Detailed Course Syllabus

Academic year: 2025/2026	**Semester:** Summer semester
Year of study: 1	**Study programme:** Psihologija (R) (Prijediplomski)

I. BASIC COURSE INFORMATION

Name: Mozak, znanje i obrazovanje	
Abbreviation: IZBP-15	
ECTS: 3	**Code:** 194549
Prerequisites: No	
Total Course Workload	
Teaching Mode	**Total Hours**
Lecture	15
Seminar	15
Class Time and Place: HKS - according to the published schedule	

II. TEACHING STAFF

Course Holder

Name and Surname: Knežević Martina

Academic Degree:	**Professional Title:** izvanredni profesor
Contact E-mail: martina.knezevic@unicath.hr	**Telephone:**

Office Hours: According to the published schedule

Course Assistant

III. DETAILED COURSE INFORMATION

Teaching Language: Hrvatski

Course Description	Temeljni **cilj** predmeta je upoznati studente/-ice s najnovijim spoznajama o mozgu, s naglaskom na ulogu okoline, obrazovanja i iskustva u oblikovanju ponašanja. Studenti/-ice će imati priliku istražiti odnos između razvojne psihologije, kognitivne neuroznanosti (znanosti o mozgu i ponašanju) i psihologije obrazovanja, kroz interdisciplinarno gledište te upoznati poteškoće i izazove s kojima se suočavaju stručnjaci iz različitih područja prilikom pokušaja primjene dostignuća iz jedne znanstvene discipline na drugu. Predmet stavlja snažan naglasak na interdisciplinarni dijalog i usredotočuje se na premošćivanje prepreka između istraživanja i prakse.

Educational Outcomes	1. Objasniti ulogu osnovnih struktura ljudskog mozga te moderne metode njihova istraživanja. 2. Komentirati važnost učenja i poučavanja od najranije dobi i značajnost cjeloživotnog učenja za razvoj i funkcioniranje mozga. 3. Prezentirati najnovija saznanja o međudjelovanju uma, mozga i obrazovanja. 4. Raspraviti praktične i etičke izazove u interdisciplinarnom pristupu poučavanju. 5. Razlikovati znanstvene činjenice od mitova o mozgu. 6. Komentirati važnost učenja i poučavanja od najranije dobi i značajnost cjeloživotnog učenja za razvoj i funkcioniranje mozga
Textbooks and Materials	
Required	1. Skripte i bilješke s predavanja 2. Blakemore, SJ and Firth, U (2005) The Learning Brain: Lessons for Education. *Oxford, UK: Blackwell Publishing*. 3. Johnson, M. H., & de Haan, M. (2015). *Developmental cognitive neuroscience: An Introduction. (4th ed.).* West Sussex, UK: Wiley Blackwell. 4. Keating, D. P. (Ed.). (2011). *Nature and nurture in early child development*. New York, NY: Cambridge University Press.
Supplementary	

Knjige:

1. Blakemore, SJ (2018) Inventing Ourselves: The Secret Life of the Teenage Brain. New York: Hachette Book Group.
2. Sax, O (1998) Čovjek koji je ženu zamijenio šeširom. Hrvatski Leskovac: KruZak
3. Sousa, DA (2011) How the Brain Learns. *Thousand Oaks, California: A SAGE Company*
4. Wolfe, P (2010) Brain Matters: Translating Research into Classroom Practice. *Alexandria, Virginia, USA: ASCD books.*

Znanstveni radovi:

