1

Statistics

Empirical Research Methods 1

Rotation project 1

Elective courses

Elective Modules in Cognitive Sciences

NOTE: Each student is required to choose 3 ECTS points from the modules offered in the course *Elective Modules in Cognitive Sciences* and/or *Communis* courses provided they are held in English OR accredit an internship.

Internship

Supporting Elective courses

Academic Development

LIST OF COURSES IN THE SECOND SEMESTER

Mandatory courses

Interdisciplinary Modules in Cognitive Sciences 2

Ethics

Empirical Research Methods 2

Rotation project 2

Elective courses

Elective Modules in Cognitive Sciences

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Internship

Supporting Elective courses

Academic Development

LIST OF COURSES IN THE FIRST SEMESTER

Mandatory courses

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Rotation project 1

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Elective Modules in Cognitive Sciences

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Supporting Elective courses

Academic Development

LIST OF COURSES IN THE SECOND SEMESTER

Mandatory courses

Interdisciplinary Modules in Cognitive Sciences 2

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Rotation project 2

Elective courses

Elective Modules in Cognitive Sciences

NOTE: Each student is required to choose 3 ECTS points from the modules offered in the course *Elective Modules in Cognitive Sciences* and/or *Communis* courses provided they are held in English OR accredit an internship.

Internship

Supporting Elective courses

Academic Development

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Introduction to the Disciplines and Work in Cognitive Sciences
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st
Academic year	2026/2027
ECTS credits	7
Contact hours (Lectures + Seminars + Practical work)	54+54+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Prof. Igor Bajšanski, Prof. Luca Malatesti, Dr. Ljerka Ostojić, Dr. Edward Legg
Course instructors	Contact details
Dr. Sandra Arbula	Email: sandra.arbula@ffri.unri.hr , Office: F-121, Office hours: TBA
Dr. Zdenka Brzović	Email: zdenka@ffri.uniri.hr , Office: F-413, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office hours: TBA
Dr. Marko Jurjako	Email: mjurjako@ffri.uniri.hr , Office: F-422, Office hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
This is an intensive, introductory course that runs over the first 6 weeks in the first semester. The course has three objectives: i) to introduce you to the work in cognitive sciences, ii) to enable you to complement your knowledge from your undergraduate training, and iii) to introduce you to the different ways of learning and teaching involved in the Masters programme. This course is divided into a compulsory component (including 4 workshops), an elective module (you choose one out of two modules), and elective elements (you choose two out of five elements). At the beginning of the course, our First Year Tutor will help you figure out how to choose the elective parts of the course.	

EXPECTED LEARNING OUTCOMES

Compulsory learning outcomes:

- describe and analyse disciplines and areas within cognitive sciences,
- compare different approaches and methods within cognitive sciences,
- analyse concepts connecting different disciplines.

Elective learning outcomes:

Module „Introduction to empirical cognitive sciences“:

- visualise and use descriptors for specific data distributions,
- describe and visualise relationships between a set of variables,
- describe the foundations of empirical research in cognitive sciences.

Module „Introduction to philosophy of cognitive sciences“:

- competently read contemporary philosophical literature from philosophy of mind and philosophy of cognitive sciences,
- use informal logic, thought experiments, and conceptual analysis for evaluating philosophical texts, describe the most significant philosophical problems arising from research in cognitive sciences,
- evaluate philosophical views related to types of explanations in cognitive sciences,
- independently read and analyse original works in philosophy of science and philosophy of special sciences,
- defend different philosophical positions within debates in contemporary philosophy of science.

Elective elements:

- analyse concepts and approaches of research within a selected area,
- identify and formulate major issues and discussions within a selected area.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
x		x	

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	3.2	
Class Participation	3.8	N/A
TOTAL	7	N/A

This course is not graded. However, students must actively participate in this course to be able to progress to the other courses that follow this introductory course.

This course is the prerequisite for enrolling in all other courses in the study programme.

Class participation: Lectures will have interactive elements and seminars may involve reading of literature, discussions, short writing assignments, short presentations.

III. READING

MANDATORY READING

- Shaughnessy, J.J., Zechmeister, E.B. & Zechmeister, J.S. (2012). *Research methods in psychology* (9th ed.). McGraw-Hill.
- Weiskopf, D.A., & Adams, F. (2015). *An introduction to the philosophy of psychology*. Cambridge University Press. [Selected chapters].
- Fosl, P.S., & Baggini, J. (2020). *The philosopher's toolkit: A compendium of philosophical concepts and methods*.
- Martinich, A. (2001). *Philosophical writing: An introduction* (3rd ed.) Blackwell.

- Bear, F.M., Connor, B.W., & Paradiso, M.A. (2016). *Neuroscience exploring the brain*. Philadelphia: Wolters Kluwer.
- Kolb, B. & Whishaw, I.Q. (2003). *Fundamentals of Human Neuropsychology*. New York: W.H. Freeman and Company.
- Field, A., Miles, & Field, Z. (2012). *Discovering Statistics Using R*. Sage Publications.
- King, B.M., Rosopa, P.J., & Minium, E.W. (2011). *Statistical Reasoning in the Behavioral Sciences* (6th ed.) John Wiley & Sons, Inc.
- Olmstead, M.C. & Kuhlmeier, V. (2015). *Comparative cognition*. Cambridge University Press.
- Heyes, C. (2012). Simple minds: a qualified defence of associative learning. *Proceedings of the Royal Society B*, 367, 2697-2703. <https://doi.org/10.1098/rstb.2012.0217>
- Andrews, K. (2020). *How to study animal minds*. Cambridge: Cambridge University Press. <https://doi.org/10.1017/9781108616522>
- Miller, G.A. (2003). The cognitive revolution: a historical perspective. *Trends in Cognitive Sciences*, 7(3), 141-144. [https://doi.org/10.1016/S1364-6613\(03\)00029-9](https://doi.org/10.1016/S1364-6613(03)00029-9)
- Greenwood, J.D. (1999). Understanding the “cognitive revolution” in psychology. *Journal of the History of the Behavioral Sciences*, 35(1), 1-22. [https://doi.org/10.1002/\(SICI\)1520-6606\(199924\)35:1<1::AID-JHBS1>3.0.CO;2-4](https://doi.org/10.1002/(SICI)1520-6606(199924)35:1<1::AID-JHBS1>3.0.CO;2-4)
- Cohen-Cole, J. (2014). *The open mind: Cold War politics and the sciences of human nature*. University of Chicago.
- Eysenck, M.W. & Keane, M.T. (2007). Psychology Press.
- Okasha, Samir (2004). *Philosophy of Science: A Very Short Introduction*. Oxford University Press.
- Kitcher, P. & Barker, G. (2014). *Philosophy of Science: A New Introduction*. Oxford University Press.
- Godfrey-Smith, Peter (2003). *Theory and Reality: An Introduction to the Philosophy of Science*. Chicago University Press.

RECOMMENDED FURTHER READING

- Bermudez, J. L. ed. (2006). *Philosophy of psychology: contemporary readings*. New York and London: Routledge.
- Weiskopf, D. and Adams, F. (2015). *An introduction to the philosophy of psychology*. Cambridge: Cambridge University Press
- Borsboom, D. (2005). *Measuring the mind: conceptual issues in contemporary psychometrics*. Cambridge: Cambridge University Press.
- Crane, T. 2001. *The Elements of Mind: An Introduction to the Philosophy of Mind*. Oxford: Oxford University Press. (str. 34-58).
- Okasha, S. (2019). *Philosophy of Biology: A Very Short Introduction*. Oxford University Press.
- Godfrey-Smith, P. (2014). *Philosophy of Biology*. Princeton University Press.
- Shettleworth, S. J. (2009). *Cognition, evolution, and behavior*. Oxford University Press.
- Pearce, J. M. (2013). *Animal learning and cognition: An introduction*. Psychology Press.

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty. If you will be missing a class, please contact the lecturer - this is especially important for the elective elements or modules, where there may only a few students taking a module or element, such that the lecturer can plan the best way to hold the class.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange a meeting.

INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
V. COURSE OUTLINE		
DATE	TOPIC	
Week 1		
Day 1	Introduction to the programme and the course Instructor: Ljerka Ostojić Students will choose their elective module and elective elements and receive detailed information about their schedule and modules and elements.	
Day 2	Cognitive Sciences Instructors: Edward Legg	
Day 3	Cognitive Sciences Instructors: Edward Legg	
Day 4	Interdisciplinarity in Cognitive Sciences Instructors: Edward Legg	
Day 5	Interdisciplinarity in Cognitive Sciences Instructors: Ivan Flis	
Week 2		
Day 1	Workshop 1: Working with Scientific Literature Instructor: Edward Legg	
Day 2	Elective Module*	
Day 3	Elective Module *	
Day 4	Elective Element 1**	
Week 3		
Day 1	Elective Element 1**	
Day 2	Elective Module*	
Day 3	Elective Module*	
Day 4	Elective Element 1**	
Day 5	Workshop 2: Reading Scientific Literature Instructor: Ivan Flis	
Week 4		
Day 1	Elective Element 1**	
Day 2	Elective Module*	
Day 3	Elective Module*	
Day 4	Elective Element 2**	
Week 5		
Day 1	Elective Element 2**	
Day 2	Elective Module*	
Day 3	Elective Module*	
Day 4	Elective Element 2**	
Day 5	Workshop 3: Scientific Writing Instructor: Ljerka Ostojic	

Week 6		
Day 1	Elective Element 2**	
Day 2	Elective Module*	
Day 3	Elective Module*	
Day 4	Workshop 4: Research Integrity for the Masters in Cognitive Sciences Instructors: Edward Legg, Ljerka Ostojic, Ivan Flis	
* If you choose the elective module <i>Introduction to empirical cognitive sciences</i>, there are two parts to this module: 1) <i>Introduction to statistics</i> (instructor: Sandra Arbula) and 2) <i>Introduction to empirical research methods</i> (instructor: Ljerka Ostojić). If you choose the elective module <i>Introduction to the philosophy of cognitive sciences</i>, there are three parts to this module: 1) <i>Introduction to philosophy of cognitive sciences</i> (instructor: Luca Malatesti), 2) <i>Introduction to philosophical research methods</i> (instructors: Luca Malatesti, Zdenka Brzovic), and 3) <i>Introduction to philosophy of science</i> (Zdenka Brzovic) ** You chose two out of five elective modules available: 1. <i>Cognitive Psychology</i> (instructor: Edward Legg), 2. <i>Neuropsychology and cognition</i> (instructor: Sandra Arbula), 3. <i>Comparative cognition</i> (instructor: Ljerka Ostojić), 4. <i>Models and theories in cognitive sciences</i> (instructor: Ivan Flis), and 4. <i>Critical history of cognitive science and its methods</i> (instructor: Ivan Flis).		

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Compulsory learning outcome: describe and analyse disciplines and areas within cognitive sciences	Introduction to cognitive sciences, Interdisciplinarity in cognitive sciences	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Compulsory learning outcome: compare different approaches and methods within cognitive sciences	Introduction to cognitive sciences, Interdisciplinarity in cognitive sciences	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Compulsory learning outcome: analyse concepts connecting different disciplines	Introduction to cognitive sciences, Interdisciplinarity in cognitive sciences	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Elective learning outcome: visualise and use descriptors for specific data distributions	Statistics	Lectures, Seminars	The study programme foresees no assessment of students for this course.
Elective learning outcome: describe and visualise relationships between a set of variables	Statistics	Lectures, Seminars	The study programme foresees no assessment of students for this course.
Elective learning outcome: describe the foundations of empirical research in cognitive sciences	Empirical research methods	Lectures, Seminars	The study programme foresees no assessment of students for this course.
Elective learning outcome: competently read contemporary philosophical literature from philosophy of mind and philosophy of cognitive sciences	Philosophy of mind, Philosophy of cognitive sciences	Seminars	The study programme foresees no assessment of students for this course.

Elective learning outcome: use informal logic, thought experiments, and conceptual analysis for evaluating philosophical texts, describe the most significant philosophical problems arising from research in cognitive sciences	Philosophical research methods, Philosophy of science, Philosophy of cognitive science, Philosophy of mind	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Elective learning outcome: evaluate philosophical views related to types of explanations in cognitive sciences	Philosophy of mind, Philosophy of mind, Philosophy of cognitive science	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Elective learning outcome: independently read and analyse original works in philosophy of science and philosophy of special sciences	Philosophical research methods, Philosophy of science, Philosophy of cognitive science, Philosophy of mind	Seminars	The study programme foresees no assessment of students for this course.
Elective learning outcome: defend different philosophical positions within debates in contemporary philosophy of science	Philosophical research methods, Philosophy of science, Philosophy of cognitive science, Philosophy of mind	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Elective learning outcome: Elective elements: analyse concepts and approaches of research within a selected area	Cognitive psychology, Comparative cognition, Neuropsychology and cognition, Critical history of cognitive science and its methods, Models and theories in cognitive sciences	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.
Elective learning outcome: identify and formulate major issues and discussions within a selected area	Cognitive psychology, Comparative cognition, Neuropsychology and cognition, Critical history of cognitive science and its methods, Models and theories in cognitive sciences	Lectures, Seminars, Discussions	The study programme foresees no assessment of students for this course.

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Interdisciplinary Modules in Cognitive Sciences 1
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st
Academic year	2026/2027
ECTS credits	6
Contact hours (Lectures + Seminars + Practical work)	26+13+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Prof. Igor Bajšanski, Dr. Marko Jurjako
Course instructors	Contact details
Prof. Pavle Valerjev	Email: valerjev@unizd.hr (guest lecturer)
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office hours: TBA
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office hours: TBA
Dr. Marko Jurjako	Email: mjurjako@ffri.uniri.hr , Office: 422, Office hours: TBA
Nirvana Ribić	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
In this course, you will gain knowledge of selected topics from cognitive sciences from a disciplinary and interdisciplinary perspective. In addition to interactive lectures, we will have interdisciplinary moderated discussion groups. For some of these, your lecturers will select the literature, for others you will be able to select topics and papers of your interest. In addition, we will have invited lecturers for specific topics.	

EXPECTED LEARNING OUTCOMES			
• synthesise results and insights from selected areas, • consider and compare theories and models within selected areas, • critically evaluate claims of empirical research from selected areas, • analyse interdisciplinary links between disciplines and areas.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')			
Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	1.3		
Class participation	0.7	35	
Essay	2	35	
Written Exam	2	30	
TOTAL	6	100	
To obtain a grade on this course, students must i) participate in class discussions and other tasks during classes (maximum points available: 35), ii) submit one essay per module for four modules (maximum points available: 35), and iii) write an essay-style exam at the end of the term (maximum points available: 30).			
Detailed information about all graded elements will be given and discusses in the first lecture.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
• Frodeman, R., Klein, J.T., & Pacheco, R.C.D.S. (Eds). (2017). <i>The Oxford handbook of interdisciplinarity</i>. Oxford University Press. • Dennett, D.C. (1981). True believers: the intentional strategy and why it works. In Chalmers (2002). <i>Philosophy of Mind: classical and comtemporary readings</i>. Oxford University Press. • Gentner, D. (2010). Psychology in cognitive science: 1987-2038. <i>Topics in Cognitive Science</i>, 2(3), 328-344. • Van Eck, N.J. & Waltman, L. (2014). CitNetExplorer: A new software tool for analyzing and visualizing citation networks. <i>Journal of Informetrics</i>, 8(4), 802-823. https://doi.org/10.1016/j.joi.2014.07.006 • Dehaene, S. (2009). Origins of mathematical intuitions: the case of arithmetic. <i>Annals of the New York Academy of Sciences</i>, 1156, 232-259. https://doi.org/10.1111/j.1749-6632.2009.04469.x • Nieder, A., & Dehaene, S. (2009). Representation of number in the brain. <i>Annual Review of Neuroscience</i>, 32, 185-208. https://doi.org/10.1146/annurev.neuro.051508.135550 • Cavanagh, P. (2011). Visual cognition. <i>Vision Research</i>, 51(13), 1538-1551. https://doi.org/10.1016/j.visres.2011.01.05 • Franconeri, S.L., Alvarez, G.A., & Cavanagh, P. (2013). Flexible cognitive resources: competitive content maps for attention and memory. <i>Trends in Cognitive Sciences</i>, 17(3), 134-141. https://doi.org/10.1016/i.tics.2013.01.010			

- Roelfsema, P.R., & Houtkamp, R. (2011). Incremental grouping of image elements in vision. *Attention, Perception & Psychophysics*, 73(8), 2542-2572. <https://doi.org/10.3758/s13414-011-0200-0>
- Samuels, R., Stich, S., & Bishop, M. (2002). Ending the rationality wars: how to make disputes about human rationality disappear. In R. Eliso (Ed.), *Common Sense, Reasoning, and Rationality*. Oxford University Press.
- Evans, J.St.B.T. & Stanovich, K.E. (2013). Dual-process theories of higher cognition advancing the debate. *Perspectives on Psychological Science*, 8(3), 223-241. <https://doi.org/10.1177/1745691612460685>
- Pennycook, G., Fugelsang, J.A., & Koehler, D.J. (2015). What makes us think? A three-stage dual-process model of analytic engagement. *Cognitive Psychology*, 80, 34-72. <https://doi.org/10.1016/j.cogpsych.2015.05.001>
- Stanovich, K.E. & West, R.F. (2000). Individual differences in reasoning: implications for the rationality debate. *Behavioral & Brain Sciences*, 23, 645-726. <https://doi.org/10.1017/S0140525X0028343X>
- Tversky, A. & Kahneman, D. (1974). Judgement under uncertainty: Heuristics and biases. *Science*, 185, 1124-1131. <https://doi.org/10.1126/science.185.4157.1124>

RECOMMENDED FURTHER READING

- Cohen Kadosh, R., & Dowker, A. (2015). *The Oxford handbook of numerical cognition*. New York: Oxford University Press.
- Fischer, M. H. & Shaki, S. (2014). Spatial associations in numerical cognition – from single digits to arithmetic. *Quarterly Journal of Experimental Psychology*, 67(8), 1461-1483. <https://doi.org/10.1080/17470218.2014.927515>
- De Neys, W. & Glumicic, T. (2008). Conflict monitoring in dual process theories of reasoning. *Cognition*, 106, 1248-1299. <https://doi.org/10.1016/j.cognition.2007.06.002>
- Dehaene, S. (2011). *The number sense. 2nd ed.* New York: Oxford University Press.
- Coltheart, V. (2010). *Tutorials in visual cognition*. New York: Psychology Press. Ross, B.H., & Irwin, D. (2013). *Cognitive vision*. Amsterdam: Elsevier Science.

