



## **Doctoral Study in Media and Communication -learning outcomes-**

### **Analytical models and simulations of interpersonal communication protocols**

1. Create and evaluate new communication protocols,
2. Valorize dialectical approaches of previous research in the field of interpersonal communication.
3. Use advanced skills in distinguishing between the theoretical assumptions of the title course and topic and those imposed by the time we live in.
4. Create and evaluate new methods in establishing "communication protocols" at the level of interpersonal communication

### **Cognitive Aspects of Communication**

1. evaluate the terms key to understanding cognitive dimensions of communication processes,
2. critically reflect on different disciplinary approaches within the cognitive and scientific fields of interest and recognise their mutual complementarity,
3. analyse research methodology that is usually applied in the area of cognitive research of communication,
4. independently and critically analyse scientific literature in the area,
5. propose a research outline in the area of cognitive aspects of communication
6. carry out pre-research, analyse and interpret the results that have been obtained

### **Design Thinking (method) in scientific research and communication**

- I1: Knowledge: Evaluate concepts, procedures and theoretical models of the Design Thinking method and create new ones.
- I2: Cognitive skills: Create new techniques for applying the Design Thinking method in different areas.
- I3: Psychomotor skills: Implement theoretical paradigms of the Design Thinking method in conducting research.
- I4: Social skills: Conduct collaborative research using Design Thinking in the field of communication.
- I5: Independence: Manage the implementation of scientific research activities in the chosen field of research.
- I6: Responsibility: Take responsibility for the success of the implementation of the personal and team part of the research problem.

### **Electronic media in the Republic of Croatia**

1. Formulate and compare the similarities and differences of the Croatian media landscape with other systems.
2. Evaluate the role of electronic media in democratic societies.
3. Formulate problems in the context of contemporary media development.
4. Critically reflect on the approach to creating media strategies.
5. Propose research in the field of media.
6. Analyze and interpret the results obtained.

### **Epistemology of information and communication sciences**



1. Critically evaluate epistemological perspectives and research paradigms in information and communication sciences.
2. Establish a research methodology and use research instruments in accordance with the principles of individual research paradigms in information and communication sciences, adequate for the investigation of selected research problems.
3. Conduct own scientific research focused on knowledge as a subject of research in the field of information and communication sciences.
4. Apply critical-theoretical approaches in information and communication sciences in leading and managing complex communication processes and interacting and cooperating with different social groups.
5. Justify the scientific status and epistemological foundations of the information and communication field

#### **Gemification of modern communication**

- IU 1. Searches, critically reads scientific literature and evaluates its relevance and scientific contribution.
- IU 2. Creates a scientific research plan using flowcharts and specialized methods for creating and integrating new knowledge into various information and communication fields of science.
- IU 3. Codes, evaluates and analyzes statistical data obtained with a measuring instrument.
- IU 4. Plans and implements communication activities within a team using the analysis and synthesis of relevant information.
- IU 5. Independently designs a conceptual framework or prototype based on scientific achievements within research activities.

#### **Information, disinformation and hybrid threats**

1. develop systems and processes of critical thinking as a fundamental prerequisite for effectively dealing with disinformation and threats,
2. analyze disinformation and hybrid threats and their possible consequences in various forms of manifestation
3. independently define models and functions of the hybrid threat process at the national and international level;
4. recognize and communicate hybrid threats in the media and on social networks;
5. know models of dealing with disinformation threats of other states and organizations;
6. be active stakeholders in the crisis management system, crisis communication in case of exposure to hybrid threats at the national and international level

#### **The informational context of media and communication studies**

1. formulate theoretical research problems in the field of media and communication studies,
2. evaluate theoretical literature in the field of media and communication studies,
3. evaluate the nature of electronic media and types of mass communication in the digital age
4. critically reflect on the position of various types of information institutions within existing communication systems on a domestic and international level,
5. connect the importance of the emergence, operation and change of basic communication patterns
6. propose a research design in the field of media and communication theory,
7. conduct preliminary research, analyze and interpret the obtained results.

#### **Innovative communication in a changed reality**

1. understand communication as a holistic social science



2. know the scientific assumptions on which communication methods, strategies and skills are based
3. ability to critically reflect on assertive communication behavior, nonverbal communication, metalanguage,
4. evaluate scientific theories and literature
5. develop a research design, select research methods, conduct research, apply research methods and write a scientific paper in the field of communication.