1. Adolphs, R (2001) The neurobiology of social cognition. *Current Opinion in Neurobiology, 11:231-239.*
2. Best, JR, Miller, PH & Naglieri, JA (2011) Relations between executive function and academic achievement from ages 5 to 17 in a large, representative national sample. *Learning and Individual Differences, 21: 327-336.*
3. Blakemore, SJ (2008) The social brain in adolescence. *Nature Reviews Neuroscience, 9:267-277.*
4. Brown, TT & Jernigan, LJ (2012) Brain Development during the Preschool Years. *Neuropsychology Review, 22:313-333.*
5. Crone, EA & Dahl, RE (2012) Understanding adolescence as a period of social-affective engagement and goal flexibility. *Nature Reviews Neuroscience, 13(9): 636-650.*
6. Johnson, MH (2001) Functional brain development in humans. *Nature Reviews Neuroscience, 2:475-483.*
7. Fischer, KW (2008) Dynamic cycles of cognitive and brain development: Measuring growth in mind, brain and education. In A. M. Battro, K. W. Fischer & P. Lena (Eds.), The Educated Brain (pp. 127-150). Cambridge U.K.: Cambridge University Press.
8. Fischer, KW (2009) Mind, Brain and Education: Building a Scientific Groundwork for Learning and Teaching. *Mind, Brain and Education, 3(1): 3-16.*
9. Goswami, U (2006) Neuroscience and education: from research to practice? *Nature Reviews Neuroscience, 2-7.*
10. Kostović, I i sur. (2005) Razvitak i strukturna plastičnost čovjekova mozga. Medicina, 42(41):5-12
11. McEwen, BS (2007) Physiology and Neurobiology of Stress and Adaptation: Central Role of the Brain. *Physiological Reviews, 87:873-904.*
12. Moran, JM (2013) Lifespan development: The effects of typical aging on theory of mind. *Behavioural Brain Research, 237:32-40.*
13. Stiles, J & Jernigan, TL (2010) The Basics of Brain Development. *Neuropsychology Review, 20:327-348.*
14. Tsujimoto, S (2008) The Prefrontal Cortex: Functional Neural Development During Early Childhood. *Neuroscientist, 14(4): 345-358.*
15. Toga, WA, Thompson, PM & Sowell, ER (2006) Mapping brain maturation. *Trends in neuroscience, 29(3): 148-159.*
16. Rubia, K (2013) Functional brain imaging across development. *European Child and Adolescent Psychiatry, 22:719-731.*
17. Zaidi, ZF (2010) Gender Differences in Human Brain: A Review. *The Open Anatomy Journal, 2:37-55*.
18. Yurgelun-Todd, D (2007) Emotional and cognitive changes during adolescence. *Current Opinion in Neurobiology,17(2):251-257.*

Examination and Grading

To Be Passed DA	**Exclusively Continuous Assessment** NE	**Included in Average Grade** DA

Prerequisites to Obtain Signature and Take Final Exam	• Redovito pohađanje nastave (prisutnost na najmanje 70% nastave) • Stjecanje minimalno 35% bodova (od ukupno 100 bodova) tijekom nastave (kumulativno ostvareno na seminarskom izlaganju i na dva kolokvija) • Uredno izvršene seminarske obveze (pripremljeno i izloženo seminarsko izlaganje)

Examination Manner

Nastavne aktivnosti (70% ocjene):

- 1 kolokvij
- 2 seminarska rada
- Završni ispit (30% ocjene)

Brojčana ljestvica ocjenjivanja studentskog rada:

- izvrstan (5) – 90 do 100% bodova
- vrlo dobar (4) – 80 do 89,9% bodova
- dobar (3) – 65 do 79,9% bodova
- dovoljan (2) – 50 do 64,9% bodova
- nedovoljan (1) – 0 do 49,9 % bodova

Grading Manner

- Kontinuirano vrednovanje studentskog rada kroz nastavne aktivnosti (seminarsko izlaganje; kolokvij (pismeni))
- Završni pismeni ispit (minimum za prolaz na pismenom ispitu je 50% točne riješenosti).

Detailed Overview of Grading within ECTS

VRSTA AKTIVNOSTI	ECTS bodovi - koeficijent opterećenja studenata	UDIO OCJENE (%)
Pohađanje nastave	0.75	0
Seminarski rad	0.75	20
Seminarski rad	0.5	20
Kolokvij-međuispit	0.5	30
Ukupno tijekom nastave	2.5	70
Završni ispit	0.5	30
UKUPNO BODOVA (nastava+zav.ispit)	3	100

IV. WEEKLY CLASS SCHEDULE