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange a meeting.

INFORMATION ABOUT THE FINAL EXAM

The final exam is an essay-style exam in which students will choose two out of four given questions.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	4 February 2027, 18 February 2027
Summer	1 July 2027, 15 July 2027
Autumn	26 August 2027, 19 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 7	Introductory Module: Inter-/Trans-/Multidisciplinarity and Cognitive Sciences Instructor: Ivan Flis, Ljerka Ostojić
Week 8	Module 1: Numerical Cognition: Cognitive foundations of numerical cognition Instructors: Edward Legg
Week 9	Module 1: Numerical Cognition: Cognitive foundations of numerical cognition Instructors: Edward Legg
Week 10	Module 2: Visual Cognition Instructors: Edward Legg
Week 11	Module 2: Visual Cognition Instructors: Edward Legg
Week 12	Module 3: Reasoning and Judgement Instructor: Pavle Valerjev, Sandra Arbula, Ljerka Ostojić
Week 13	Module 3: Reasoning and Judgement Instructor: Pavle Valerjev, Sandra Arbula, Ljerka Ostojić
Week 14	Module 4: Rationality Instructor: Marko Jurjako, Nirvana Ribić
Week 15	Module 4: Rationality Instructor: Marko Jurjako, Nirvana Ribić

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Synthesise results and insights from selected areas	Interdisciplinarity, visual cognition, numerical cognition, judgement and reasoning, rationality	Lectures and seminars for all modules	Class Participation (discussion), essays, written exam
Consider and compare theories and models within selected areas	Visual cognition, numerical cognition, judgement and reasoning	Lectures and seminars for modules 1-3	Class Participation (discussion), essays, written exam
Critically evaluate claims of empirical research from selected areas	Visual cognition, numerical cognition, judgement and reasoning, rationality	Lectures and seminars for modules 1-4	Class Participation (discussion), essays, written exam
Analyse interdisciplinary links between disciplines and areas	Interdisciplinarity, visual cognition, numerical cognition, judgement and reasoning, rationality	Lectures from the Introductory Module, Seminars for all five modules	Class Participation (discussion), essays, written exam

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Statistics	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		1st	
Academic year		2026/2027	
ECTS credits		5	
Contact hours (Lectures + Seminars + Practical work)		18+18+18	
Time and venue of classes		According to Schedule	
Language of instruction		English	
Course organisers		Dr. Petra Anić, Dr. Marko Tončić, Dr. Sandra Arbula	
Course instructors		Contact details	
Sandra Abula		Email: sandra.arbula@ffri.uniri.hr , Office: F-121, Office hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
The aim of the course is to enable you to work with empirical data and plan and perform statistical analyses. During this course, we will, wherever possible, use open-source software for all data manipulations and analyses to ensure that you can transfer the acquired skills and knowledge to your future work.			
EXPECTED LEARNING OUTCOMES			
• use R to manipulate data files, • use R to visualise data (1D, 2D, 3D) • use R for modelling continuous and categorical outcome variables, • apply and interpret basic linear models for continuous and categorical variables, • apply the acquired methods in own research.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
x	x	x	x
Fieldwork	Laboratory work	Mentoring	Other

		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	1.8		
Class participation	0.5	10	
Seminar paper	0.9	40	
Written exam	0.9	30	
Oral exam	0.9	20	
TOTAL	5	100	
To obtain a grade on this course, students must i) actively engage in the class (maximum points; 10), ii) submit a seminar paper (maximum points: 40), iii) pass a written exam (maximum points: 30) and oral exam (maximum points: 20).			
Detailed information about all graded elements will be given and discusses in the first lecture.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
- van den Berg, S.M. (2024), <i>Analysing Data using Linear Models: With applications in R</i>, University of Twente, Department of Learning, Data Analytics, and Technology - Judd, C.M., McClelland, G.H., & Ryan, C.S. (2017). <i>Data Analysis: A model comparison approach to regression, ANOVA, and beyond</i>. Routledge/Taylor & Francis Group. - Maindonald, J. & Braun, J.W. (2010). <i>Data Analysis and Graphics Using R – an Example-Based Approach</i>. Cambridge University Press - Miles, J. & Shevlin, M. (2001). <i>Applying Regression & Correlation</i>. SAGE Publications.			
RECOMMENDED FURTHER READING			
- Agresti, A. (1996). <i>Categorical Data Analysis</i>. John Wiley & Sons, Inc. - Crawley, M.J. (2007). <i>The R book</i>. John Wiley & Sons. - Field, A., Miles., & Field, Z. (2012). <i>Discovering Statistics Using R</i>. Sage Publications. - Pinheiro, J.C. & Bates, D.M. (2000). <i>Mixed-effects models in S and S-PLUS</i>. Springer			
IV. ADDITIONAL INFORMATION			
ATTENDANCE			
This is a course in which each week’s classes build up on previous ones. It is thus hard to successfully fulfil the course requirements and achieve the learning outcomes without being present in all classes. Consequently, this course has a stricter attendance than most other courses, and this concerns lectures, seminars and practicals. In general, it is advised that you attend 100% of classes. However, we understand that it is sometimes necessary to miss classes, but this should be minimal and due to important reasons, and you need to contact the lecturer if you will be missing a class or had to miss a class due to an emergency. The lecturer will then figure out a plan how to best make up for the missed classes so that an absence does not negatively affect your progress through the course, such that you are required to adhere to the plan for making up for missed classes.			
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE			

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact the lecturer in advance to arrange for a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
Students must pass a written and an oral exam.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	2 February 2027, 16 February 2027
Summer	15 June 2027, 6 July 2027
Autumn	31 August 2027, 14 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 7	Course introduction; Basic data manipulation in R; Variable types; Data visualization;
Week 8	Simple linear regression model
Week 9	Correlation and multiple regression model
Week 10	Statistical inference
Week 11	Null hypothesis testing
Week 12	Seminar project preparation: RMarkdown; Categorical predictors
Week 13	ANOVA
Week 14	Interactions and post-hocs
Week 15	Assumptions of linear models and linear mixed models

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Use R to manipulate data files	Basic data manipulation in R; Seminar project preparation: RMarkdown	Lectures, Practical work, Independent work	Seminar paper
Use R to visualise data (1D, 2D, 3D)	Data visualization; Seminar project preparation: RMarkdown;	Lectures, Practical work, Independent work	Seminar paper
Use R for modelling continuous and categorical outcome variables	Simple linear regression model; Correlation and multiple regression model; Interactions and post-hocs; ANOVA; Assumptions of linear models and linear mixed models	Lectures, Practical work, Independent work	Exam (written and oral); Seminar paper
Apply and interpret basic linear, non-linear and non-parametric models for continuous and categorical variables	Simple linear regression model; Correlation and multiple regression model; Interactions and post-hocs; ANOVA; Assumptions of linear models and linear mixed models; Statistical inference; Null hypothesis testing	Lectures, practical work, Independent work	Exam (written and oral); Seminar paper
Apply the acquired methods in own research	All topics	Lectures, Practical work, Independent work	Self-Evaluation

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Empirical Research Methods 1
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st
Academic year	2026/2027
ECTS credits	5
Contact hours (Lectures + Seminars + Practical work)	18+18+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Dr. Sandra Arbula, Dr. Ljerka Ostojić, Dr. Asmir Gračanin
Course instructors	Contact details
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Ljiljana Lazarević (guest lecturer)	Email: ljiljana.lazarevic@f.bg.ac.rs
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
In this course, you will familiarise yourself with different theoretical approaches in the study of the mind and methods of model construction, experimental research and neuroscience research methods.	
EXPECTED LEARNING OUTCOMES	
• analyse experimental and non-experimental research designs and compare their methodological features, • interpret interaction terms in complex experimental designs, • design experimental and non-experimental studies based on different research questions, • select and devise an appropriate method when planning and conducting research, • describe and analyse the main measurement theories, • evaluate discussions on validity and reliability, • describe and evaluate neuroscience methods,	

- apply and adapt assessment scales in cognitive sciences,
- apply psychophysiological measures for research in cognitive sciences.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		
Fieldwork	Laboratory work	Mentoring	Other
			x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	1.2	
Class participation	0.5	10
Seminar paper	1.5	50
Written exam	0.9	20
Oral exam	0.9	20
TOTAL	6	100

To obtain a grade on this course, students must i) actively engage in classes (maximum points: 10), ii) submit one seminar paper (maximum points: 50), and iii) pass a written and oral exam (written exam, maximum points: 20, oral exam, maximum points: 20).

Detailed information about all graded elements will be given and discussed in the first lecture.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Bermúdez, J. (2016). *Cognitive science: An introduction to the science of the mind* (2nd ed.). Cambridge University Press.
- Shaughnessy, J. J., Zechmeister, E. B. i Zechmeister, J. S. (2012). *Research methods in psychology* (9th ed.). McGraw-Hill.

RECOMMENDED FURTHER READING

- Wagenmakers, E.-J. (2018). *Stevens' handbook of experimental psychology and cognitive neuroscience. Volume 5: Methodology* (4th ed.). John Wiley & Sons.
- Dienes, Z. (2008). *Understanding psychology as a science: An introduction to scientific and statistical inference*. Palgrave Macmillan.
- Stanovich, K. E. (2013). *How to think straight about psychology* (10th ed.). Pearson Education.
- Sun, R. (2008). *The Cambridge handbook of computational psychology*. Cambridge University Press.

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
Students must pass a written and an oral exam.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	4 February 2027, 18 February 2027
Summer	1 July 2027, 15 July 2027
Autumn	26 August 2027, 19 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 7	Introduction to the course Instructor: Ljerka Ostojić
Week 8	Module 1: Measurement Theories Instructor: Ljiljana Lazarević
Week 9	Module 1: Measurement theories Instructor: Ljiljana Lazarević
Week 10	Module 2: Experimental Research Methods Instructor: Ljerka Ostojić
Week 11	Module 2: Experimental Research Methods Instructor: Ljerka Ostojić
Week 12	Module 3: Neuroscience Methods Instructor: Sandra Arbula
Week 13	Module 3: Neuroscience Methods Instructor: Sandra Arbula
Week 14	Module 4: Non-experimental Research Methods Instructor: TBC
Week 15	Module 4: Non-experimental Research Methods Instructor: TBC

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Analyse experimental and non-experimental research designs and compare their methodological features,	Experimental Research Methods, Non-Experimental Research Methods, Neuroscience Methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Interpret interaction terms in complex experimental designs	Experimental Research Methods, Neuroscience Methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Design experimental and non-experimental studies based on different research questions	Experimental Research Methods, Non-Experimental Research Methods, Measurement theories, Neuroscience Methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Select and devise an appropriate method when planning and conducting research,	Experimental Research Methods, Non-Experimental Research Methods, Neuroscience Methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Describe and analyse the main measurement theories	Measurement theories, Validity, Reliability	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Evaluate discussions on validity and reliability	Measurement theories, Validity, Reliability	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Describe and evaluate neuroscience methods	Neuroscience methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Apply and adapt assessment scales in cognitive sciences	Neuroscience methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam
Apply psychophysiological measures for research in cognitive sciences	Non-experimental research methods, Neuroscience methods	Lectures, Seminars	Seminar paper, Written exam, Oral exam

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Rotation project 1
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st
Academic year	2026/2027
ECTS credits	4
Contact hours (Lectures + Seminars + Practical work)	2+16+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Dr. Ljerka Ostojić
Course instructors	Contact details
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: 344, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@ffri.uniri.hr , Office: 121, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
In this course, you will choose one of the offered topics and, independently and with your supervisor, plan and design a study. The aim of the course is to think about the importance of early stages of research, thus the emphasis will be on planning and structuring the research: for empirical projects, this will include planning statistical analysis but will not include data collection, and for theoretical projects, this will focus on structuring and planning the project. This semester, you will be asked to especially focus on the research design and planning of statistical analyses. Thus, the rotation project will give you the opportunity to apply knowledge and skills from the <i>Empirical Research Methods 1</i> and <i>Statistics</i> courses. In addition, we will organise workshops with invited lecturers.	
EXPECTED LEARNING OUTCOMES	

- select and adapt research designs according to a research question,
- explain and argue the choice of research design according to a research question,
- critically assess possible claims based on the planned study.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.6	
Project	2	50
Seminar paper	1.4	50
TOTAL	4	100

To obtain a grade on this course, students must i) choose and conduct one rotation project (maximum points: 50) and ii) submit a seminar paper (rotation project report; maximum points: 50).

Detailed information about all graded elements will be given and discussed in the first lecture.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Forstmeier, W., Wagenmakers, E. J., & Parker, T. H. (2017). Detecting and avoiding likely false-positive findings – a practical guide. *Biological Reviews*, 92(4), 1941-1968.
- Allen, C. & Mehler, D.M. (2019). Open science challenges, benefits and tips in early career and beyond. *PLoS Biology*, 17, e3000246.
- Munro, K. J., & Prendergast, G. (2019). Encouraging pre-registration of research studies. *International Journal of Audiology* 58

RECOMMENDED FURTHER READING

- Haven, T. L., & Van Grootel, D. L. (2019). Preregistering qualitative research. *Accountability in Research*, 26(3), 229-244.
- Ledgerwood, A. (2018). The preregistration revolution needs to distinguish between predictions and analyses. *Proceedings of the National Academy of Sciences*, 115(45), E10516-E10517.

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance at the two workshops is mandatory – we can be flexible about timings of the workshops to ensure that everyone can attend. In addition, you have to organise 4 meetings with your project supervisor(s).

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact the lecturer in advance to arrange a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	12 February 2027, 26 February 2027
Summer	25 June 2027, 9 July 2027
Autumn	3 September 2027, 17 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 7	Introduction to the course (choosing of topics, preparing for the rotation project) (2S)
Week 8	Project Work (2S)
Week 9	
Week 10	Workshop 1*: Open Science and pre-registrations (1L+2S)
Week 11	Project Work (2S)
Week 12	Workshop 2*: Analysis plans (1L+2S)
Week 13	Project Work (2S)
Week 14	Project Work (2S)
Week 15	Final discussion (2S)
* Workshops may be organised with invited lecturers, thus the dates may change. Workshops will either be held in person or online.	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Select and adapt research designs according to a research question	Selected project area, Open Science, Pre-registration	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Explain and argue the choice of research design according to a research question	Selected project area, Open Science, Pre-registration	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Critically assess possible claims based on the planned study	Selected project area, Open Science, Pre-registration	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Elective Modules in Cognitive Sciences
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st, 3rd
Academic year	2026/2027
ECTS credits	3
Contact hours (Lectures + Seminars + Practical work)	12+12+0
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Zdenka Brzović, Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula
Course instructors	Contact Details
Prof. Marija Brala Vukanović	Email: marija.brala@ffri.uniri.hr , Office: F-901, Office hours: TBA
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Marko Jurjako	Email: mjurjako@ffri.uniri.hr , Office: 422, Office hours: TBA
Nirvana Ribic	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	

The aim of this course is to familiarise you with different areas of cognitive sciences from a disciplinary, multidisciplinary and interdisciplinary perspective.

Within the elective course, there are several modules from which you can choose one.

For Winter semester 2026/2027, the following modules are planned:

1st and 2nd year students:

- Social Cognition (also open to Erasmus students)
- Philosophy of Science (also open to Erasmus students)
- Cognitive Linguistics
- Cognitive Sciences Bookclub
- Philosophy of Psychology and Neuroscience

2nd year students only:

- Science Writing and Reviewing

EXPECTED LEARNING OUTCOMES

Depending on the chosen module from the modules offered in this semester, students are expected to achieve a subset of the following course outcomes:

- to write on the same topic in different ways, depending on where the text is expected to be published,
- to structure a scientific text according to where the text is expected to be published,
- to recognise how to rearrange the text when a change in the main structure is needed, e.g., because there is a change in the place where the paper is sent for review,
- to analyse potential challenges and benefits of working with multiple co-authors,
- to integrate the above-mentioned challenges and benefits in decision-making on co-authorship and organisation of work,
- to analyse and evaluate others' comments on the text, and how and when to integrate them into new versions,
- to analyse and evaluate the usefulness of own comments on others' writing, and how to structure own comments,
- to formulate constructive comments and feedback in the role of a reviewer,
- to analyse basic terminology and theoretical assumptions in cognitive linguistics,
- to interpret linguistic phenomena (of English but also other languages familiar to the students),
- to interpret differences between languages regarding terminology and principles of cognitive linguistics,
- to compare differences between languages with universally operational elements and processes of the human mind and human language competencies,
- to summarise and evaluate research in cognitive linguistics,
- to discuss approaches and projects in cognitive linguistics,
- to describe and analyse current topics and recent studies in social cognition research,
- to critically evaluate methods and claims of social cognition studies,
- to explain recent discussions within contemporary philosophy of science,
- to defend different philosophical positions within discussions on contemporary philosophy of science.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.73	
Class Participation	1	50
Project	1.27	50
TOTAL	3	100

To obtain a grade on this course, students must i) actively participate in class (maximum points: 50) and ii) successfully complete a project (maximum points: 50).