### **Intercultural communication**

- 1 describing and valuing specific aspects of cultures and contrasts of east and west, north and south both as geopolitical and cultural spaces,
- 2 evaluating scientific literature in the area of intercultural communication,
- 3 understanding and distinguishing borders as lines of territorial, linguistic, cultural demarcations as well as meeting points and places of interconnectedness and mutuality,
- 4 describing and valuing particularities and intersectionality of border cultures, and understanding the conjunction of engagement and geopolitics within the aesthetic spheres,
- 5 drawing up a research paper outline, choosing research methods, carrying out research, applying research methods and writing a scientific paper in the area of intercultural communication

### **Interpersonal dynamics, communication skills and teamwork**

1. During the course, students will rank, review and self-assess different communication and problem-solving approaches, interpersonal dynamics and teamwork.
2. By actively participating in discussions and exercises, group and individual work, students will review and compare their understanding of their own communication skills, teamwork skills, including self-assessment of team leadership.
3. Students will synthesize knowledge and skills related to interpersonal communication processes in the context of small groups.
4. They will evaluate facts, theories, procedures and principles of how to communicate adequately and how individual variables affect individual behaviour.
5. Students will independently and responsibly judge interpersonal dynamics, communication skills and teamwork in a small group and how interpersonal dynamics affect behaviour in a team.

### **Communication and media from the perspective of the publishing industry**

1. critically reflect on the causes and consequences of changes in publishing,
2. evaluate the characteristics of disruptive technologies in the processes of acquiring, editing and disseminating publishing products,
3. explain available information technologies in the field of publishing and publishing,
4. evaluate the advantages and disadvantages of using various media and tools in communication processes,
5. plan, present and manage a program for offering information technologies.

### **Communicology of terrorism (Terrorism and political communication)**

1. Interpret the social construction and evolution of the meaning and content of the concept of (counter)terrorism.
2. Analyze terrorism through communication theories/perspectives.
3. Classify different types of terrorism.
4. Evaluate the social consequences of terrorism: media presentation of terrorism, impact on society, democracy, rule of law.



5. Formulate acquired theoretical, comparative-analytical and research competencies and knowledge about (counter)terrorism.
6. Compare national counter-terrorism models.
7. Evaluate national counter-terrorism systems and policies.

### **Media convergence**

1. Recognize and define terms related to media convergence
2. Create and develop new digital content and manage such content
3. Build skills and resources related to media convergence and adapt experience to new changes in the media industry
4. Recognize the direction of media changes and adapt your work tasks accordingly
5. Synthesize acquired knowledge about different media forms and user habits and contribute to the development of new theories

### **Qualitative research methods**

Identify research problems for which qualitative methods are appropriate research methods.  
Differentiate individual qualitative research methods and explain their key features.  
Design research questions appropriate to a qualitative research design.  
Differentiate between the types of qualitative sampling and explain their key features.  
Justify the adequacy of certain types of qualitative sampling.  
Distinguish and explain the main ethical principles and typical problems of qualitative research.

### **Quantitative research methods**

1. Collect data and critically evaluate it,
2. Distinguish between data types and select appropriate analysis.
3. Formulate a research hypothesis and select a suitable test.
4. Interpret the results of the analysis.
5. Conduct your own research

### **Media Semiotics**

- 1 describing and understanding methodological problems in the area of media semiotics,
- 2 evaluating scientific literature in the area of media semiotics,
- 3 evaluating different concepts and processes that take place in a media text (text, image, sound) through processes of creating signs, i.e. meanings,
- 4 understanding factors that affect the design of media texts in the context of semiotic instrumentation
- 5 drawing up a research paper outline, choosing research methods, carrying out research, applying research methods and writing a scientific paper in the area of media semiotics.

### **Media and culture**

1. Analyze media content - quantitative and qualitative analysis of content, determination of key themes and dominant ones discourse
2. Evaluate the elements of cultural policy, evaluate specific goals and means of cultural policy
3. Critically assess the role of media and culture from the aspect of identity creation - cultural and national
4. Analysis of media content and cultural elements that influence the creation of a culture of memory
5. Evaluating and researching the characteristics of the processes that determine the relationships between the functioning of new media and emergent cultures



6. Analysis of processes in which cultures are studied as factors of conflict, and processes in which cultures are set as foundations of sustainable development

### **Media in the context of social inclusion**

(Knowledge) After successful completion of the course Media in the context of communication inclusion, students will:

I1. create new factual and theoretical knowledge in the field of exercising communication and cultural rights members of vulnerable groups in public space.

I2. create highly specialized knowledge about advanced and innovative research methods and tools in the goal identifying the strengths of the media and public discourse in the context of communication inclusion of vulnerable groups.

