



**PHARMACY  
INTEGRATED ACADEMIC STUDIES  
FOURTH YEAR OF STUDY**

2025/2026

**RESEARCH IN CLINICAL PHARMACOLOGY**

Title of the course:

## **RESEARCH IN CLINICAL PHARMACOLOGY**

This course is assigned 5 ECTS credits.

It consists of 4 active teaching hours per week: 2 hours of lectures, 1 hour of seminar and 1 hour of practical classes.

## TEACHERS:

	Name and surname	E-mail	Title
1.	Ana Pejcic	<a href="mailto:anapejcic201502@yahoo.com">anapejcic201502@yahoo.com</a>	Assistant Professor
2.	Jasmina Milovanovic	<a href="mailto:jasminamilo@yahoo.com">jasminamilo@yahoo.com</a>	Full professor
3.	Marina Kostic	<a href="mailto:marrina2006kg@yahoo.com">marrina2006kg@yahoo.com</a>	Full professor
4.	Radica Zivkovic Zaric	<a href="mailto:radica_zivkovic@yahoo.com">radica_zivkovic@yahoo.com</a>	Associate professor
5.	Milos Milosavljevic	<a href="mailto:milosavljevicmilos91@gmail.com">milosavljevicmilos91@gmail.com</a>	Assistant Professor

## COURSE STRUCTURE:

Module No	Title	No of weeks	Number of hours per week			Responsible teacher
			Lectures	Seminars	Practice	
1.	Research in clinical pharmacology	15	2	1	1	Ana Pejcic
<b><math>\Sigma</math> 30+15+15=60</b>						

## GRADING:

The grade will be equivalent to the number of points achieved (see the table). The points will be awarded according to the following scheme:

### 1. PRE-EXAM ACTIVITIES (ACTIVITY DURING CLASSES):

Based on participation and activity during classes, a student can earn up to 2 points per week. In this way, a maximum of 30 points can be earned. The student has the right to take the final exam only if they have previously earned more than 50% of the maximum number of points allocated for pre-exam activities, i.e., at least 16 points for class participation.

### 2. FINAL EXAM:

The student prepares and defends a written final exam essay on a given topic in the field of clinical pharmacology. In this way, a student can earn a maximum of 70 points.

## FINAL GRADE

The final grade, which depends on the total number of earned points - the sum of points on activities during classes and points obtained on the exam, is formed according to the following table:

Grading system		
Grade	Total No. of points	Description
10	91-100	Excellent
9	81-90	Exceptionally good
8	71-80	Very good
7	61-70	Good
6	51-60	Passing
5	<51	Failing

## Literature

Ray S, Fitzpatrick S, Golubic R, Fisher S, Gibbins S. Oxford Handbook of Clinical and Healthcare Research (Oxford Medical Handbooks). Oxford University Press; 2016.

Orme M, Sjöqvist F, Birkett D. Clinical Pharmacology in Health Care, Teaching and Research. World Health Organization, IUPHAR, CIOMS; 2012.

Atkinson AJ, et al. Principles of Clinical Pharmacology. 2nd ed. Burlington: Elsevier; 2007.

Katzung B. Basic and Clinical Pharmacology. 10th ed. New York: McGraw-Hill; 2004.

# Schedule

## Module 1:

### COURSE UNIT 1 (WEEK 1): **Introduction to clinical pharmacology**

Lectures: 2 hours	Seminars: 1 hour	Practical classes: 1 hour
Introduction to clinical pharmacology	Research domains of clinical pharmacology	Types of studies in clinical pharmacology

### COURSE UNIT 2 (WEEK 2): **Design of clinical trials of drugs**

Lectures: 2 hours	Seminars: 1 hour	Practical classes: 1 hour
Design of clinical trials of drugs	Principles of Good Clinical Practice	Ethical considerations of research in clinical pharmacology