Activities and class and projects will differ in their content and form based on the chosen module. Detailed information will be given by the module instructor(s) in the first module class.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Smaldino, P. E. & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, doi: 10.1098/rsos.160384.
- Leonelli, S. (2018). Re-thinking reproducibility as a criterion for research quality. [Pre-print]. http://philsci-archive.pitt.edu/14352/1/Reproducibility_2018_SL.pdf
- Bermúdez, J. (2016). *Cognitive science: An introduction to the science of the mind* (3rd ed.). New York: Cambridge University Press.
- Levine, D. S. (2019). *Introduction to cognitive and neural modeling* (3rd ed.). New York: Routledge
- Spelke, E. S., & Kinzler, K. D. (2007). Core knowledge. *Developmental Science*, 10(1), 89–96. doi:10.1111/j.1467-7687.2007.00569.x
- Gopnik, A. (1996). The Scientist as Child. *Philosophy of Science*, 63(4), 485–514. doi:10.1086/289970
- Tenenbaum, J. B., Kemp, C., Griffiths, T. L., & Goodman, N. D. (2011). How to Grow a Mind: Statistics, Structure, and Abstraction. *Science*, 331(6022), 1279–1285. doi:10.1126/science.1192788
- Kubricht, J. R., Holyoak, K. J., & Lu, H. (2017). Intuitive Physics: Current Research and Controversies. *Trends in Cognitive Sciences*, 21(10), 749–759. doi:10.1016/j.tics.2017.06.002
- Kuhl, P. K. (2004). Early language acquisition: cracking the speech code. *Nature Reviews Neuroscience*, 5(11), 831–843. doi:10.1038/nrn1533
- Suddendorf, T. (2017). The Emergence of Episodic Foresight and Its Consequences. *Child Development Perspectives*, 11(3), 191–195. doi:10.1111/cdep.12233
- Hamlin, J. K. (2013). Moral Judgment and Action in Preverbal Infants and Toddlers. *Current Directions in Psychological Science*, 22(3), 186–193. doi:10.1177/0963721412470687
- Poulin-Dubois, D. (2020). Theory of mind development: State of the science and future directions. *Progress in Brain Research*. doi:10.1016/bs.pbr.2020.05.021
- Bear, F. M., Connors, B. W., Paradiso, M. A. (2016). *Neuroscience exploring the brain*. Philadelphia: Wolters Kluwer.
- Byrne, R.W. & Bates, L.A. (2007). Sociality, evolution and cognition. *Current Biology*, 17(16), R714-R723. <http://doi.org/10.1016/j.cub.2007.05.069>
- Heyes, C. (2019). Précis of *Cognitive gadgets: The cultural evolution of thinking*. *Behavioral and Brain Sciences*, 42, E169. <https://doi.org/10.1017/S0140525X18002145>
- Shettleworth, S.J. (2012). Modularity, comparative cognition and human uniqueness. *Philosophical Transactions of the Royal Society B*, 367, 2794–2802. <https://doi.org/10.1098/rstb.2012.0211>
- Huber, L. & Wilkinson, A. (2012). Evolution of cognition: a comparative approach. In *Sensory Perception* (pp. 135-152). Vienna: Springer.
- Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M., Perilloux, C., & Buss, D. M. (2010). Evolutionary psychology: Controversies, questions, prospects, and limitations. *American Psychologist*, 65(2), 110.
- Buss, D. M. (1995). Evolutionary psychology: A new paradigm for psychological science. *Psychological inquiry*, 6(1), 1-30.

- Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences?. *Perspectives on Psychological Science*, 4(4), 359-366.
- Cosmides, L., & Tooby, J. (2013). Evolutionary psychology: New perspectives on cognition and motivation. *Annual review of psychology*, 64, 201-229.
- Mack, C.A. (2012). How to write a good scientific paper: title, abstract, and keywords. *Journal of Micro/Nanolithography, MEMS, and MOEMS*, 11(2), 020101.
- Schickore, J. (2008). Doing science, writing science. *Philosophy of Science*, 7(3), 323-343
- Croft, William & D. Alan Cruse. 2004. *Cognitive Linguistics*. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press.
- Matthews, Peter. 2014. *The Concise Dictionary of Linguistics* (Oxford Paperback Reference). New York: Oxford University Press.
- Frith, C.D. (2008). Social Cognition. *Philosophical Transactions of the Royal Society B*, 363(1499): 2033–2039. <https://doi.org/10.1098/rstb.2008.0005>
- Larsen, R.J., & Buss, D.M. (2005). *Personality psychology*. New York: McGraw-Hill
- Fecher, B. & Friesike, S. (2014). Open science: one term, five schools of thought. In *Opening science* (pp. 17-47). Cham: Springer.
- McKiernan, E.C. et al. (2016). Point of view: How open science helps researchers succeed. *eLife*, 5, e16800.
- Allen, C. & Mehler, D.M. (2019). Open science challenges, benefits and tips in early career and beyond. *PLoS Biology*, 17(5), e3000246.
- Nosek, B.A. & Lindsay, D.S. (2018). Preregistration becoming the norm in psychological science. *APS Observer*, 31(3).
- Szollosi, A., Kellen, D., Navarro, D.J., Shiffrin, R., van Rooij, I., Van Zandt, T., & Donkin, C. (2019). Is preregistration worthwhile? *Trends in Cognitive Sciences*, 24(2), 94-95.
- Scheel, A.M., Schijen, M., & Lakens, D. An excess of positive results. *Comparing the standard Psychology literature with Registered Reports*. Preprint at <https://osf.io/p6e9c> (2020).
- Hunter, J. (2012). Post-publication peer review: opening up scientific conversation. *Frontiers in Computational Neuroscience*, 6(63). <https://doi.org/10.3389/fncom.2012.00063>
- Kirkham, J. & Moher, D. (2018). Who and why do researchers opt to publish in post-publication peer review platforms? – findings from a review and survey of F1000 Research. *F1000Research*, 7(920). <https://doi.org/10.12688/f1000research.15436.1>
- Sarabipour, S., Debat, H.J., Burgess, S.J., Schwessinger, B., & Hensel, Z. (2019). On the value of preprints: An early career researcher perspective. *PLoS Biology*, 17(2), e3000151. <https://doi.org/10.1371/journal.pbio.3000151>
- Okasha, Samir (2004). *Philosophy of Science: A Very Short Introduction*. Oxford University Press.
- Godfrey-Smith, Peter (2003). *Theory and Reality: An Introduction to the Philosophy of Science*. Chicago University Press.
- Philip Kitcher and Gillian Barker (2014). *Philosophy of Science: A New Introduction*. Oxford University Press.
- Block, N. 1978. Troubles with Functionalism. Pretiskano u W. Lycan, ur. *Mind and Cognition*. Oxford: Blackwell, 2008.
- Dennett, D. 1988. Quining Qualia. U A. Marcel and E. Bisiach, ur. *Consciousness in Contemporary Science*. Oxford: Oxford University Press, 43-77. Reprinted in N. Block, O. Flanagan i G. Güzeldere, ur. *The Nature of Consciousness*. Cambridge, Mass.: MIT Press, 1997.
- Crane, T. 2001. *The Elements of Mind: An Introduction to the Philosophy of Mind*. Oxford: Oxford University Press.
- Kim, J. 2006. *Philosophy of Mind*. Boulder, Co.: Westview Press.
- Maslin, K. T. 2001. *An Introduction to the Philosophy of Mind*. Cambridge: Polity.
- Nagel, T. 1974. What is it Like to be a Bat? *Philosophical Review* 83: 435–450. Reprinted in D. Chalmers, ur. *Philosophy of Mind: Classical and Contemporary Readings*. Oxford: Oxford University Press.
- Ryle, G. 1949. *The Concept of Mind*. London: Hutchinson. Pretiskano s uvodom D. Dennetta, Penguin: London, 1980.
- Chalmers, D. 2002. *Philosophy of Mind: Classical and Contemporary Readings*. New York: Oxford University Press.

- Weiskopf, D. and Adams, F. (2015). *An introduction to the philosophy of psychology*. Cambridge: Cambridge University Press.

RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.

INFORMATION ABOUT THE FINAL EXAM

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	12 February 2027, 26 February 2027
Summer	25 June 2027, 9 July 2027
Autumn	1 September 2027, 15 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 7	Introduction to the course (1L) Work in modules (1L + 1S)
Week 8	Work in modules (1L + 1S)
Week 9	Work in modules (1L + 1S)
Week 10	Work in modules (1L + 1S)
Week 11	Work in modules (1L + 1S)
Week 12	Work in modules (1L + 1S)
Week 13	Work in modules (1L + 1S)
Week 14	Work in modules (2L + 1S)
Week 15	Final discussion and Wrap-up (2S)

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to write on the same topic in different ways, depending on where the text is expected to be published	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to structure a scientific text according to where the text is expected to be published	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to recognise how to rearrange the text when a change in the main structure is needed, e.g., because there is a change in the place where the paper is sent for review	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to analyse potential challenges and benefits of working with multiple co-authors	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to integrate the above-mentioned challenges and benefits in decision-making on co-authorship and organisation of work	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to analyse and evaluate others' comments on the text, and how and when to integrate them into new versions	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to analyse and evaluate the usefulness of own comments on others' writing, and how to structure own comments	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to formulate constructive comments and feedback in the role of a reviewer	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to analyse basic terminology and theoretical assumptions in cognitive linguistics	Modules Cognitive Linguistics and Extension to Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to interpret linguistic phenomena (of English	Module Cognitive Linguistics	Lectures, Seminar	Class Participation, Project

but also other languages familiar to the students)			
to interpret differences between languages regarding terminology and principles of cognitive linguistics	Module Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to compare differences between languages with universally operational elements and processes of the human mind and human language competencies	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to summarise and evaluate research in cognitive linguistics	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to discuss approaches and projects in cognitive linguistics	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and recent studies in social cognition research	Module Social Cognition	Lectures, Seminar	Class Participation, Project
to critically evaluate methods and claims of social cognition studies	Module Social Cognition	Lectures, Seminar	Class Participation, Project
to explain recent discussions within contemporary philosophy of science,	Module Philosophy of Science	Lectures, Seminar	Class Participation, Project
to defend different philosophical positions within discussions on contemporary philosophy of science.	Module Philosophy of Science	Lectures, Seminar	Class Participation, Project
to explain the discrepancies between folk psychology and scientific concepts from psychology and neuroscience	Module Philosophy of Psychology and Neuroscience	Lectures, Seminar	Class Participation, Project
to explain and evaluate the role of philosophy of psychology in integrating philosophical, psychological and neuroscientific approaches to the research of the human mind (the interface problem)	Module Philosophy of Psychology and Neuroscience	Lectures, Seminar	Class Participation, Project

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Academic Development	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		3rd, exceptionally in 1st	
Academic year		2026/2027	
ECTS credits		3 or 6	
Contact hours (Lectures + Seminars + Practical work)		Students conduct an internship within the disciplines and work of cognitive sciences at a host institution. Students have a supervisor at the host institution.	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Ljerka Ostojić	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
This is an elective that students can enrol into if they are conducting an internship that is additional to their Masters thesis project. Students can either get the internship accredited instead of elective courses, or as extra ECTS.			
EXPECTED LEARNING OUTCOMES			
To plan and conduct work of a cognitive scientists in an academic or non-academic professional environment.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
		x	
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT		ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Internship		1.5 ETCS for 2 weeks of full-time work	N/A

TOTAL	3 or 6	N/A
There is no summative assessment for this course.		
III. READING		
MANDATORY READING		
If there is mandatory reading for this course, then it will be decided by the individual supervisors.		
RECOMMENDED FURTHER READING		
If there is recommended further reading for this course, then it will be decided by the individual supervisors.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Students need to fulfil all obligations of the internship as agreed upon with their supervisor.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
V. COURSE OUTLINE		
DATE	TOPIC	
Times and dates of the internship, as well as the working schedule will be agreed with the internship supervisor at the host institution.		

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to evaluate benefits of AI for investigating cognition and the mind	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify and analyse challenges and obstacles in working with AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to independently study recent literature in the field of AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify the main discussions in research on cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to evaluate benefits and challenges of different empirical approaches to study cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to critically assess results of empirical studies in cognitive development as well as their link to theories on development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to discuss chosen research fields within developmental psychology	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to critically assess methods and claims of studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to analyse the challenges and benefits of Open Science approaches and tools	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to apply and adapt various Open Science tools to own research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to discuss benefits and suitability of various tools for different research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project

to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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SVEUČILIŠTE U RIJECI

Filozofski fakultet

Sveučilišna avenija 4
51 000 Rijeka

SYLLABUS

KEY INFORMATION ABOUT THE COURSE	
Course title	Academic Development
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st, 3rd
Academic year	2026/2027
ECTS credits	2
Contact hours (Lectures + Seminars + Practical work)	0+5+10
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula, Dr. Petra Anić, Dr. Marko Tončić
Course instructors	Contact Details
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F- 121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
Nirvana Ribić	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Petra Anić	Email: panic@ffri.uniri.hr , Office: 354, Office hours: TBA
Dr. Marko Tončić	Email: mtoncic@ffri.uniri.hr , Office: 369, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	

This is an additional, supportive elective course that students can enrol into to receive individualised and flexible support with various aspects of their academic development:

For Winter semester 2026/2027, the following support is planned

1st year students:

- Support with academic English
- Support with reading literature
- Support with academic writing

2nd year students:

- Support with advanced statistical methods
- Support with statistical methods for Masters thesis projects

EXPECTED LEARNING OUTCOMES

Depending on the support the student needs:

- to independently read technical and scientific literature,
- to listen to lectures and talks and take notes,
- to present their own arguments,
- to prepare and orally present technical and scientific topics,
- to plan and write a structured text,
- to summarise and critically evaluate written academic texts,
- to paraphrase texts,
- to use academic discourse,
- to reflect on their own skills, recognise areas for improvements and identify useful resources,
- to use specific complex statistical methods that are relevant to a chosen research area,
- to assess the adequacy of different statistical methods for the selected research area.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
	x	x	x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.5	
Class Participation	1.5	N/A
TOTAL	2	N/A

There is no summative assessment for this course.

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Moore, J. (2017) *Oxford Academic Vocabulary Practice: Upper-intermediate*. Oxford University Press.
- Swales, J. M., Feak, C. (2012) *Academic Writing for Graduate Students: Essential Tasks and Skills*. Michigan: University of Michigan.
- McCarthy, P., Hatcher, C. (2002) *Presentation Skills: Essential Guide for Students*. New Delhi: Sage Publications

RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION	
ATTENDANCE	
The course will be adjusted to students' schedules.	
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	Seminar
Week 8	Seminar
Week 9	Practical Work
Week 10	Practical Work
Week 11	Practical Work
Week 12	Practical Work
Week 14	Final discussion and Wrap-up

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Interdisciplinary Modules in Cognitive Sciences 2
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	3rd
Academic year	2026/2027
ECTS credits	9
Contact hours (Lectures + Seminars + Practical work)	60+20+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Prof. Igor Bajšanski, Dr. Marko Jurjako, Dr. Edward Legg, Dr. Luca Malatesti, Dr. Asmir Gračanin
Course instructors	Contact details
Prof. Igor Bajšanski	Email: sibajsan@ffri.uniri.hr , Office: F-347, Office Hours: TBA
Dr. Marko Jurjako	Email: mjurjako@ffri.uniri.hr , Office: F-422, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office hours: TBA
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
In this follow-up course to the <i>Interdisciplinary Modules in Cognitive Sciences 1</i>, you will gain further knowledge of selected topics from cognitive sciences from a disciplinary and interdisciplinary perspective. In addition to interactive lectures, we will have interdisciplinary moderated discussion groups. For some of these, your lecturers will select the literature, for others you will be able to select topics and papers of your interest. In addition, we will have invited lecturers for specific topics.	
EXPECTED LEARNING OUTCOMES	

- synthesise results and insights from selected areas,
- consider and compare theories and models within selected areas,
- critically evaluate claims of empirical research from selected areas,
- analyse interdisciplinary links between disciplines and areas,
- synthesise arguments from philosophy in selected areas,
- compare discussions in selected areas in philosophy and within empirical disciplines and areas.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	2.67	
Class participation	2.33	35
Essay	2	35
Written Exam	2	30
TOTAL	9	100

To obtain a grade on this course, students must i) participate in class discussions and other tasks during classes (maximum points available: 35), ii) submit one essay per module for four modules (maximum points available: 35), and iii) write an essay-style exam at the end of the term (maximum points available: 30).