(Skills) After successful completion of the course Media in the context of communication inclusion, students will be able to:

I3. analyze and critically evaluate the good practice of various forms of support in order to raise the quality of life members of vulnerable groups

I4. create (new) socially acceptable forms of communication with members of vulnerable groups in public space through the dimensions of communication competence, focus on others (developing empathy and supporting)

(Competences) After successful completion of the course Media in the context of communication inclusion, students will act independently and take responsibility for:

I5. promoting and supporting ethics and social change through professional and personal engagement aimed at visibility and social inclusion of vulnerable groups

### **Media intertextuality**

After completing and passing the exam in this course, students will be able to:

1. Critically collect information in the field of media intertextuality
2. Evaluate scientific literature in the field of the course
3. Critically reflect on media appearances, as well as media manipulations achieved with extratextual elements
4. Apply intertextual specifics and principles in the analysis of media texts
5. Develop a research plan, select research methods, conduct research, apply research methods and write a scientific paper in the field of media intertextuality

### **Research methodology in the information and communication field of science**

1. set up/develop a research design in the information and communication field of science,
2. test hypotheses (quantitative),
3. use SPSS (or Nvivo for qualitative methodology)
4. test the prerequisites for using certain types of statistical tests
5. conduct your own research (collecting data and testing metric characteristics)

### **Mobile media**

After attending the course and passing the exam, students will be able to:

1. Recognize mobile media as dominant media in information
2. Define how mobile devices have changed the media environment
3. Research and define new user habits
4. Defining and recognizing new ways of creating content adapted to mobile media
5. Create and implement mobile strategies in business



### **Advanced digital methods in information and communication sciences**

After successfully completing this course, students will be able to:

1. Recognize and evaluate digital research methods
2. Use digital research methods for research in the field of information and communication sciences with the aim of developing new knowledge
3. Ethically judge research conducted using digital methods
4. Propose and apply digital methods for collecting, processing and analyzing data
5. Independently conduct research using digital methods while respecting ethical standards

### **New trends in media design**

After completing and passing the exam in this course, students will be able to:

1. Define, explain and argue key concepts related to media design and production
2. Create, select and conduct their own research in the field of media design
3. Design and explain the theoretical framework of the research
4. Select and plan complex media design projects
5. Select, predict and evaluate media channels and standards
6. Compare, evaluate and rank design projects and tasks

### **Journalism, digital media and information culture**

After completing the course, doctoral students will be able to:

1. Understand and research the digital media environment
2. Critically analyze the ways in which journalism and the media are adapting to changes in the media market in the 21st century.
3. Understand and independently research new media forms, audience stratification and changes in the way they are informed, the impact of new technologies on media editing and content.
4. Develop a research plan with a proposal for adequate methodological tools.
5. Independently research various sources from the course area and independently prepare a scientific paper.

### **Journalism, public relations and media discourse**

After completing the course, doctoral students will be able to:

1. Understand and research the contemporary media and communication environment
2. Critically analyze media and communication processes, while special emphasis is placed on the acquisition of scientific and theoretical-epistemological knowledge that has an impact on contemporary media, communication and promotional practice.
3. Understand the role of public relations in contemporary media discourse, as well as various elements, aspects and strategies for managing corporate communication
4. Critically evaluate the ways in which contemporary public relations influence the media agenda and editorial policy in the 21st century.
5. Independently research various sources from the course area and independently prepare a scientific paper.

### **Selected chapters of artificial intelligence**

1. Create a comprehensive insight into the history of the development of artificial intelligence





as a scientific and technological discipline,

2. Create a comprehensive understanding of the scientific and technological settings on which artificial intelligence rests,
3. Create the ability to critically reflect on various achievements of artificial intelligence in the context of its impact on the daily life of individuals and society as a whole,
4. Evaluate specific achievements and creative techniques of artificial intelligence, developed to support specific areas of research and development in the domain of media, together with the associated research methods and tools,
5. Design and draft a research plan, select research methods, conduct research, apply research methods and write a scientific paper in the field of artificial intelligence.

#### **Selected chapters on ontologies and the semantic web**

1. Create a comprehensive insight into the history of the development of ontologies and the semantic Web as a scientific and technological discipline,
2. Create a comprehensive understanding of the scientific and technological settings on which ontologies and the semantic Web are based,
3. Create the ability to critically reflect on various achievements in the field of ontologies and the semantic Web, in the context of their impact on the daily life of individuals and society as a whole,
4. Evaluate specific achievements and creative techniques of ontologies and the semantic Web, developed to support specific areas of research and development in the media domain, together with the associated research methods and tools,
5. Design and draft a research proposal, select research methods, conduct research, apply research methods and write a scientific paper in the field of ontologies and the semantic Web.