### COURSE UNIT 3 (WEEK 3): **Evidence-based medicine**

Lectures: 2 hours	Seminars: 1 hour	Practical classes: 1 hour
Introduction to evidence-based medicine	An analysis of the validity and practical significance of clinical studies	Practical analysis of examples of clinical studies

### COURSE UNIT 4 (WEEK 4): **Basic principles of conducting literature search**

Lectures: 2 hours	Seminars: 1 hour	Practical classes: 1 hour
Basic principles of conducting literature search	Databases: PubMed/MEDLINE, Google Scholar, Cochrane library	Practical aspects of literature search

### COURSE UNIT 5 (WEEK 5): **Basic principles of writing a scientific article in the field of clinical pharmacology**

Lectures: 2 hours	Seminars: 1 hour	Practical classes: 1 hour
Basic principles of writing a scientific article in the field of clinical pharmacology	Parts of a scientific article	Practical aspects of reference citation

**COURSE UNIT 6 (WEEK 6): Determination of written essay topics**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Selection of relevant research topics in clinical pharmacology. Determination of written essay topics.

**COURSE UNIT 7 (WEEK 7): Selection of research design**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Determining the research design based on the selected topic.

**COURSE UNIT 8 (WEEK 8): Preparation of the research protocol**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Preparation of the research protocol (plan).

**COURSE UNIT 9 (WEEK 9): Data collection for research 1**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Data collection for research. Literature search for writing the introduction.

**COURSE UNIT 10 (WEEK 10): Data collection for research 2**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Data collection for research. Writing the methods section.

**COURSE UNIT 11 (WEEK 11): Analysis of collected data**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Analysis of collected data.

**COURSE UNIT 12 (WEEK 12): Principles of presenting results**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Textual, graphical, and tabular presentation of collected data – research results.

**COURSE UNIT 13 (WEEK 13): Principles of discussing results**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Preparation of the discussion based on analyzed results.

**COURSE UNIT 14 (WEEK 14): Principles of writing conclusion and abstract**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Formulating conclusions and writing the abstract. Preparation of the final written essay in its entirety.

**COURSE UNIT 15 (WEEK 15): Resolving issues arising during the research and writing process**

Lectures: 2 hours

Seminars: 1 hour

Practical classes: 1 hour

---

Resolving research and essay writing issues.

## **LECTURES AND PRACTICE**

**WEDNESDAY**

**COMPUTER HALL**

**16.45-19.45**

[Schedule of lectures, practical classes and tests – academic calendar](#)

## RESEARCH IN CLINICAL PHARMACOLOGY: COURSE SCHEDULE

Module	Week	Type	Title	Teacher
<b>1</b>	1	L/S/P	Introduction to clinical pharmacology	Ana Pejcic
	2	L/S/P	Design of clinical trials of drugs	Marina Kostic
	3	L/S/P	Evidence-based medicine	Marina Kostic
	4	L/S/P	Basic principles of conducting literature search	Milos Milosavljevic
	5	L/S/P	Basic principles of writing a scientific article in the field of clinical pharmacology	Ana Pejcic
	6	L/S/P	Determination of written essay topics	Ana Pejcic
	7	L/S/P	Selection of research design	Jasmina Milovanovic
	8	L/S/P	Preparation of the research protocol	Ana Pejcic
	9	L/S/P	Data collection for research 1	Milos Milosavljevic
	10	L/S/P	Data collection for research 2	Ana Pejcic

## RESEARCH IN CLINICAL PHARMACOLOGY: COURSE SCHEDULE

Module	Week	Type	Title	Teacher
<b>1</b>	11	L/S/P	Analysis of collected data	Jasmina Milovanovic
	12	L/S/P	Principles of presenting results	Ana Pejcic
	13	L/S/P	Principles of discussing results	Radica Zivkovic Zaric
	14	L/S/P	Principles of writing conclusion and abstract	Ana Pejcic
	15	L/S/P	Resolving issues arising during the research and writing process	Ana Pejcic
		<b>E</b>	<b>FINAL EXAM</b>	

L-lectures; S-seminars; P-practical classes, E-exam