Detailed information about all graded elements will be given and discussed in the first lecture.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Frodeman, R., Klein, J.T., & Pacheco, R.C.D.S. (Eds). (2017). *The Oxford handbook of interdisciplinarity*. Oxford University Press.
- Dennett, D.C. (1981). True believers: the intentional strategy and why it works. In Chalmers (2002). *Philosophy of Mind: classical and contemporary readings*. Oxford University Press.
- Gentner, D. (2010). Psychology in cognitive science: 1987-2038. *Topics in Cognitive Science*, 2(3), 328-344.
- Van Eck, N.J. & Waltman, L. (2014). CitNetExplorer: A new software tool for analyzing and visualizing citation networks. *Journal of Informetrics*, 8(4), 802-823. <https://doi.org/10.1016/j.joi.2014.07.006>
- Dehaene, S. (2009). Origins of mathematical intuitions: the case of arithmetic. *Annals of the New York Academy of Sciences*, 1156, 232-259. <https://doi.org/10.1111/j.1749-6632.2009.04469.x>
- Nieder, A., & Dehaene, S. (2009). Representation of number in the brain. *Annual Review of Neuroscience*, 32, 185-208. <https://doi.org/10.1146/annurev.neuro.051508.135550>
- Cavanagh, P. (2011). Visual cognition. *Vision Research*, 51(13), 1538-1551. <https://doi.org/10.1016/j.visres.2011.01.05>
- Franconeri, S.L., Alvarez, G.A., & Cavanagh, P. (2013). Flexible cognitive resources: competitive content maps for attention and memory. *Trends in Cognitive Sciences*, 17(3), 134-141. <https://doi.org/10.1016/j.tics.2013.01.010>
- Roelfsema, P.R., & Houtkamp, R. (2011). Incremental grouping of image elements in vision. *Attention*,

<i>Perception & Psychophysics</i>, 73(8), 2542-2572. https://doi.org/10.3758/s13414-011-0200-0 - Samuels, R., Stich, S., & Bishop, M. (2002). Ending the rationality wars: how to make disputes about human rationality disappear. In R. Eliso (Ed.), <i>Common Sense, Reasoning, and Rationality</i>. Oxford University Press. - Evans, J.St.B.T. & Stanovich, K.E. (2013). Dual-process theories of higher cognition advancing the debate. <i>Perspectives on Psychological Science</i>, 8(3), 223-241. https://doi.org/10.1177/1745691612460685 - Pennycook, G., Fugelsang, J.A., & Koehler, D.J. (2015). What makes us think? A three-stage dual-process model of analytic engagement. <i>Cognitive Psychology</i>, 80, 34-72. https://doi.org/10.1016/j.cogpsych.2015.05.001 - Stanovich, K.E. & West, R.F. (2000). Individual differences in reasoning: implications for the rationality debate. <i>Behavioral & Brain Sciences</i>, 23, 645-726. https://doi.org/10.1017/S0140525X0028343X - Tversky, A. & Kahneman, D. (1974). Judgement under uncertainty: Heuristics and biases. <i>Science</i>, 185, 1124-1131. https://doi.org/10.1126/science.185.4157.1124	
RECOMMENDED FURTHER READING	
- Cohen Kadosh, R., & Dowker, A. (2015). <i>The Oxford handbook of numerical cognition</i>. New York: Oxford University Press. - Fischer, M. H. & Shaki, S. (2014). Spatial associations in numerical cognition – from single digits to arithmetic. <i>Quarterly Journal of Experimental Psychology</i>, 67(8), 1461-1483. https://doi.org/10.1080/17470218.2014.927515 - De Neys, W. & Glumicic, T. (2008). Conflict monitoring in dual process theories of reasoning. <i>Cognition</i>, 106, 1248-1299. https://doi.org/10.1016/j.cognition.2007.06.002 - Dehaene, S. (2011). <i>The number sense. 2nd ed.</i> New York: Oxford University Press. - Coltheart, V. (2010). <i>Tutorials in visual cognition</i>. New York: Psychology Press. Ross, B.H., & Irwin, D. (2013). <i>Cognitive vision</i>. Amsterdam: Elsevier Science.	
IV. ADDITIONAL INFORMATION	
ATTENDANCE	
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.	
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
The final exam is an essay-style exam in which students will choose two questions.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	N/A
Summer	18 June 2027, 9 July 2027
Autumn	27 August 2027, 14 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Module 1: Metacognition and Metareasoning

	Instructors: Pavle Valerjev, Ljerka Ostojić, Sandra Arbula
Week 2	Module 1: Metacognition and Metareasoning Instructors: Pavle Valerjev, Ljerka Ostojić, Sandra Arbula
Week 3	Module 1: Metacognition and Metareasoning Instructors: Pavle Valerjev, Ljerka Ostojić, Sandra Arbula
Week 4	Module 2: Metacognition and Consciousness Instructor: Ljerka Ostojić, Marko Jurjako
Week 5	Module 2: Metacognition and Consciousness Instructors: Ljerka Ostojić, Marko Jurjako
Week 6	Module 2: Metacognition and Consciousness Instructor: Ljerka Ostojić, Marko Jurjako
Week 7	Module 3: Theory of Mind Instructors: Edward Legg
Week 8	Module 3: Theory of Mind Instructors: Edward Legg
Week 9	Module 3: Theory of Mind Instructors: Edward Legg
Week 10	Module 4: Social Perception Instructor: Edward Legg
Week 11	Module 4: Social Perception Instructor: Edward Legg
Week 12	Module 5: Individual Differences in Cognition Instructor: TBC
Week 13	Module 5: Individual Differences in Cognition Instructor: TBC
Week 14	Workshop and student discussions: Ljerka Ostojic, Ivan Flis
Week 15	Student discussions Ljerka Ostojic, Ivan Flis

VI. CONSTRUCTIVE ALIGNMENT

LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Synthesise results and insights from selected areas	Metacognition, Consciousness, Theory of Mind, Social Cognition, Social Perception, Individual Differences	Lectures, Seminars	Class Participation (discussion), Essays, Written exam
Consider and compare theories and models within selected areas	Metacognition, Consciousness, Theory of Mind, Social Cognition, Social Perception	Lectures, Seminars	Class Participation (discussion), Essays, Written exam
Critically evaluate claims of empirical research from selected areas	Metacognition, Consciousness, Theory of Mind, Social Cognition, Social Perception, Individual Differences	Lectures, Seminars	Class Participation (discussion), Wssays, Written exam
Analyse interdisciplinary links between disciplines and areas	Interdisciplinarity, Multidisciplinarity	Workshop	Class Participation (discussion), Wssays, Written exam
Synthesise arguments from philosophy in selected areas	Metacognition, Consciousness, Theory of Mind	Lectures, Seminars	Class Participation (discussion), Essays, Written exam
Compare discussions in selected areas in philosophy and within empirical disciplines and areas	Metacognition, Consciousness, Theory of Mind	Lectures, Seminars, Workshop	Class Participation (discussion), Essays, Written exam

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Ethics
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd
Academic year	2026/2027
ECTS credits	6
Contact hours (Lectures + Seminars + Practical work)	15+30+0
Time and venue of classes	TBC
Language of instruction	English
Course organiser	Dr. Ljerka Ostojić
Course instructors	Contact details
Dr. Ivan Flis	Email: ivan.flis@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
In this course, will work through ethical questions in cognitive sciences research and discuss situations and components that you are likely to encounter in your future research career.	
EXPECTED LEARNING OUTCOMES	
- critically assess the role of ethics for cognitive sciences, - analyse ethical issues related to different studies, - assess the ways in which ethical issues in empirical research can be approached during applications for ethical approval, - discuss ethical issues arising from the use of empirical data and results, - analyse ethical questions related to the nature of work and professional development in academia.	

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')			
Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	1.5		
Project	2.5	50	
Seminar paper	2	50	
TOTAL	6	100	
To obtain a grade on this course, students must i) take part in a project (maximum points: 50) and ii) submit one seminar paper (maximum points: 50).			
Detailed information about all graded elements will be given and discusses in the first lecture.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
- Rosnow, R.L. & Rosenthal (2013). <i>Beginning Behavioral Research: A Conceptual Primer</i>. Harlow: Prentice Hall. - Levelt, W.J., Drenth., P.J.D., & Noort, E. (2012). Flawed science: The fraudulent research practices of social psychologist Diederik Stapel. Retrieved from https://pure.mpg.de/rest/items/item_1569964/component/file_1569966/content - Birhane, A. & Guest, O. (2020). Towards decolonising computational sciences. <i>arXiv:1009.14258</i>. - Lee, D.N. (2020). Diversity and inclusion activism in animal behaviour and the ABS: a historical view from the USA. <i>Animal Behaviour</i>, 164, 273-280. https://doi.org/10.1016/j.anbehav.2020.03.019 - Greene, T., Schmueli, G., Ray, S., & Fell, J. (2019). Adjusting to the GDPR: The impact on data scientists and behavioral researchers. <i>Big data</i>, 7(3), 140-162. https://doi.org/10.1089/big.2018.0176 - Buchanan, K., Burt de Perera, T., Carere, C., Carter, T., Hailey, A., Hubrecht, R., Jennings, D., Metcalfe, N., Pitcher, T., Peron, F., Sneddon, L., Sherwin, C., Talling, J., Thomas, R., & Thompson, M. (2012). Guidelines for the treatment of animals on behavioural research and teaching. <i>Animal Behaviour</i>, 83(1), 301-309. https://doi.org/10.1016/j.anbehav.2011.10.031 - Norton, B.J. (1978). Karl Pearson and Statistics: The origins of scientific innovation. <i>Social Studies of Science</i>, 8(1), 3-34. - Smaldino, P.E. & McElreath, R. (2016). The natural selection of bad science. <i>Royal Society Open Science</i>, 3(9), 160384. https://doi.org/10.1098/rsos.160384 - Vanderkerckhove, J., White, C.N., Trueblood, J.S., Rouder, J.N., Matzke, D., Leite, F.P., Etz, A., Donkin, C., Devezer, B., Criss, A.H., & Lee, M.D. (2019). Robust diversity in cognitive science. <i>Computational Brain & Behavior</i>, 2, 271-276. https://doi.org/10.1007/s42113-019-00066-7. - Chambers, C.D., Dienes, Z., McIntosh, R.D., Rotshtein, P., & Willmes, K. (2015). Registered reports: realigning incentives in scientific publishing. <i>Cortex</i>, 66, A1-A2. https://doi.org/10.1016/j.cortex.2015.03.022 - Tennant, J.P., Waldner, F., Jacques, D.C., Masuzzo, P., Collister, L.B., & Hartgerink, C.H. (2016). The academic, economic and societal impacts of Open Access: an evidence/based review. <i>F1000Research</i>, 5, 632. https://doi.org/10.12688/f1000research.8460.3 - Eren, E. (2020). Never the right time: maternity planning alongside a science career in academia. <i>Journal of Gender Studies</i>, 1-12. https://doi.org/10.1080/09589236.2020.1858765			

RECOMMENDED FURTHER READING	
- Siebert, J.E. (2004). Empirical research on research ethics. <i>Ethics & Behavior</i>, 14(4), 397-412. https://doi.org/10.1207/s15327019eb1404_9 - Mietola, R., Miettinen, S., & Vehmas, S. (2017). Voiceless subjects? Research ethics and persons with profound intellectual disabilities. <i>International Journal of Social Research Methodology</i>, 20(3), 263-274. - Jaffe, K., Correa, J.C., & Tang-Martinez, Z. (2020). Ethology and animal behaviour in Latin America. <i>Animal Behaviour</i>, 164, 281-291. https://doi.org/j.anbehav.2019.11.007 - Gluck, J.P. (1997). Harry F. Harlow and animal research: reflections on the ethical paradox. <i>Ethics & Behavior</i>, 7(2), 149- 161. - Delzell, D.A.P. & Poliak, C.D. (2013). Karl Pearson and Eugenics: Personal Opinions and Scientific Rigor. <i>Science and Engineering Ethics</i>, 19, 1057-1070. - Smaldino, P.E., Turner, M.A., & Contreras Kallens, P.A. (2019). Open science and modified funding lotteries can impede the natural selection of bad science. <i>Royal Society Open Science</i>, 6(7), 190194. https://doi.org/10.1098/rsos.190194 - Nosek, B.A., Spies, J.R., & Motyl, M. (2012). Scientific Utopia II. Restructuring incentives and practices to promote truth over publishability. <i>Perspectives on Psychological Science</i>, 7(6), 615-631. https://doi.org/10.1177/1745691612459058 - Weisshaar, K. (2017). Publish <i>and</i> perish? An assessment of gender gaps in promotion to tenure in academia. <i>Social Forces</i>, 96(2), 529-560. https://doi.org/10.1093/sf/sox052	
IV. ADDITIONAL INFORMATION	
ATTENDANCE	
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.	
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	N/A
Summer	30 June 2027, 14 July 2027
Autumn	1 September 2027, 15 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Introduction to the course. Introduction to Ethics in Cognitive Sciences Instructors: Ljerka Ostojić, Ivan Flis
Week 2	Module 1: Ethics in Research with Participants Instructor: Ljerka Ostojić

Week 3	Module 1: Ethics in Research with Participants Instructor: Ljerka Ostojić
Week 4	Module 1: Ethics in Research with Participants Instructor: Ljerka Ostojić, Ivan Flis
Week 5	Module 1: Ethics in Research with Participants Instructor: Ljerka Ostojić, Sandra Arbula
Week 6	Module 2: Ethics and Open Science Instructor: Ivan Flis, Ljerka Ostojić
Week 7	Project Introduction
Week 8	Module 2: Ethics and Open Science Instructor: Ivan Flis, Ljerka Ostojić
Week 9	Module 2: Ethics and Open Science Instructor: Ivan Flis, Ljerka Ostojić
Week 10	Module 3: Ethics in AI Instructor: Ivan Flis, Ljerka Ostojić
Week 11	Module 3: Ethics in AI Instructor: Ivan Flis, Ljerka Ostojić
Week 12	Project Work
Week 13	Module 4: Ethics and the Scientific Community Instructor: Ivan Flis, Ljerka Ostojić
Week 14	Module 4: Ethics and the Scientific Community Instructor: Ivan Flis, Ljerka Ostojić
Week 15	Wrap-up, Project Presentation and Discussion

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Critically assess the role of ethics for cognitive sciences	Ethics in philosophy, Ethics in empirical research, Ethics in AI	Lectures, Seminars, Discussions	Project-based assessment, Seminar paper
Analyse ethical issues related to different studies	Ethics in philosophy, Ethics in empirical research, Ethics in AI	Lectures, Seminars, Discussions	Project-based assessment, Seminar paper
Assess the ways in which ethical issues in empirical research can be approached during applications for ethical approval	Ethics in working with human participants, Ethics in working with animal participants	Lectures, Seminars, Discussions	Project-based assessment, Seminar paper
Discuss ethical issues arising from the use of empirical data and results	Ethics in empirical research, Open Science, Data Management, Data Sharing, Dissemination of research, Participatory research	Lectures, Seminars, Discussions	Project-based assessment, Seminar paper
Analyse ethical questions related to the nature of work and professional development in academia	Ethics and the scientific community, Visibility and diversity in the scientific community, Scientific colonialism	Lectures, Seminars, Discussions	Project-based assessment, Seminar paper

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Empirical Research Methods 2	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		2nd	
Academic year		2026/2027	
ECTS credits		7	
Contact hours (Lectures + Seminars + Practical work)		30+30+0	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Sandra Arbula	
Course instructors		Contact details	
Dr. Edward Legg		Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA	
Dr. Sandra Arbula		Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, you will familiarise yourself with the diversity of methodological approaches and methods in cognitive sciences and will train for (independent) research in cognitive sciences by integrating steps in empirical research through a specialised workshop.			
EXPECTED LEARNING OUTCOMES			
• design cognitive experiments with reaction time as a dependent variable, • analyse and interpret results of an experiment with reaction time as a dependent variable, • program a cognitive experiment using PsychoPy or OpenSesame, • design and program online experiments, • critically assess the use of online testing in cognitive sciences.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')			
Lectures	Seminars	Practical work	Independent work
X	X		X

Fieldwork	Laboratory work	Mentoring	Other
			x
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	2		
Class participation	2	20	
Seminar paper	2	50	
Project	2	30	
TOTAL	7	100	
To obtain a grade on this course, students must i) participate in class discussions and other tasks during classes (maximum points: 20), ii) actively take part in the class project (workshop; maximum points: 30), and iii) submit a seminar paper (workshop report; maximum points: 50).			
Detailed information about all graded elements will be given and discusses in the first lecture.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
- Bermúdez, J. (2016). <i>Cognitive science: An introduction to the science of the mind</i> (2nd ed.). Cambridge University Press. - Shaughnessy, J. J., Zechmeister, E. B. i Zechmeister, J. S. (2012). <i>Research methods in psychology</i> (9th ed.). McGraw-Hill. - Stewart, N., Chadler, J., & Paolacci, G. (2017). Crowdsourcing samples in cognitive science. <i>Trends in cognitive sciences</i>, 21(10), 736-748. https://doi.org/10.1016/j.tics.2017.06.007 - Farrell, S. & Lewandowsky, S. (2018). <i>Computational modeling of cognition and behavior</i>. Cambridge University Press. - Kline, R. B. (2008). <i>Becoming a behavioral science researcher: A Guide to producing research that matters</i>. The Guilford Press.			
RECOMMENDED FURTHER READING			
- Wagenmakers, E.-J. (2018). <i>Stevens' handbook of experimental psychology and cognitive neuroscience. Volume 5: Methodology</i> (4th ed.). John Wiley & Sons. - Dienes, Z. (2008). <i>Understanding psychology as a science: An introduction to scientific and statistical inference</i>. Palgrave Macmillan. - Sun, R. (2008). <i>The Cambridge handbook of computational psychology</i>. Cambridge University Press. - Chmielewski, M. & Kucker, S.C. (2019). An MTurk crisis? Shifts in data quality and the impact on study results. <i>Social Psychological and Personality Science</i>, 11, 464-473. https://doi.org/10.1177/1948550619875149 - Owens, J. & Hawkins, E.M. (2019). Using online labor market participants for nonprofessional investor research: a comparison of MTurk and Qualtrics samples. <i>Journal of Information Systems</i>, 33(1), 113-128. https://doi.org/10.2308/isys/52036			
IV. ADDITIONAL INFORMATION			
ATTENDANCE			
This is a course in which each week’s classes build up on previous ones. It is thus hard to successfully fulfil the course requirements and achieve the learning outcomes without being present in all classes. Consequently, this course has a stricter attendance than most other courses, and this concerns lectures, seminars and practicals. In general, it is			

advised that you attend 100% of classes. However, we understand that it is sometimes necessary to miss classes, but this should be minimal and due to important reasons, and you need to contact the lecturer if you will be missing a class or had to miss a class due to an emergency. The lecturer will then figure out a plan how to best make up for the missed classes so that an absence does not negatively affect your progress through the course, such that you are required to adhere to the plan for making up for missed classes.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange a meeting.