#### **Organization and management of corporate information security**

1. Evaluate the concept, role and significance of information security, ISO: 27001 standards in the protection of information capital.
2. Apply legal regulations in the collection, processing and use of data and information
3. Implement practical knowledge in the application of information security measures in the protection of data and information in the organization.
5. Recognize risks and threats in business communication (computer crime, social engineering, economic espionage, hybrid operations).
6. Develop research competence in the field of information security with special emphasis on the protection of data and information

#### **Politics and the media: dichotomy and dialectic**

1. Define and understand the relationship between politics and the media;
2. Through critical information gathering, recognize and define media bias and relevant theories on the relationship between media and politics;
3. Design and implement new paradigms on media content and media-mediated information related to politics;
4. Apply scientific methods on media and politics and their interrelationship;
5. Identify and practice investigative journalism and its role in political processes in a specific community (city, state, region, international community).

#### **Approaches in the research of digital intelligence in the field of media and communication**

After active participation in the realization of the course and successful mastery of the content, and passing the exam, the doctoral student will be able to:



- I1: Evaluate concepts, procedures and theoretical models of digital intelligence and create new ones.
- I2: Create new methods for researching different areas of digital intelligence.
- I3: Implement theoretical paradigms of digital intelligence in conducting research.
- I4: Conduct collaborative research on digital intelligence in the field of media and communication.
- I5: Manage the implementation of scientific research activities on the selected research topic.
- I6: Take responsibility for the successful implementation of the personal and team part of the research problem.

#### **Psychology and communication skills**

1. to know psychology as a natural and social science
2. to know the scientific principles on which psychological communication methods and skills are based,
3. to acquire the ability to critically reflect on psychosocial behavior, nonverbal communication, positive and negative communication, body language and teamwork,
4. to acquire the ability to evaluate scientific literature in the field of the subject and to become familiar with valid sources of information and possibilities for publishing independent/group scientific works of interest to the field of the subject,
5. to develop a research plan, select research methods, conduct research, apply research methods and write a scientific work in the field of psychological communication skills.

#### **Security and protection of graphic media**

After completing and passing the exam in this course, students will be able to:

1. Analyze and recognize the importance of protecting images and data on graphic media
2. Create new solutions that include visible and hidden information
3. Research data security on individual graphic media using forensic devices.
4. Design new solutions for a particular spectrum (UV, visual, IR)
5. Critically assess the advantages of individual protection and its traceability.
6. Design new graphic solutions with modern protections.
7. Create an innovative solution in the field of graphic media security

#### **Synthesis and presentation of scientific information and communication in science**

After completing and passing the exam in this course, students will be able to:

1. apply different types and methods of scientific research work, basic methodological concepts and research paradigms during research activities and writing scientific papers;
2. devise a design and create a presentation considering the objectives of the presentation;
3. use all collected information related to the content of the presentation and create an adequate presentation considering the available tools;
4. conduct preliminary research, analyze and interpret the obtained results, apply research methods and write a scientific paper.

#### **Contemporary psycho-sociological topics in professional communication**

1. Evaluate the results of scientific research in the field of social psychology in professional communication
2. Use advanced concepts of group behavior theory to implement and evaluate intragroup communication
3. Evaluate the elements of interpersonal communication and implement them
4. Develop a draft research methodology
5. Conduct research and write a scientific paper





### **Technological and market development of electronic media**

Upon completion of the course, students will be able to:

- 1) Compare electronic media technologies according to their characteristics in different usage scenarios.
- 2) Understand the work processes of media organizations and companies.
- 3) Critically analyze markets and evaluate trends in electronic media consumption.
- 4) Evaluate the interconnectedness of electronic media and other creative industries through social, political, and economic context.
- 5) Model business cases in relation to technological, regulatory, and market opportunities.

### **Theory of information and communication**

1. distinguish and evaluate the components of the communication process
2. analyze, distinguish and describe media in the communication process
3. mathematically describe, explain and create informational impact
4. analyze and separate informative from redundant in different forms of communication
5. know and apply theories in their own research and analysis of data, information, entropy, redundancy in the communication process

### **Public relations management**

### **Visual culture and the science of the image**

1. Understand how images and their observers create meaning and determine the role that visuals have in our culture and photographic images in the media
2. Evaluate the visibility of artistic practices and cultural content in the media with the associated research interdisciplinary approach to methods and tools.
3. Critically analyze the role of visual culture and visual communications in contemporary society and analyze the results of media and similar social research (especially film criticism, critical reviews of various media content, etc.) that find application in media practice
4. Be able to recognize, define and confidently analyze media-relevant dimensions, factors and categories of perception and experience of photographic images
5. Design and develop a research plan, select research methods, conduct research, apply research methods and write a scientific paper in the field of visual culture.

### **Protection of personal data in the media**