

INTEGRATED ACADEMIC STUDIES OF PHARMACY

FIFTH YEAR OF STUDIES

academic year 2023/2024

Course: 19.GE007

Final work - Research

The course is evaluated with 5 ECTS. The course consists of 20 classes of work with mentor per week.

TEACHERS AND ASSOCIATES:

RB	Name and surname	E-mail address	vocation
1.	Jovana Novakovic	jovana.jeremic@medf.kg.ac.rs	Assistant Professor
2.	Isidora Milosavljevic	isidora.stojic@medf.kg.ac.rs	Assistant Professor
3.	Nevena Jeremic	nbarudzic@hotmail.com	Associate Professor

COURSE STRUCTURE:

Modul numbe r	Name of the module		N° of week s	Lecture s	Practic e	Other active classes	Teacher - head of the module
1	Advanced Research Method		15	0	0	20	asst. prof. Jovana Novakovic
							Σ0+0+20=300

ASSESSMENT:

The student masters the subject by modules. The grade is equivalent to the number of points earned (see tables). Points are earned in two ways:

- 1. PROJECT includes topic selection (students choose a research question), literature review (students conduct a thorough review of existing literature related to their chosen topic, summarizing key findings, identifying gaps in knowledge, and providing a theoretical framework for research), research design (students develop a research plan outlining the methodology, data collection methods, and analysis techniques to address their research question), research plan (students design experiments, develop the survey, collect data protocols and plans statistic analysis).
- **2. WRITTEN EXAMINATION** includes questions from various research areas, research methodology, data analysis and interpretation of research findings.

MAXIMUM POINTS					
1	Project	70			
3 Written examination		30			
	Σ	100			

The final grade is formed as follows:

In order to complete the course, the student must acquire at least 51 point in summary.

number of acquired points	grade
0 - 50	5
51 - 60	6
61-70	7
71 - 80	8
81 - 90	9
91 - 100	10

LITERATURE:

the name of the textbook	authors	publisher	the library
Academic Guidebook for young researches	Skoric, Marko	Niš: Univerzitet, 2018	Have
Basic Principles of clinical research and Methodology	Gupta, Sk.	N.Delhi: Gaypee Brothers, 2017	Have
Designing Clinical research	Hulley, Stephen B.	Philadelphia: Lippincot Williams & Wilkins, 2007	Have
Essentals of research design and methodology	Marczyk, Greoffrey	London: John Willy & sons, 2005	Have
Essential of clinical research	Glasser, Stephen P.	New York: Springer, 2008	Have
Key concepts in medical and behevioral research	Leavitt, Fred	Fremont: Jain publishing company, 2008	Have
Oxford Handbook of Clinical and Healthcare Research (Flexicover) (Oxford Medical Handbooks)	Ray S, Fitzpatrick S, Golubic R, Fisher S, Gibbings S	Oxford University Press, 2016	Have
Research methodology in the medical and biological scinces	Laake, Petter	San Diego: Academic Press, 2007	Have
Research metods in health	Bowling, Ann	New York: McGraw-Hill, 2009	Have
Research metods in psychiatry	Freema, Chiris	London: Elsevier, 2008	Have

PROGRAM:

MODULE: ADVANCED RESEARCH METHOD

TEACHING UNIT 1 (FIRST WEEK):

INTRODUCTION TO FINAL WORK

Students research work – 20 classes

Overview of the purpose, objectives and structure of the final work research project.

TEACHING UNIT 2 (SECOND WEEK):

LITERATURE REVIEW

Students research work – 20 classes

Techniques for conducting a comprehensive literature review to identify gaps in research and establish the theoretical framework.

TEACHING UNIT 3 (THIRD WEEK):

PROJECT PLANNING

Students research work – 20 classes

Techniques for developing a comprehensive project plan with main objectives, timelines, and resources.

TEACHING UNIT 4 (FOURTH WEEK):

RESEARCH DESIGN

Students research work -20 classes

Introduction to different research designs and methods. Selection of appropriate research methods and techniques for data collection and analysis.

TEACHING UNIT 5 (FIFTH WEEK):

ETHICAL CONSIDERATIONS IN RESEARCH

Students research work -20 classes

Discussion of the ethical principles and guidelines governing research involving human subjects, animals, and data confidentiality.

TEACHING UNIT 6 (SIXTH WEEK):

WRITING RESEARCH PROPOSALS

Students research work -20 classes

Step-by-step guidance on writing a research proposal, including sections on background, aims methodology and expected outcomes.

TEACHING UNIT 7 (SEVENTH WEEK):

PROJECT MANAGEMENT

Students research work – 20 classes

Strategies for effective project management, including monitoring progress, addressing challenges, and adapting plans as needed.

TEACHING UNIT 8 (EIGHTH WEEK): RESEARCH IMPLEMENTATION Students research work – 20 classes Work with mentor. TEACHING UNIT 9 (NINTH WEEK): **RESEARCH IMPLEMENTATION** Students research work -20 classes Work with mentor. TEACHING UNIT 10 (TENTH WEEK): RESEARCH IMPLEMENTATION Students research work – 20 classes Work with mentor. TEACHING UNIT 11 (ELEVENTH WEEK): RESEARCH IMPLEMENTATION Students research work – 20 classes Work with mentor. TEACHING UNIT 12 (TWELFTH WEEK): **RESEARCH IMPLEMENTATION** Students research work – 20 classes Work with mentor. TEACHING UNIT 13 (THIRTEENTH WEEK): **RESEARCH IMPLEMENTATION** Students research work – 20 classes Work with mentor. TEACHING UNIT 14 (FOURTEENTH WEEK): RESEARCH IMPLEMENTATION Students research work -20 classes Work with mentor. TEACHING UNIT 15 (FIFTEENTH WEEK): **RESEARCH EVALUATION** Students research work – 20 classes

Reflection of the final work research process, including strengths, weaknesses and lessons learned.

Students research work					

LESSON SCHEDULE FOR THE SUBJECT PHARMACEUTICAL BIOTECHNOLOGY

module	Sunday	type	method unit name	a teacher
	1	SRW	Introduction to final work	
	2	SRW	Literature review	
	3	SRW	Project planning	
	4	SRW	Research design	
	5	SRW	Ethical considerations in research	
	6	SRW	Writing research proposals	
	7	SRW	Project management	
1	8	SRW	Research implementation	
	9	SRW	Research implementation	
	10	SRW	Research implementation	
	11 SRW 12 SRW 13 SRW	SRW	Research implementation	
		Research implementation		
		SRW	Research implementation	
	14	SRW	Research implementation	
	15	SRW	Research evaluation	