INFORMATION ABOUT THE FINAL EXAM

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

Further support for this course

As part of the supporting elective course *Academic Development*, we offer individualised further support with the content of this course, specifically the programming experiments.

EXAM DATES

Winter	N/A
Summer	25 June 2027, 9 July 2027
Autumn	27 August 2027, 9 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 1	Introduction to the course and workshop Instructors: Edward Legg, Sandra Arbula
Week 2	Mental chronometry Instructor: Sandra Arbula
Week 3	Mental chronometry Instructor: Sandra Arbula
Week 4	Programming cognitive experiments Instructor: Edward Legg
Week 5	Programming cognitive experiments Instructor: Edward Legg
Week 6	Programming cognitive experiments Instructor: Edward Legg
Week 7	Programming cognitive experiments Instructor: Edward Legg
Week 8	Programming cognitive experiments Instructor: Edward Legg
Week 9	Programming cognitive experiments Instructor: Edward Legg
Week 10	Programming cognitive experiments Instructor: Edward Legg

Week 11	Workshop Instructors: Edward Legg, Sandra Arbula
Week 12	Workshop Instructors: Edward Legg, Sandra Arbula
Week 13	Workshop Instructors: Edward Legg, Sandra Arbula
Week 14	Workshop: Piloting of experiments Instructors: Edward Legg, Sandra Arbula
Week 15	Workshop: Student Presentations Instructors: Edward Legg, Sandra Arbula

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Design cognitive experiments with reaction time as a dependent variable	Mental chronometry, Programming cognitive experiments, Online testing	Lectures, Seminars, Workshop	Class Participation, Project, Seminar paper
Analyse and interpret results of an experiment with reaction time as a dependent variable	Mental chronometry	Lectures, Seminars, Workshop	Class Participation, Project, Seminar paper
Program a cognitive experiment using PsychoPy or OpenSesame	Programming cognitive experiments	Lectures, Seminars	Class Participation
Design and program online experiments	Online testing	Lectures, Seminars	Class Participation
Critically assess the use of online experiments in cognitive sciences	Online testing	Lectures, Seminars	Class Participation

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Rotation project 2
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd
Academic year	2026/2027
ECTS credits	5
Contact hours (Lectures + Seminars + Practical work)	3+19+0
Time and venue of classes	TBC
Language of instruction	English
Course organisers	Dr. Ljerka Ostojić
Course instructors	Contact details
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@ffri.uniri.hr , Office: F-121, Office Hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
Like in the course <i>Rotation project 1</i>, you will choose one of the offered topics and, independently and with your supervisor, plan and design a study. The aim of the course is to think about the importance of early stages of research, thus the emphasis will be on planning and structuring the research: for empirical projects, this will include planning statistical analysis but will not include data collection, and for theoretical projects, this will focus on structuring and planning the project. This semester, you will be asked to especially focus on data management and ethical questions related to your selected research question. Thus, the rotation project will give you the opportunity to apply knowledge and skills from the <i>Empirical Research Methods 2</i> and <i>Ethics</i> courses. In addition, we will organise workshops with external collaborators and invited lecturers.	
EXPECTED LEARNING OUTCOMES	

- select and adapt research designs according to a research question,
- explain and argue the choice of research design according to a research question,
- critically assess possible claims based on the planned study,
- critically evaluate possible ways to increase reproducibility and replicability of research (if relevant),
- plan and write a data management plan for a selected research question,
- critically evaluate ethical questions related to a selected research question,
- analyse possible ways to approach the above-mentioned ethical questions in practice.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.73	
Project	2.67	50
Seminar paper	1.6	50
TOTAL	5	100

To obtain a grade on this course, students must i) choose and conduct one rotation project (maximum points: 50) and ii) submit a seminar paper (rotation project report; maximum points: 50).

Detailed information about all graded elements will be given and discussed in the first lecture.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Wilkinson, M., Dumontier, M., Aalbersberg, I. *et al.* (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data* 3, 160018
- Gewin, V. (2016). Data sharing: An open mind on open data. *Nature*, 529(7584), 117-119.
- Stewart, N., Chandler, J., & Paolacci, G. (2017). Crowdsourcing samples in cognitive science. *Trends in cognitive sciences*, 21(10), 736-748.
- Crüwell, S., van Doorn, J., Etz, A., Makel, M. C., Moshontz, H., Niebaum, J. C., ... & Schulte-Mecklenbeck, M. (2019). Seven easy steps to open science. *Zeitschrift für Psychologie*.

RECOMMENDED FURTHER READING

- Truong, N. B., Sun, K., Lee, G. M., & Guo, Y. (2019). Gdpr-compliant personal data management: A blockchain-based solution. *IEEE Transactions on Information Forensics and Security*, 15, 1746-1761.
- McLeod, J., & O'Connor, K. (2020). Ethics, archives and data sharing in qualitative research. *Educational Philosophy and Theory*, 53(5), 523-535.
- Gurevitch, J., Koricheva, J., Nakagawa, S., & Stewart, G. (2018). Meta-analysis and the science of research synthesis. *Nature*, 555(7695), 175-182.

IV. ADDITIONAL INFORMATION	
ATTENDANCE	
Attendance at the two workshops is mandatory – we can be flexible about timings of the workshops to ensure that everyone can attend. In addition, you have to organise 4 meetings with your project supervisor(s).	
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact the lecturer in advance to arrange a meeting.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	N/A
Summer	25 June 2027, 9 July 2027
Autumn	3 September 2027, 17 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Introduction to the course (choosing of topics, preparing for the rotation project) (1S)
Week 2	Project Work (2S)
Week 3	
Week 4	
Week 5	Project Work (2S)
Week 6	
Week 7	Workshop 1*: Ethics Applications (1L + 3S)
Week 8	
Week 9	Project Work (2S)
Week 10	Workshop 3*: Meta-Analysis (2L + 4S)
Week 11	
Week 12	Project Work (2S)
Week 13	
Week 14	
Week 15	Final discussion (2S)
* Workshops may be organised with invited lecturers, thus the dates may change. Workshops will either be held in person or online.	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
Select and adapt research designs according to a research question	Selected project area, Replicability, Reproducibility, Meta-analysis	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Explain and argue the choice of research design according to a research question	Selected project area, Replicability, Reproducibility, Meta-analysis	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Critically assess possible claims based on the planned study	Selected project area	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Critically evaluate possible ways to increase reproducibility and replicability of research (if relevant),	Selected project area, Replicability, Reproducibility	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Plan and write a data management plan for a selected research question,	Selected project area, Data management	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Critically evaluate ethical questions related to a selection research question,	Selected project area, Ethics, GDPR, FAIR Data	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper
Analyse possible ways to approach the above-mentioned ethical questions in practice.	Selected project area, Ethics, GDPR, FAIR Data	Individual work, Meetings with project supervisor, Workshops	Project, Seminar paper

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Elective modules in Cognitive Sciences
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd, 4th
Academic year	2026/2027
ECTS credits	3
Contact hours (Lectures + Seminars + Practical work)	12+12+0
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Zdenka Brzović, Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula
Course instructors	Contact Details
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F- 121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
The aim of this course is to familiarise you with different areas of cognitive sciences from a disciplinary, multidisciplinary, and interdisciplinary perspective. Within the elective course, there are several modules from which you can choose one. For Summer semester 2026/2027, the following modules are planned: 1st and 2nd year students: ○ Developing Minds (also open to Erasmus students) ○ Open Science and Its Tools (also open to Erasmus students) ○ Evolution of Mind: Brain and Behaviour ○ AI & Cognition – Critical AI Literacy	

2nd year students only:

- o Cognitive Neuroscience Methods in Practice

EXPECTED LEARNING OUTCOMES

Depending on the chosen module, students are expected to achieve a subset of the following course outcomes:

- to evaluate benefits of AI for investigating cognition and the mind,
- to identify and analyse challenges and obstacles in working with AI,
- to independently study recent literature in the field of AI
- to identify the main discussions in research on cognitive development,
- to evaluate benefits and challenges of different empirical approaches to study cognitive development,
- to critically assess results of empirical studies in cognitive development as well as their link to theories on development,
- to discuss chosen research fields within developmental psychology,
- to describe and analyse current topics and studies on the evolution of cognition,
- to critically assess methods and claims of studies on the evolution of cognition,
- to analyse the challenges and benefits of Open Science approaches and tools,
- to apply and adapt various Open Science tools to own research,
- to discuss benefits and suitability of various tools for different research,
- to discuss and make informed decisions about using Open Science approaches and tools in own work.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.73	
Class Participation	1	50
Project	1.27	50
TOTAL	3	100

To obtain a grade on this course, students must i) actively participate in class (maximum points: 50) and ii) successfully complete a project (maximum points: 50).

Activities and class and projects will differ in their content and form based on the chosen module. Detailed information will be given by the module instructor(s) in the first module class.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Smaldino, P. E. & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, doi: 10.1098/rsos.160384.
- Leonelli, S. (2018). Re-thinking reproducibility as a criterion for research quality. [Pre-print]. http://philsci-archive.pitt.edu/14352/1/Reproducibility_2018_SL.pdf
- Bermúdez, J. (2016). *Cognitive science: An introduction to the science of the mind* (3rd ed.). New York: Cambridge University Press.
- Levine, D. S. (2019). *Introduction to cognitive and neural modeling* (3rd ed.). New York: Routledge
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RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	NA
Summer	25 June 2027, 9 July 2027
Autumn	1 September 2027, 15 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Introduction to the course (2L)
Week 3	Work in modules (1L + 1S)
Week 4	Work in modules (1L + 1S)
Week 5	Work in modules (1L + 1S)
Week 6	Work in modules (1L + 1S)
Week 7	Work in modules (1L + 1S)
Week 8	Work in modules (1L + 1S)
Week 9	Work in modules (1L + 1S)
Week 10	Work in modules (1L + 1S)
Week 11	Work in modules (1L + 1S)
Week 12	Work in modules (1L + 1S)
Week 14	Final discussion and Wrap-up (2S)

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to evaluate benefits of AI for investigating cognition and the mind	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify and analyse challenges and obstacles in working with AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to independently study recent literature in the field of AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify the main discussions in research on cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to evaluate benefits and challenges of different empirical approaches to study cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to critically assess results of empirical studies in cognitive development as well as their link to theories on development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to discuss chosen research fields within developmental psychology	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to critically assess methods and claims of studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to analyse the challenges and benefits of Open Science approaches and tools	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to apply and adapt various Open Science tools to own research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to discuss benefits and suitability of various tools for different research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project

to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Academic Development	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		4th, exceptionally in 2nd	
Academic year		2026/2027	
ECTS credits		3 or 6	
Contact hours (Lectures + Seminars + Practical work)		Students conduct an internship within the disciplines and work of cognitive sciences at a host institution. Students have a supervisor at the host institution.	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Ljerka Ostojić	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
This is an elective that students can enrol into if they are conducting an internship that is additional to their Masters thesis project. Students can either get the internship accredited instead of elective courses, or as extra ECTS.			
EXPECTED LEARNING OUTCOMES			
To plan and conduct work of a cognitive scientists in an academic or non-academic professional environment.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
		x	
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION		MAXIMUM POINTS (% OF TOTAL)
Internship	1.5 ETCS for 2 weeks of full-time work		N/A

TOTAL	3 or 6	N/A
There is no summative assessment for this course.		
III. READING		
MANDATORY READING		
If there is mandatory reading for this course, then it will be decided by the individual supervisors.		
RECOMMENDED FURTHER READING		
If there is recommended further reading for this course, then it will be decided by the individual supervisors.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Students need to fulfil all obligations of the internship as agreed upon with their supervisor.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
V. COURSE OUTLINE		
DATE	TOPIC	
Times and dates of the internship, as well as the working schedule will be agreed with the internship supervisor at the host institution.		

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to evaluate benefits of AI for investigating cognition and the mind	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify and analyse challenges and obstacles in working with AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to independently study recent literature in the field of AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify the main discussions in research on cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to evaluate benefits and challenges of different empirical approaches to study cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to critically assess results of empirical studies in cognitive development as well as their link to theories on development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to discuss chosen research fields within developmental psychology	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to critically assess methods and claims of studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to analyse the challenges and benefits of Open Science approaches and tools	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to apply and adapt various Open Science tools to own research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to discuss benefits and suitability of various tools for different research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project

to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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SVEUČILIŠTE U RIJECI

Filozofski fakultet

Sveučilišna avenija 4
51 000 Rijeka

SYLLABUS

KEY INFORMATION ABOUT THE COURSE	
Course title	Academic Development
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd, 4th
Academic year	2026/2027
ECTS credits	2
Contact hours (Lectures + Seminars + Practical work)	0+5+10
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula, Dr. Petra Anić, Dr. Marko Tončić
Course instructors	Contact Details
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F- 121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
Nirvana Ribić	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Petra Anić	Email: panic@ffri.uniri.hr , Office: 354, Office hours: TBA
Dr. Marko Tončić	Email: mtoncic@ffri.uniri.hr , Office: 369, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	

This is an additional, supportive elective course that students can enrol into to receive individualised and flexible support with various aspects of their academic development:

For Summer semester 2026/2027, the following support is planned

1st year students:

- Support with academic English
- Support with reading literature
- Support with academic writing
- Support with programming experiments

2nd year students:

- Support with advanced statistical methods
- Support with statistical methods for Masters thesis projects

EXPECTED LEARNING OUTCOMES

Depending on the support the student needs:

- to independently read technical and scientific literature,
- to listen to lectures and talks and take notes,
- to present their own arguments,
- to prepare and orally present technical and scientific topics,
- to plan and write a structured text,
- to summarise and critically evaluate written academic texts,
- to paraphrase texts,
- to use academic discourse,
- to reflect on their own skills, recognise areas for improvements and identify useful resources,
- to use specific complex statistical methods that are relevant to a chosen research area,
- to assess the adequacy of different statistical methods for the selected research area,
- to program cognitive experiments using PsychoPy or OpenSesame.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
	x	x	x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.5	
Class Participation	1.5	N/A
TOTAL	2	N/A

There is no summative assessment for this course.

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Moore, J. (2017) *Oxford Academic Vocabulary Practice: Upper-intermediate*. Oxford University Press.
- Swales, J. M., Feak, C. (2012) *Academic Writing for Graduate Students: Essential Tasks and Skills*. Michigan: University of Michigan.
- McCarthy, P., Hatcher, C. (2002) *Presentation Skills: Essential Guide for Students*. New Delhi: Sage Publications

RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

The course will be adjusted to students' schedules.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.

INFORMATION ABOUT THE FINAL EXAM

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

V. COURSE OUTLINE

DATE	TOPIC
Week 1	
Week 3	
Week 4	Seminar
Week 5	Seminar
Week 6	
Week 7	Practical Work
Week 8	Practical Work
Week 9	
Week 10	
Week 11	Practical Work
Week 12	Practical Work
Week 14	Final discussion and Wrap-up

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title	Preparation of Masters Thesis 1		
Study programme	Masters in Cognitive of Sciences: Cognition and the Mind		
Semester	3rd		
Academic year	2026/2027		
ECTS credits	20		
Course organisers	Dr. Sandra Arbula, Dr. Ljerka Ostojić		
Contact hours (Lectures + Seminars + Practical work)	NA. Students work with their supervisor(s) on a research project.		
Time and venue of classes	TBC		
Language of instruction	English		
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
Students work independently and with their supervisor(s) and where applicable, advisor(s) on the plan of their Masters thesis project. Students working on their Masters thesis at the Faculty of Humanities and Social Sciences are expected to work in the joint office. Students present the plan for their Masters thesis project as a poster during the <i>CogSci Masters Posters</i> event.			
EXPECTED LEARNING OUTCOMES			
- To select a research question for independent scientific or scholarly work, - For empirical projects: to design an empirical study to investigate the chosen research question, - For theoretical projects, to choose adequate theoretical research methods for the chosen research question, - To critically evaluate the possible inferences and conclusions that can be drawn based on the research project of the Masters thesis, - To plan and carry out a poster presentation of the chosen Masters thesis project.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			

TOTAL	4	100
Students are awarded 20 ECTS for this course (without summative grading) if they have presented their Masters thesis project as a poster during the <i>CogSci Masters Posters</i> event.		
III. READING		
MANDATORY READING		
The Literature for this course depends on the Masters thesis project.		
RECOMMENDED FURTHER READING		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Students have regular meetings with their supervisor(s) and advisor(s).		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their supervisor(s) during meetings, contact them over email or Moodle, and during office hours.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
EXAM DATES		
Winter	10 February 2027 and 24 February 2027	
Summer	30 June 2027 and 14 July 2027	
Autumn	1 September 2027 and 15 September 2027	
V. COURSE OUTLINE		
DATE	TOPIC	
Week 1	Introduction to the Masters thesis and finding a supervisor.	
Week 2	Workshop	
Week 3	Working on the Masters thesis project. Meeting with supervisor.	
Week 4	Working on the Masters thesis project. Meeting with supervisor.	
Week 5	Working on the Masters thesis project. Meeting with supervisor.	
Week 6	Working on the Masters thesis project. Meeting with supervisor.	
Week 7	Working on the Masters thesis project. Meeting with supervisor.	

Week 8	Working on the Masters thesis project. Meeting with supervisor.
Week 9	Working on the Masters thesis project. Meeting with supervisor.
Week 10	Working on the Masters thesis project. Meeting with supervisor.
Week 11	Working on the Masters thesis project. Meeting with supervisor.
Week 12	Working on the Masters thesis project. Preparation for the poster presentation.
Week 13	Working on the Masters thesis project. Meeting with supervisor.
Week 14	Poster presentation.
Week 15	Working on the Masters thesis project. Meeting with supervisor.

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
To select a research question for independent scientific or scholarly work,	Masters thesis topic	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
For empirical projects: to design an empirical study to investigate the chosen research question,	Masters thesis topic if empirical	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
For theoretical projects, to choose adequate theoretical research methods for the chosen research question,	Masters thesis topics if theoretical	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
Critically evaluate the possible inferences and conclusions that can be drawn based on the research project of the Masters thesis,	Masters thesis topic	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
Plan and carry out a poster presentation of the chosen Masters thesis project.	Masters thesis topic	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during poster presentation.

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Science Communication 1	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		3rd	
Academic year		2026/2027	
ECTS credits		4	
Contact hours (Lectures + Seminars + Practical work)		3+14+0	
Time and venue of classes		TBC	
Language of instruction		English	
Course organiser		Dr. Ljerka Ostojić	
Course instructor		Contact details	
Dr. Ljerka Ostojić		Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, students will plan and carry out a science communication project related to their Masters thesis.			
EXPECTED LEARNING OUTCOMES			
- to conceptualise different science communication ideas and adapt them to the topic of a research project, - to create a plan for a science communication project according to a selected topic, - to critically evaluate the benefits and possible problems in science communication in general and for specific projects.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
x	x	x	x
Fieldwork	Laboratory work	Mentoring	Other
x		x	x

II. COURSE EVALUATION AND GRADING CRITERIA		
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.37	
Class participation	0.63	20
Project	3	80
TOTAL	4	100
To successfully pass this course, students must i) actively participate in classes/during mentoring sessions (maximum points available: 20) and ii) design and plan a science communication project (maximum points available: 80).		
Final grades will be determined as follows:		
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES	
5 (A)	90 – 100 % points	
4 (B)	75 – 89.9 % points	
3 (C)	60 – 74.9 % points	
2 (D)	50 – 59.9 % points	
1 (F)	0 – 49.9 % points	
III. READING		
MANDATORY READING		
National Academies of Sciences, Engineering, and Medicine (2017). <i>Communicating science effectively: a research agenda</i>. Washington, DC: National Academies Press (US)		
RECOMMENDED FURTHER READING		
- Burns, T.W., O'Connor, D.J., & Stocklmayer, S.M. (2003). Science communication: A contemporary definition. <i>Public Understanding of Science</i>, 12, 183. https://doi.org/10.1177/0963662503012204 - Welbourne, D.J. & Grant, W.J. (2015). Science communication on YouTube: factors that affect channel and video popularity. <i>Public Understanding of Science</i>, 25(6), 706-718. https://doi.org/10.1177/0963662515572068 - McCartney, M., Childers, C., Baiduc, R.R., & Barnicle, K. (2018). Annotated Primary Literature: A Professional Development Opportunity in Science Communication for Graduate Students and Postdocs. <i>Journal of Microbiology & Biology Education</i>, 19(1), 19.1.24. https://dx.doi.org/10.1128%2Fjmb.e.v19i1.1439 - Bubela, T., Nisbet, M.C., Borchelt, R., Brunger, F., Critchley, C., Einsiedel, E., Geller, G., Gupta, A., Hampel, J., Hyde-Lay, R., Jandciu, E.W., Jones S.A., Kolopack, P., Lane, S., Loughheed, T., Nelich, B., Ogbogu, U., O’Riordan, K., Ouellette, C., Spear, M., Strauss, S., Thavaratnam, T., Willemse, L., & Caulfield, T. (2009). Science communication revisited. <i>Nature Biotechnology</i>, 27(6), 514-518.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.		
INFORMATION ABOUT THE FINAL EXAM		

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	11 February 2027, 25 February 2027
Summer	30 June 2027, 14 July 2027
Autumn	1 September 2027, 15 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 1	
Week 2	
Week 3	Intro to the course (1L + 2S)
Week 4	Project work (2S)
Week 5	Project work (2S)
Week 6	
Week 7	Workshop 1 (1L+2S)
Week 8	
Week 9	Project work (2S)
Week 10	
Week 11	Workshop 2 (1L+2S)
Week 12	
Week 13	
Week 14	Project work (2S)
Week 15	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to conceptualise different science communication ideas and adapt them to the topic of a research project,	Media, Social media, Target audience, Citizen Science	Mentoring and Workshops	Class Participation, Project
to create a plan for a science communication project according to a selected topic,	Media, Social media, Target audience, Citizen Science	Mentoring and Workshops	Project
to critically evaluate the benefits and possible problems in science communication in general and for specific projects.	Ethics, Research integrity, Communication	Mentoring and Workshops	Class Participation, Project

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title	Journal Club 1		
Study programme	Masters in Cognitive Sciences: Cognition and the Mind		
Semester	3rd		
Academic year	2026/2027		
ECTS credits	2		
Contact hours (Lectures + Seminars + Practical work)	0+20+0		
Time and venue of classes	TBC		
Language of instruction	English		
Course organisers	Dr. Edward Legg, Dr. Ljerka Ostojić		
Course instructors	Contact details		
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA		
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA		
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, students will lead so-called journal clubs in which they will lead discussions about a selected paper. There is also the opportunity to invite external speakers to present their research. At the start of the course, students will learn in a workshop how to prepare presentations and lead a journal club, including how to moderate a discussion. After a student has picked an article that they will present as part of their journal club, they will receive one-on-one mentoring from the course organiser(s) in preparing for the journal club.			
EXPECTED LEARNING OUTCOMES			
- to present literature (e.g., an article) in a concise form to an audience of scientists with different experiences, - to critically evaluate and discuss methods, claims, and possible impact of research.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
	x		x
Fieldwork	Laboratory work	Mentoring	Other

		x	x
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	0.27		
Class participation	1.73	100	
TOTAL	2	100	
Students are required to participate in journal clubs. During the second year of study, each student is required to select and present a topic in one journal club. If for some reason (e.g., justified absence of the student) it is not possible to give the presentation, the lecturer and student will agree on a different form of student contribution in order for the student to receive a positive grade. As it is not possible for every student to give the presentation in the same semester, lecturers will adjust the programme of the ‘Journal Club 1’ and ‘Journal Club 2’ courses.			
Students will obtain a positive grade for the course if they have presented (or made an equivalent contribution in situations where presentation was not possible) in one journal club, or if their presentation is planned during the course "Journal Club 2", and if they actively participate in discussions.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
Deenadayalan, Y., Grimmer-Somers, K., Prior, M., & Kumar, S. (2008). How to run an effective journal club: a systematic review. <i>Journal of evaluation in clinical practice</i>, 14(5), 898-911.			
RECOMMENDED FURTHER READING			
IV. ADDITIONAL INFORMATION			
ATTENDANCE			
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.			
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE			
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.			
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS			
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.			
INFORMATION ABOUT THE FINAL EXAM			
There is no final exam for this course.			
OTHER RELEVANT INFORMATION			
Academic honesty			
Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function			

is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	11 February 2027 and 25 February 2027
Summer	30 June 2027 and 14 July 2027
Autumn	1 September 2027 and 15 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 1	Intro to the course (1S)
Week 2	Workshop
Week 3	
Week 4	
Week 5	Journal Club (1S)
Week 6	
Week 7	Journal Club (1S)
Week 8	
Week 9	Journal Club (1S)
Week 10	Journal Club (1S)
Week 11	Journal Club (1S)
Week 12	
Week 13	Journal Club (1S)
Week 14	Journal Club (1S)
Week 15	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to present literature (e.g., an article) in a concise form to an audience of scientists with different experiences,	Topics of the papers chosen to be presented and discussed during a journal club	Leading the journal club	Presentation and discussion leading during the journal club.
to critically evaluate and discuss methods, claims, and possible impact of research	Topics of the papers chosen to be presented and discussed during a journal club	Leading the journal club, Discussion during the journal club.	Presentation and discussion during the journal club.

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Professional Development	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		3rd	
Academic year		2026/2027	
ECTS credits		2	
Contact hours (Lectures + Seminars + Practical work)		0+12+0	
Time and venue of classes		TBC	
Language of instruction		English	
Course organiser		Dr. Ljerka Ostojić	
Course instructor		Contact details	
Dr. Ljerka Ostojić		Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, students will work on developing tools for their professional development and receive mentoring based on their current career plans.			
EXPECTED LEARNING OUTCOMES			
- to write a CV and adapt it for different situations (applying for a doctorate, applying for other jobs within the academic environment, applying for jobs in industry), - effectively use social networks and other online platforms for professional development and professional visibility. - effectively plan the next steps in one’s own professional work. - prepare questions for people working in the field they are interested in.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
x	x	x	x
Fieldwork	Laboratory work	Mentoring	Other

x		x	x
II. COURSE EVALUATION AND GRADING CRITERIA			
There is no summative assessment for this course.			
III. READING			
MANDATORY READING			
Mohammadi, E., Thelwall, M., Kwasny, M., & Holmes, K.L. (2018). Academic information on Twitter: A user survey. <i>PLoS ONE</i>, 13(5), e0197265. https://doi.org/10.1371/journal.pone.0917265			
RECOMMENDED FURTHER READING			
- Nigar, N. (2021). Networking and professional development in today's world of work. <i>Academia Letters</i>, 2. - Hartnell-Young, E. (2021). Using a Portfolio Approach to Navigate Academia. In <i>Women Thriving in Academia</i>. Emerald Publishing Limited. - Antwi, J. (2020). Navigating Academia Through the Eyes of a Non-Traditional Entomologist. <i>American Entomologist</i>, 66(4), 64-64. - MacDonald, K., Diamond, F., Wilkinson, J., Sum, N., Longmuir, F., & Kaukko, M. (2021). Creating spaces of learning in academia: fostering niches for professional learning practice. <i>Studies in Continuing Education</i>, 1-18. - Payne, D. (2019). The professional advisers who can help you to move from academia to industry. <i>Nature</i>, 567(7747), 135-138. - Luo, T., Freeman, C., & Stefaniak, J. (2020). "Like, comment, and share"—professional development through social media in higher education: A systematic review. <i>Educational Technology Research and Development</i>, 68(4), 1659-1683. - Norris, M. E., & O'Toole, B. (2020). Exploring career paths beyond academia for psychological scientists. <i>Consulting Psychology Journal: Practice and Research</i>, 72(1), 8. - Young, G., Kilborn, M., Arnold, C., Azam, S., Badenhorst, C., Godfrey, J. R., ... & Pickett, S. (2017). Women reflect on being well in academia: Challenges and supports. <i>LEARNing Landscapes</i>, 10(2), 335-351. - Germain-Alamartine, E., Ahoba-Sam, R., Moghadam-Saman, S., & Evers, G. (2020). Doctoral graduates' transition to industry: networks as a mechanism? Cases from Norway, Sweden and the UK. <i>Studies in Higher Education</i>, 1-16. - Börner, K., Scrivner, O., Gallant, M., Ma, S., Liu, X., Chewning, K., ... & Evans, J. A. (2018). Skill discrepancies between research, education, and jobs reveal the critical need to supply soft skills for the data economy. <i>Proceedings of the National Academy of Sciences</i>, 115(50), 12630-12637..			
IV. ADDITIONAL INFORMATION			
ATTENDANCE			
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.			
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE			
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.			
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS			
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.			
INFORMATION ABOUT THE FINAL EXAM			

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

V. COURSE OUTLINE

DATE	TOPIC
Week 1	
Week 2	Intro to the course (1S)
Week 3	
Week 4	
Week 5	Workshop
Week 6	
Week 7	
Week 8	Workshop
Week 9	
Week 10	
Week 11	Workshop
Week 12	
Week 13	
Week 14	Wrap up (2S)
Week 15	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to write a CV and adapt it for different situations (applying for a doctorate, applying for other jobs within the academic environment, applying for jobs in industry),	Target audience, CV, industry vs. academia	Mentoring and Workshops	Class Participation
effectively use social networks and other online platforms for professional development and professional visibility.	Social networks	Mentoring and Workshops	Class Participation
effectively plan the next steps in one's own professional work.	CV writing, applications for jobs, applications for scholarships and PhD positions	Mentoring and Workshops	Class Participation
prepare questions for people working in the field they are interested in.	Applying for jobs, work-life balance/integration, networking, career development and career plans	Mentoring	Class Participation

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Elective Modules in Cognitive Sciences
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	1st, 3rd
Academic year	2026/2027
ECTS credits	3
Contact hours (Lectures + Seminars + Practical work)	12+12+0
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Zdenka Brzović, Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula
Course instructors	Contact Details
Prof. Marija Brala Vukanović	Email: marija.brala@ffri.uniri.hr , Office: F-901, Office hours: TBA
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F-121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Marko Jurjako	Email: mjurjako@ffri.uniri.hr , Office: 422, Office hours: TBA
Nirvana Ribic	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	

The aim of this course is to familiarise you with different areas of cognitive sciences from a disciplinary, multidisciplinary and interdisciplinary perspective.

Within the elective course, there are several modules from which you can choose one.

For Winter semester 2026/2027, the following modules are planned:

1st and 2nd year students:

- Social Cognition (also open to Erasmus students)
- Philosophy of Science (also open to Erasmus students)
- Cognitive Linguistics
- Cognitive Sciences Bookclub
- Philosophy of Psychology and Neuroscience

2nd year students only:

- Science Writing and Reviewing

EXPECTED LEARNING OUTCOMES

Depending on the chosen module from the modules offered in this semester, students are expected to achieve a subset of the following course outcomes:

- to write on the same topic in different ways, depending on where the text is expected to be published,
- to structure a scientific text according to where the text is expected to be published,
- to recognise how to rearrange the text when a change in the main structure is needed, e.g., because there is a change in the place where the paper is sent for review,
- to analyse potential challenges and benefits of working with multiple co-authors,
- to integrate the above-mentioned challenges and benefits in decision-making on co-authorship and organisation of work,
- to analyse and evaluate others' comments on the text, and how and when to integrate them into new versions,
- to analyse and evaluate the usefulness of own comments on others' writing, and how to structure own comments,
- to formulate constructive comments and feedback in the role of a reviewer,
- to analyse basic terminology and theoretical assumptions in cognitive linguistics,
- to interpret linguistic phenomena (of English but also other languages familiar to the students),
- to interpret differences between languages regarding terminology and principles of cognitive linguistics,
- to compare differences between languages with universally operational elements and processes of the human mind and human language competencies,
- to summarise and evaluate research in cognitive linguistics,
- to discuss approaches and projects in cognitive linguistics,
- to describe and analyse current topics and recent studies in social cognition research,
- to critically evaluate methods and claims of social cognition studies,
- to explain recent discussions within contemporary philosophy of science,
- to defend different philosophical positions within discussions on contemporary philosophy of science.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.73	
Class Participation	1	50
Project	1.27	50
TOTAL	3	100

To obtain a grade on this course, students must i) actively participate in class (maximum points: 50) and ii) successfully complete a project (maximum points: 50).

Activities and class and projects will differ in their content and form based on the chosen module. Detailed information will be given by the module instructor(s) in the first module class.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Smaldino, P. E. & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, doi: 10.1098/rsos.160384.
- Leonelli, S. (2018). Re-thinking reproducibility as a criterion for research quality. [Pre-print]. http://philsci-archive.pitt.edu/14352/1/Reproducibility_2018_SL.pdf
- Bermúdez, J. (2016). *Cognitive science: An introduction to the science of the mind* (3rd ed.). New York: Cambridge University Press.
- Levine, D. S. (2019). *Introduction to cognitive and neural modeling* (3rd ed.). New York: Routledge
- Spelke, E. S., & Kinzler, K. D. (2007). Core knowledge. *Developmental Science*, 10(1), 89–96. doi:10.1111/j.1467-7687.2007.00569.x
- Gopnik, A. (1996). The Scientist as Child. *Philosophy of Science*, 63(4), 485–514. doi:10.1086/289970
- Tenenbaum, J. B., Kemp, C., Griffiths, T. L., & Goodman, N. D. (2011). How to Grow a Mind: Statistics, Structure, and Abstraction. *Science*, 331(6022), 1279–1285. doi:10.1126/science.1192788
- Kubricht, J. R., Holyoak, K. J., & Lu, H. (2017). Intuitive Physics: Current Research and Controversies. *Trends in Cognitive Sciences*, 21(10), 749–759. doi:10.1016/j.tics.2017.06.002
- Kuhl, P. K. (2004). Early language acquisition: cracking the speech code. *Nature Reviews Neuroscience*, 5(11), 831–843. doi:10.1038/nrn1533
- Suddendorf, T. (2017). The Emergence of Episodic Foresight and Its Consequences. *Child Development Perspectives*, 11(3), 191–195. doi:10.1111/cdep.12233
- Hamlin, J. K. (2013). Moral Judgment and Action in Preverbal Infants and Toddlers. *Current Directions in Psychological Science*, 22(3), 186–193. doi:10.1177/0963721412470687
- Poulin-Dubois, D. (2020). Theory of mind development: State of the science and future directions. *Progress in Brain Research*. doi:10.1016/bs.pbr.2020.05.021
- Bear, F. M., Connors, B. W., Paradiso, M. A. (2016). *Neuroscience exploring the brain*. Philadelphia: Wolters Kluwer.
- Byrne, R.W. & Bates, L.A. (2007). Sociality, evolution and cognition. *Current Biology*, 17(16), R714-R723. <http://doi.org/10.1016/j.cub.2007.05.069>
- Heyes, C. (2019). Précis of *Cognitive gadgets: The cultural evolution of thinking*. *Behavioral and Brain Sciences*, 42, E169. <https://doi.org/10.1017/S0140525X18002145>
- Shettleworth, S.J. (2012). Modularity, comparative cognition and human uniqueness. *Philosophical Transactions of the Royal Society B*, 367, 2794–2802. <https://doi.org/10.1098/rstb.2012.0211>
- Huber, L. & Wilkinson, A. (2012). Evolution of cognition: a comparative approach. In *Sensory Perception* (pp. 135-152). Vienna: Springer.
- Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M., Perilloux, C., & Buss, D. M. (2010). Evolutionary psychology: Controversies, questions, prospects, and limitations. *American Psychologist*, 65(2), 110.
- Buss, D. M. (1995). Evolutionary psychology: A new paradigm for psychological science. *Psychological inquiry*, 6(1), 1-30.

- Buss, D. M. (2009). How can evolutionary psychology successfully explain personality and individual differences?. *Perspectives on Psychological Science*, 4(4), 359-366.
- Cosmides, L., & Tooby, J. (2013). Evolutionary psychology: New perspectives on cognition and motivation. *Annual review of psychology*, 64, 201-229.
- Mack, C.A. (2012). How to write a good scientific paper: title, abstract, and keywords. *Journal of Micro/Nanolithography, MEMS, and MOEMS*, 11(2), 020101.
- Schickore, J. (2008). Doing science, writing science. *Philosophy of Science*, 7(3), 323-343
- Croft, William & D. Alan Cruse. 2004. *Cognitive Linguistics*. (Cambridge Textbooks in Linguistics.) Cambridge: Cambridge University Press.
- Matthews, Peter. 2014. *The Concise Dictionary of Linguistics* (Oxford Paperback Reference). New York: Oxford University Press.
- Frith, C.D. (2008). Social Cognition. *Philosophical Transactions of the Royal Society B*, 363(1499): 2033–2039. <https://doi.org/10.1098/rstb.2008.0005>
- Larsen, R.J., & Buss, D.M. (2005). *Personality psychology*. New York: McGraw-Hill
- Fecher, B. & Friesike, S. (2014). Open science: one term, five schools of thought. In *Opening science* (pp. 17-47). Cham: Springer.
- McKiernan, E.C. et al. (2016). Point of view: How open science helps researchers succeed. *eLife*, 5, e16800.
- Allen, C. & Mehler, D.M. (2019). Open science challenges, benefits and tips in early career and beyond. *PLoS Biology*, 17(5), e3000246.
- Nosek, B.A. & Lindsay, D.S. (2018). Preregistration becoming the norm in psychological science. *APS Observer*, 31(3).
- Szollosi, A., Kellen, D., Navarro, D.J., Shiffrin, R., van Rooij, I., Van Zandt, T., & Donkin, C. (2019). Is preregistration worthwhile? *Trends in Cognitive Sciences*, 24(2), 94-95.
- Scheel, A.M., Schijen, M., & Lakens, D. An excess of positive results. *Comparing the standard Psychology literature with Registered Reports*. Preprint at <https://osf.io/p6e9c> (2020).
- Hunter, J. (2012). Post-publication peer review: opening up scientific conversation. *Frontiers in Computational Neuroscience*, 6(63). <https://doi.org/10.3389/fncom.2012.00063>
- Kirkham, J. & Moher, D. (2018). Who and why do researchers opt to publish in post-publication peer review platforms? – findings from a review and survey of F1000 Research. *F1000Research*, 7(920). <https://doi.org/10.12688/f1000research.15436.1>
- Sarabipour, S., Debat, H.J., Burgess, S.J., Schwessinger, B., & Hensel, Z. (2019). On the value of preprints: An early career researcher perspective. *PLoS Biology*, 17(2), e3000151. <https://doi.org/10.1371/journal.pbio.3000151>
- Okasha, Samir (2004). *Philosophy of Science: A Very Short Introduction*. Oxford University Press.
- Godfrey-Smith, Peter (2003). *Theory and Reality: An Introduction to the Philosophy of Science*. Chicago University Press.
- Philip Kitcher and Gillian Barker (2014). *Philosophy of Science: A New Introduction*. Oxford University Press.
- Block, N. 1978. Troubles with Functionalism. Pretiskano u W. Lycan, ur. *Mind and Cognition*. Oxford: Blackwell, 2008.
- Dennett, D. 1988. Quining Qualia. U A. Marcel and E. Bisiach, ur. *Consciousness in Contemporary Science*. Oxford: Oxford University Press, 43-77. Reprinted in N. Block, O. Flanagan i G. Güzeldere, ur. *The Nature of Consciousness*. Cambridge, Mass.: MIT Press, 1997.
- Crane, T. 2001. *The Elements of Mind: An Introduction to the Philosophy of Mind*. Oxford: Oxford University Press.
- Kim, J. 2006. *Philosophy of Mind*. Boulder, Co.: Westview Press.
- Maslin, K. T. 2001. *An Introduction to the Philosophy of Mind*. Cambridge: Polity.
- Nagel, T. 1974. What is it Like to be a Bat? *Philosophical Review* 83: 435–450. Reprinted in D. Chalmers, ur. *Philosophy of Mind: Classical and Contemporary Readings*. Oxford: Oxford University Press.
- Ryle, G. 1949. *The Concept of Mind*. London: Hutchinson. Pretiskano s uvodom D. Dennetta, Penguin: London, 1980.
- Chalmers, D. 2002. *Philosophy of Mind: Classical and Contemporary Readings*. New York: Oxford University Press.

- Weiskopf, D. and Adams, F. (2015). *An introduction to the philosophy of psychology*. Cambridge: Cambridge University Press.

RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.

INFORMATION ABOUT THE FINAL EXAM

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	12 February 2027, 26 February 2027
Summer	25 June 2027, 9 July 2027
Autumn	1 September 2027, 15 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 7	Introduction to the course (1L) Work in modules (1L + 1S)
Week 8	Work in modules (1L + 1S)
Week 9	Work in modules (1L + 1S)
Week 10	Work in modules (1L + 1S)
Week 11	Work in modules (1L + 1S)
Week 12	Work in modules (1L + 1S)
Week 13	Work in modules (1L + 1S)
Week 14	Work in modules (2L + 1S)
Week 15	Final discussion and Wrap-up (2S)

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to write on the same topic in different ways, depending on where the text is expected to be published	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to structure a scientific text according to where the text is expected to be published	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to recognise how to rearrange the text when a change in the main structure is needed, e.g., because there is a change in the place where the paper is sent for review	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to analyse potential challenges and benefits of working with multiple co-authors	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to integrate the above-mentioned challenges and benefits in decision-making on co-authorship and organisation of work	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to analyse and evaluate others' comments on the text, and how and when to integrate them into new versions	Module Science Writing and Reviewing	Lectures, Seminar	Class Participation, Project
to analyse and evaluate the usefulness of own comments on others' writing, and how to structure own comments	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to formulate constructive comments and feedback in the role of a reviewer	Module Science Writing and Reviewing, Cognitive Sciences Bookclub	Lectures, Seminar	Class Participation, Project
to analyse basic terminology and theoretical assumptions in cognitive linguistics	Modules Cognitive Linguistics and Extension to Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to interpret linguistic phenomena (of English	Module Cognitive Linguistics	Lectures, Seminar	Class Participation, Project

but also other languages familiar to the students)			
to interpret differences between languages regarding terminology and principles of cognitive linguistics	Module Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to compare differences between languages with universally operational elements and processes of the human mind and human language competencies	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to summarise and evaluate research in cognitive linguistics	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to discuss approaches and projects in cognitive linguistics	Modules Cognitive Linguistics	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and recent studies in social cognition research	Module Social Cognition	Lectures, Seminar	Class Participation, Project
to critically evaluate methods and claims of social cognition studies	Module Social Cognition	Lectures, Seminar	Class Participation, Project
to explain recent discussions within contemporary philosophy of science,	Module Philosophy of Science	Lectures, Seminar	Class Participation, Project
to defend different philosophical positions within discussions on contemporary philosophy of science.	Module Philosophy of Science	Lectures, Seminar	Class Participation, Project
to explain the discrepancies between folk psychology and scientific concepts from psychology and neuroscience	Module Philosophy of Psychology and Neuroscience	Lectures, Seminar	Class Participation, Project
to explain and evaluate the role of philosophy of psychology in integrating philosophical, psychological and neuroscientific approaches to the research of the human mind (the interface problem)	Module Philosophy of Psychology and Neuroscience	Lectures, Seminar	Class Participation, Project

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Academic Development	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		3rd, exceptionally in 1st	
Academic year		2026/2027	
ECTS credits		3 or 6	
Contact hours (Lectures + Seminars + Practical work)		Students conduct an internship within the disciplines and work of cognitive sciences at a host institution. Students have a supervisor at the host institution.	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Ljerka Ostojić	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
This is an elective that students can enrol into if they are conducting an internship that is additional to their Masters thesis project. Students can either get the internship accredited instead of elective courses, or as extra ECTS.			
EXPECTED LEARNING OUTCOMES			
To plan and conduct work of a cognitive scientists in an academic or non-academic professional environment.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
		x	
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT		ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Internship		1.5 ETCS for 2 weeks of full-time work	N/A

TOTAL	3 or 6	N/A
There is no summative assessment for this course.		
III. READING		
MANDATORY READING		
If there is mandatory reading for this course, then it will be decided by the individual supervisors.		
RECOMMENDED FURTHER READING		
If there is recommended further reading for this course, then it will be decided by the individual supervisors.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Students need to fulfil all obligations of the internship as agreed upon with their supervisor.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
V. COURSE OUTLINE		
DATE	TOPIC	
Times and dates of the internship, as well as the working schedule will be agreed with the internship supervisor at the host institution.		

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Preparation of Masters Thesis 2	
Study programme		Masters in Cognitive of Sciences: Cognition and the Mind	
Semester		4th	
Academic year		2026/2027	
ECTS credits		20	
Contact hours (Lectures + Seminars + Practical work)		NA. Students work with their supervisor(s) on a research project.	
Time and venue of classes		TBC	
Language of instruction		English	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
Students work independently and with their supervisor(s) and where applicable, advisor(s) on the plan of their Masters thesis project. Students working on their Masters thesis at the Faculty of Humanities and Social Sciences are expected to work in the joint office. Students present their Masters thesis project as a talk during the <i>Rijeka Cognitive Sciences Symposium</i> [note: students can also organise their defense as part of the symposium].			
EXPECTED LEARNING OUTCOMES			
• For empirical projects, to conduct data collection, • For empirical projects to analyse and interpret collected data, • For theoretical projects, to carry out the planned research methods, • To write a science/scholarly text, • To plan and carry out an oral presentation of own research project.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')			
Lectures	Seminars	Practical work	Independent work
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
TOTAL	4		100
Students present their Masters thesis project as a talk during the <i>Rijeka Cognitive Sciences Symposium</i> [note: students can also organise their defense as part of the symposium].			

The grade for this course is the outcome of the Masters thesis defense.	
III. READING	
MANDATORY READING	
The Literature for this course depends on the Masters thesis project.	
RECOMMENDED FURTHER READING	
IV. ADDITIONAL INFORMATION	
ATTENDANCE	
Students have regular meetings with their supervisor(s) and advisor(s).	
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE	
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.	
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their supervisor(s) during meetings, contact them over email or Moodle, and during office hours.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course. The course outcomes are evaluated during the Masters thesis defense.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	NA
Summer	30 June 2027 and 14 July 2027
Autumn	1 September 2027 and 15 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Working on the Masters thesis project. Meeting with supervisor.
Week 2	Working on the Masters thesis project. Meeting with supervisor.
Week 3	Working on the Masters thesis project. Meeting with supervisor.
Week 4	Working on the Masters thesis project. Meeting with supervisor.
Week 5	Working on the Masters thesis project. Meeting with supervisor.
Week 6	Working on the Masters thesis project. Meeting with supervisor.
Week 7	Working on the Masters thesis project. Meeting with supervisor.
Week 8	Working on the Masters thesis project. Meeting with supervisor.
Week 9	Working on the Masters thesis project. Meeting with supervisor.

Week 10	Working on the Masters thesis project. Meeting with supervisor. Preparing for student conference.
Week 11	Working on the Masters thesis project. Meeting with supervisor. Preparing for student conference.
Week 12	Working on the Masters thesis project. Meeting with supervisor. Preparing for student conference.
Week 13	Student Conference
Week 14	Working on the Masters thesis project. Meeting with supervisor.
Week 15	Working on the Masters thesis project. Meeting with supervisor.

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
For empirical projects, to conduct data collection,	Masters thesis topic	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
For empirical projects to analyse and interpret collected data,	Masters thesis topic if empirical	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
For theoretical projects, to carry out the planned research methods,	Masters thesis topics if theoretical	Individual work, Meetings with supervisor(s)	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
To write a science/scholarly text,	Masters thesis topic	Individual work, Meetings with supervisor(s), Masters Thesis writing	No summative assessment during the course. Formative assessment during meetings with supervisor(s).
To plan and carry out an oral presentation of own research project.	Masters thesis topic	Individual work, Meetings with supervisor(s), Student Conference	No summative assessment during the course. Formative assessment during student conference.

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Science Communication 2	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		4th	
Academic year		2026/2027	
ECTS credits		4	
Contact hours (Lectures + Seminars + Practical work)		3+14+0	
Time and venue of classes		TBC	
Language of instruction		English	
Course organiser		Dr. Ljerka Ostojić	
Course instructor		Contact details	
Dr. Ljerka Ostojić		Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, students will carry out and evaluate a science communication project related to their Masters thesis.			
EXPECTED LEARNING OUTCOMES			
- to adapt the content and manner of presentation to a target audience, - to make a presentation and materials in line with the target audience			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
x	x	x	x
Fieldwork	Laboratory work	Mentoring	Other
x		x	x

II. COURSE EVALUATION AND GRADING CRITERIA		
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.37	
Class participation	0.63	20
Project	3	80
TOTAL	4	100
To successfully pass this course, students must i) actively participate in classes/during mentoring sessions (maximum points available: 20) and ii) design and plan a science communication project (maximum points available: 80).		
Final grades will be determined as follows:		
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES	
5 (A)	90 – 100 % points	
4 (B)	75 – 89.9 % points	
3 (C)	60 – 74.9 % points	
2 (D)	50 – 59.9 % points	
1 (F)	0 – 49.9 % points	
III. READING		
MANDATORY READING		
Fishhoff, B. (2019). Evaluating science communication. <i>Proceedings of the National Academy of Science</i>, 116(16), 7670-7675. https://doi.org/10.1073/pnas.1805863115		
RECOMMENDED FURTHER READING		
- Constant, N., & Roberts, L. (2017). Narratives as a mode of research evaluation in citizen science: understanding broader science communication impacts. <i>Journal of science communication</i>., 16(4), A03. - Gustafson, A., & Rice, R. E. (2020). A review of the effects of uncertainty in public science communication. <i>Public Understanding of Science</i>, 29(6), 614-633. - Post, S., & Ramirez, N. (2018). Politicized science communication: predicting scientists’ acceptance of overstatements by their knowledge certainty, media perceptions, and presumed media effects. <i>Journalism & Mass Communication Quarterly</i>, 95(4), 1150-1170.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
EXAM DATES		

Winter	NA
Summer	30 June 2027, 14 July 2027
Autumn	1 September 2027, 15 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	
Week 2	
Week 3	Intro to the course (1L)
Week 4	Project work (1S)
Week 5	Project work (1S)
Week 6	
Week 7	
Week 8	
Week 9	Project work (1S)
Week 10	
Week 11	Project work (2S)
Week 12	
Week 13	
Week 14	Project work (2S)
Week 15	

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to adapt the content and manner of presentation to a target audience,	Target Audience, language	Mentoring and Workshops	Class Participation, Project
to make a presentation and materials in line with the target audience	Presentation, Fonts, Language	Mentoring and Workshops	Project

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Journal Club 2	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		4th	
Academic year		2026/2027	
ECTS credits		2	
Contact hours (Lectures + Seminars + Practical work)		0+16+0	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Ljerka Ostojić	
Course instructors		Contact details	
Dr. Edward Legg		Email: edward.legg@uniri.hr , Office: F-344, Office hours: TBA	
Dr. Ljerka Ostojić		Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
In this course, students will lead so-called journal clubs in which they will lead discussions about a selected paper. There is also the opportunity to invite external speakers to present their research. After a student has picked an article that they will present as part of their journal club, they will receive one-on-one mentoring from the course organiser(s) in preparing for the journal club.			
EXPECTED LEARNING OUTCOMES			
- to present literature (e.g., an article) in a concise form to an audience of scientists with different experiences, - to critically evaluate and discuss methods, claims, and possible impact of research.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
	x		x
Fieldwork	Laboratory work	Mentoring	Other

		x	x
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)	
Class attendance	0.27		
Class participation	1.73	100	
TOTAL	2	100	
Students are required to participate in journal clubs. During the second year of study, each student is required to select and present a topic in one journal club. If for some reason (e.g., justified absence of the student) it is not possible to give the presentation, the lecturer and student will agree on a different form of student contribution in order for the student to receive a positive grade. As it is not possible for every student to give the presentation in the same semester, lecturers will adjust the programme of the ‘Journal Club 1’ and ‘Journal Club 2’ courses.			
Students will obtain a positive grade for the course if they have presented (or made an equivalent contribution in situations where presentation was not possible) in one journal club, or if their presentation is planned during the course "Journal Club 2", and if they actively participate in discussions.			
Final grades will be determined as follows:			
GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES		
5 (A)	90 – 100 % points		
4 (B)	75 – 89.9 % points		
3 (C)	60 – 74.9 % points		
2 (D)	50 – 59.9 % points		
1 (F)	0 – 49.9 % points		
III. READING			
MANDATORY READING			
Deenadayalan, Y., Grimmer-Somers, K., Prior, M., & Kumar, S. (2008). How to run an effective journal club: a systematic review. <i>Journal of evaluation in clinical practice</i>, 14(5), 898-911.			
RECOMMENDED FURTHER READING			
IV. ADDITIONAL INFORMATION			
ATTENDANCE			
Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.			
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE			
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.			
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS			
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that students contact lecturers in advance to arrange for a meeting.			
INFORMATION ABOUT THE FINAL EXAM			
There is no final exam for this course.			
OTHER RELEVANT INFORMATION			
Academic honesty			
Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function			

is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

EXAM DATES

Winter	NA
Summer	30 June 2027 and 14 July 2027
Autumn	1 September 2027 and 15 September 2027

V. COURSE OUTLINE

DATE	TOPIC
Week 1	Journal Club (1S)
Week 2	
Week 3	Journal Club (1S)
Week 4	
Week 5	Journal Club (1S)
Week 6	
Week 7	Journal Club (1S)
Week 8	
Week 9	Journal Club (1S)
Week 10	
Week 11	Journal Club (1S)
Week 12	
Week 13	Journal Club (1S)
Week 14	
Week 15	Journal Club (1S)

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to present literature (e.g., an article) in a concise form to an audience of scientists with different experiences,	Topics of the papers chosen to be presented and discussed during a journal club	Leading the journal club	Presentation and discussion leading during the journal club.
to critically evaluate and discuss methods, claims, and possible impact of research	Topics of the papers chosen to be presented and discussed during a journal club	Leading the journal club, Discussion during the journal club.	Presentation and discussion during the journal club.

**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE	
Course title	Elective modules in Cognitive Sciences
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd, 4th
Academic year	2026/2027
ECTS credits	3
Contact hours (Lectures + Seminars + Practical work)	12+12+0
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Zdenka Brzović, Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula
Course instructors	Contact Details
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F- 121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	
The aim of this course is to familiarise you with different areas of cognitive sciences from a disciplinary, multidisciplinary, and interdisciplinary perspective. Within the elective course, there are several modules from which you can choose one. For Summer semester 2026/2027, the following modules are planned: 1st and 2nd year students: ○ Developing Minds (also open to Erasmus students) ○ Open Science and Its Tools (also open to Erasmus students) ○ Evolution of Mind: Brain and Behaviour ○ AI & Cognition – Critical AI Literacy	

2nd year students only:

- o Cognitive Neuroscience Methods in Practice

EXPECTED LEARNING OUTCOMES

Depending on the chosen module, students are expected to achieve a subset of the following course outcomes:

- to evaluate benefits of AI for investigating cognition and the mind,
- to identify and analyse challenges and obstacles in working with AI,
- to independently study recent literature in the field of AI
- to identify the main discussions in research on cognitive development,
- to evaluate benefits and challenges of different empirical approaches to study cognitive development,
- to critically assess results of empirical studies in cognitive development as well as their link to theories on development,
- to discuss chosen research fields within developmental psychology,
- to describe and analyse current topics and studies on the evolution of cognition,
- to critically assess methods and claims of studies on the evolution of cognition,
- to analyse the challenges and benefits of Open Science approaches and tools,
- to apply and adapt various Open Science tools to own research,
- to discuss benefits and suitability of various tools for different research,
- to discuss and make informed decisions about using Open Science approaches and tools in own work.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
x	x		x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.73	
Class Participation	1	50
Project	1.27	50
TOTAL	3	100

To obtain a grade on this course, students must i) actively participate in class (maximum points: 50) and ii) successfully complete a project (maximum points: 50).

Activities and class and projects will differ in their content and form based on the chosen module. Detailed information will be given by the module instructor(s) in the first module class.

Final grades will be determined as follows:

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Smaldino, P. E. & McElreath, R. (2016). The natural selection of bad science. *Royal Society Open Science*, doi: 10.1098/rsos.160384.
- Leonelli, S. (2018). Re-thinking reproducibility as a criterion for research quality. [Pre-print]. http://philsci-archive.pitt.edu/14352/1/Reproducibility_2018_SL.pdf
- Bermúdez, J. (2016). *Cognitive science: An introduction to the science of the mind* (3rd ed.). New York: Cambridge University Press.
- Levine, D. S. (2019). *Introduction to cognitive and neural modeling* (3rd ed.). New York: Routledge
- Spelke, E. S., & Kinzler, K. D. (2007). Core knowledge. *Developmental Science*, 10(1), 89–96. doi:10.1111/j.1467-7687.2007.00569.x
- Gopnik, A. (1996). The Scientist as Child. *Philosophy of Science*, 63(4), 485–514. doi:10.1086/289970
- Tenenbaum, J. B., Kemp, C., Griffiths, T. L., & Goodman, N. D. (2011). How to Grow a Mind: Statistics, Structure, and Abstraction. *Science*, 331(6022), 1279–1285. doi:10.1126/science.1192788
- Kubricht, J. R., Holyoak, K. J., & Lu, H. (2017). Intuitive Physics: Current Research and Controversies. *Trends in Cognitive Sciences*, 21(10), 749–759. doi:10.1016/j.tics.2017.06.002
- Kuhl, P. K. (2004). Early language acquisition: cracking the speech code. *Nature Reviews Neuroscience*, 5(11), 831–843. doi:10.1038/nrn1533
- Suddendorf, T. (2017). The Emergence of Episodic Foresight and Its Consequences. *Child Development Perspectives*, 11(3), 191–195. doi:10.1111/cdep.12233
- Hamlin, J. K. (2013). Moral Judgment and Action in Preverbal Infants and Toddlers. *Current Directions in Psychological Science*, 22(3), 186–193. doi:10.1177/0963721412470687
- Poulin-Dubois, D. (2020). Theory of mind development: State of the science and future directions. *Progress in Brain Research*. doi:10.1016/bs.pbr.2020.05.021
- Bear, F. M., Connors, B. W., Paradiso, M. A. (2016). *Neuroscience exploring the brain*. Philadelphia: Wolters Kluwer.
- Byrne, R.W. & Bates, L.A. (2007). Sociality, evolution and cognition. *Current Biology*, 17(16), R714-R723. <http://doi.org/10.1016/j.cub.2007.05.069>
- Heyes, C. (2019). Précis of *Cognitive gadgets: The cultural evolution of thinking*. *Behavioral and Brain Sciences*, 42, E169. <https://doi.org/10.1017/S0140525X18002145>
- Shettleworth, S.J. (2012). Modularity, comparative cognition and human uniqueness. *Philosophical Transactions of the Royal Society B*, 367, 2794–2802. <https://doi.org/10.1098/rstb.2012.0211>
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RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

Attendance is mandatory. Students are allowed to miss no more than 30% of all classes without penalty.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS	
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.	
INFORMATION ABOUT THE FINAL EXAM	
There is no final exam for this course.	
OTHER RELEVANT INFORMATION	
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.	
EXAM DATES	
Winter	NA
Summer	25 June 2027, 9 July 2027
Autumn	1 September 2027, 15 September 2027
V. COURSE OUTLINE	
DATE	TOPIC
Week 1	Introduction to the course (2L)
Week 3	Work in modules (1L + 1S)
Week 4	Work in modules (1L + 1S)
Week 5	Work in modules (1L + 1S)
Week 6	Work in modules (1L + 1S)
Week 7	Work in modules (1L + 1S)
Week 8	Work in modules (1L + 1S)
Week 9	Work in modules (1L + 1S)
Week 10	Work in modules (1L + 1S)
Week 11	Work in modules (1L + 1S)
Week 12	Work in modules (1L + 1S)
Week 14	Final discussion and Wrap-up (2S)

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to evaluate benefits of AI for investigating cognition and the mind	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify and analyse challenges and obstacles in working with AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to independently study recent literature in the field of AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify the main discussions in research on cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to evaluate benefits and challenges of different empirical approaches to study cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to critically assess results of empirical studies in cognitive development as well as their link to theories on development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to discuss chosen research fields within developmental psychology	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to critically assess methods and claims of studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to analyse the challenges and benefits of Open Science approaches and tools	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to apply and adapt various Open Science tools to own research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to discuss benefits and suitability of various tools for different research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project

to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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**SYLLABUS**

KEY INFORMATION ABOUT THE COURSE			
Course title		Academic Development	
Study programme		Masters in Cognitive Sciences: Cognition and the Mind	
Semester		4th, exceptionally in 2nd	
Academic year		2026/2027	
ECTS credits		3 or 6	
Contact hours (Lectures + Seminars + Practical work)		Students conduct an internship within the disciplines and work of cognitive sciences at a host institution. Students have a supervisor at the host institution.	
Time and venue of classes		TBC	
Language of instruction		English	
Course organisers		Dr. Edward Legg, Dr. Ljerka Ostojić	
I. DETAILED COURSE DESCRIPTION			
COURSE OVERVIEW			
This is an elective that students can enrol into if they are conducting an internship that is additional to their Masters thesis project. Students can either get the internship accredited instead of elective courses, or as extra ECTS.			
EXPECTED LEARNING OUTCOMES			
To plan and conduct work of a cognitive scientists in an academic or non-academic professional environment.			
WAYS IN WHICH THE COURSE IS DELIVERED (mark with ‘X’)			
Lectures	Seminars	Practical work	Independent work
		x	
Fieldwork	Laboratory work	Mentoring	Other
		x	
II. COURSE EVALUATION AND GRADING CRITERIA			
ASSESSMENT COMPONENT		ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Internship		1.5 ETCS for 2 weeks of full-time work	N/A

TOTAL	3 or 6	N/A
There is no summative assessment for this course.		
III. READING		
MANDATORY READING		
If there is mandatory reading for this course, then it will be decided by the individual supervisors.		
RECOMMENDED FURTHER READING		
If there is recommended further reading for this course, then it will be decided by the individual supervisors.		
IV. ADDITIONAL INFORMATION		
ATTENDANCE		
Students need to fulfil all obligations of the internship as agreed upon with their supervisor.		
WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE		
Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.		
WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS		
Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.		
INFORMATION ABOUT THE FINAL EXAM		
There is no final exam for this course.		
OTHER RELEVANT INFORMATION		
Academic honesty Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.		
V. COURSE OUTLINE		
DATE	TOPIC	
Times and dates of the internship, as well as the working schedule will be agreed with the internship supervisor at the host institution.		

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
to evaluate benefits of AI for investigating cognition and the mind	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify and analyse challenges and obstacles in working with AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to independently study recent literature in the field of AI	Module Cognition and AI	Lectures, Seminar	Class Participation, Project
to identify the main discussions in research on cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to evaluate benefits and challenges of different empirical approaches to study cognitive development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to critically assess results of empirical studies in cognitive development as well as their link to theories on development	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to discuss chosen research fields within developmental psychology	Module Developing Minds	Lectures, Seminar	Class Participation, Project
to describe and analyse current topics and studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to critically assess methods and claims of studies on the evolution of cognition	Module Evolution of the Mind	Lectures, Seminar	Class Participation, Project
to analyse the challenges and benefits of Open Science approaches and tools	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to apply and adapt various Open Science tools to own research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
to discuss benefits and suitability of various tools for different research	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project

to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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SVEUČILIŠTE U RIJECI

Filozofski fakultet

Sveučilišna avenija 4
51 000 Rijeka

SYLLABUS

KEY INFORMATION ABOUT THE COURSE	
Course title	Academic Development
Study programme	Masters in Cognitive Sciences: Cognition and the Mind
Semester	2nd, 4th
Academic year	2026/2027
ECTS credits	2
Contact hours (Lectures + Seminars + Practical work)	0+5+10
Time and venue of classes	TBC
Language of instruction	English
Course organiser and instructor	Dr. Edward Legg, Dr. Ljerka Ostojić, Dr. Sandra Arbula, Dr. Petra Anić, Dr. Marko Tončić
Course instructors	Contact Details
Dr. Edward Legg	Email: edward.legg@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Sandra Arbula	Email: Sandra.arbula@ffri.uniri.hr , Office: F- 121, Office Hours: TBA
Dr. Ljerka Ostojić	Email: lj.ostojic@uniri.hr , Office: F-344, Office Hours: TBA
Dr. Ivan Flis	Email: ivan.flis@uniri.hr , Office: F-121, Office hours: TBA
Nirvana Ribić	Email: nirvana.ribic@ffri.uniri.hr , Office: 415, Office hours: TBA
Dr. Petra Anić	Email: panic@ffri.uniri.hr , Office: 354, Office hours: TBA
Dr. Marko Tončić	Email: mtoncic@ffri.uniri.hr , Office: 369, Office hours: TBA
I. DETAILED COURSE DESCRIPTION	
COURSE OVERVIEW	

This is an additional, supportive elective course that students can enrol into to receive individualised and flexible support with various aspects of their academic development:

For Summer semester 2026/2027, the following support is planned

1st year students:

- Support with academic English
- Support with reading literature
- Support with academic writing
- Support with programming experiments

2nd year students:

- Support with advanced statistical methods
- Support with statistical methods for Masters thesis projects

EXPECTED LEARNING OUTCOMES

Depending on the support the student needs:

- to independently read technical and scientific literature,
- to listen to lectures and talks and take notes,
- to present their own arguments,
- to prepare and orally present technical and scientific topics,
- to plan and write a structured text,
- to summarise and critically evaluate written academic texts,
- to paraphrase texts,
- to use academic discourse,
- to reflect on their own skills, recognise areas for improvements and identify useful resources,
- to use specific complex statistical methods that are relevant to a chosen research area,
- to assess the adequacy of different statistical methods for the selected research area,
- to program cognitive experiments using PsychoPy or OpenSesame.

WAYS IN WHICH THE COURSE IS DELIVERED (mark with 'X')

Lectures	Seminars	Practical work	Independent work
	x	x	x
Fieldwork	Laboratory work	Mentoring	Other
		x	x

II. COURSE EVALUATION AND GRADING CRITERIA

ASSESSMENT COMPONENT	ECTS CREDIT ALLOCATION	MAXIMUM POINTS (% OF TOTAL)
Class attendance	0.5	
Class Participation	1.5	N/A
TOTAL	2	N/A

There is no summative assessment for this course.

GRADE	UNDEGRADUATE AND GRADUATE PROGRAMMES
5 (A)	90 – 100 % points
4 (B)	75 – 89.9 % points
3 (C)	60 – 74.9 % points
2 (D)	50 – 59.9 % points
1 (F)	0 – 49.9 % points

III. READING

MANDATORY READING

- Moore, J. (2017) *Oxford Academic Vocabulary Practice: Upper-intermediate*. Oxford University Press.
- Swales, J. M., Feak, C. (2012) *Academic Writing for Graduate Students: Essential Tasks and Skills*. Michigan: University of Michigan.
- McCarthy, P., Hatcher, C. (2002) *Presentation Skills: Essential Guide for Students*. New Delhi: Sage Publications

RECOMMENDED FURTHER READING

IV. ADDITIONAL INFORMATION

ATTENDANCE

The course will be adjusted to students' schedules.

WAYS IN WHICH STUDENTS WILL BE NOTIFIED ABOUT THIS COURSE

Students will be notified over email, Moodle (Merlin), and any other agreed upon platforms.

WAYS IN WHICH STUDENTS CAN COMMUNICATE WITH COURSE INSTRUCTORS

Students can talk to their course instructors in and after class, contact them over email or Moodle, and during office hours. It is recommended that student contact lecturers in advance to arrange for meeting, whether during office hours or at a different time.

INFORMATION ABOUT THE FINAL EXAM

There is no final exam for this course.

OTHER RELEVANT INFORMATION

Academic honesty

Any use of texts or other types of work by another author, as well as the use of ChatGPT or other tools whose function is based on AI technology, without a clear and unambiguous citation of the source is considered a violation of academic integrity principles, and is a serious offence regulated by the Ordinance on Student Responsibilities.

V. COURSE OUTLINE

DATE	TOPIC
Week 1	
Week 3	
Week 4	Seminar
Week 5	Seminar
Week 6	
Week 7	Practical Work
Week 8	Practical Work
Week 9	
Week 10	
Week 11	Practical Work
Week 12	Practical Work
Week 14	Final discussion and Wrap-up

VI. CONSTRUCTIVE ALIGNMENT			
LEARNING OUTCOMES	CONTENT	TEACHING AND LEARNING ACTIVITIES	ASSESSMENT TASKS
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to discuss and make informed decisions about using Open Science approaches and tools in own work	Modules Open Science and Its Tools, Cognitive Neuroscience Methods in Practice	Lectures, Seminar	Class Participation, Project
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