

GENERAL INFORMATION		
Course	Introduction to Scientific Work	
Course coordinator	Prof. Martina Smolić, MD, PhD	
Assistant/Associate	Vjera Ninčević, MD, PhD Tea Omanović Kolarić, MD, PhD Nikola Raguž-Lučić, MD, PhD	
Study Programme	Integrated undergraduate and graduate university study of Medicine in German language	
Status of the course	Elective	
Year of study, semester	4 th year, 8 th semester	
Grading scale and workload	ECTS	1
	Hours (L+S+E)	15 (10+5+0)
COURSE DESCRIPTION		
Course objectives		
<p>Students will acquire basic knowledge about the methods of creating, verifying, saving, transmitting and using the results of scientific work. Students will be introduced with the important factors of the historical development of science, the classification of science, scientific titles and scientific institutions, as well as the principles of training scientists, mentoring and teamwork. Students will be acquired with differences in the training of scientists and the possibilities of realizing a scientific career in the scientific field of biomedicine and healthcare. Acquaint students with the peculiarities of sources of scientific information with special reference to scientific publications, methods of searching scientific literature, principles of scientific methods, and planning, creation and public presentation of a scientific work and authorship.</p>		
Enrolment requirements and entry competencies		
There are no special requirements for this course except those defined by the curriculum of the entire study program.		
Learning outcomes at the Programme level		
1.1, 2.1, 2.3, 3.4., 3.5		
Learning outcomes (5-10)		
<p>After passing the exam from this course, the student will be able to:</p> <ol style="list-style-type: none"> 1. To explain the differences in the training of scientists in the scientific field of biomedicine and healthcare 2. To clarify the mentoring system, the peculiarities of the education of scientists and teamwork as the foundations of scientific research work. 3. Define methods of research and inspiration for scientific work. 4. Distinguish the methods of scientific research work. 5. Define the parts of the original scientific work. 6. Differentiate between the basic determinants in presenting the results of scientific research work orally and in writing. 7. Clarify the role, competences and work of bioethical commissions. 		
Course content		

Subject content

1. Education of scientists. Scientific career.
2. Origin and development of scientific thought. Searching scientific literature via the Internet.
3. Scientific research: methods of solving problems arising from the development of theory or from work in practice.
4. Scientific research: analysis of unexpected discoveries that emerge from the processing of the 'mass' of biological data.
5. Induction and deduction as methods of scientific work.
6. Defining and describing the growth process of a scientific work.
7. Complete original scientific work.
8. Review scientific work.
9. Presentation of the results of scientific and research work orally and through posters.
10. Basic documents, declarations, recommendations and codes of conduct in biomedical research involving humans and animals.
11. Consent, voluntariness, confidentiality and information of research participants.
12. Rules of work of ethical commissions. The process of assessing compliance with ethical standards.

Mode of teaching	<input checked="" type="checkbox"/> lectures	<input checked="" type="checkbox"/> independent tasks
	<input checked="" type="checkbox"/> seminars and workshops	<input checked="" type="checkbox"/> multimedia and network
	<input checked="" type="checkbox"/>	<input type="checkbox"/> laboratory
	<input type="checkbox"/> distance education	<input type="checkbox"/> mentoring work
	<input type="checkbox"/> field teaching	<input type="checkbox"/> other

Student obligations

Students are expected to attend all class sessions, as well as to take all the examinations. However, they are allowed for excused absences, totalling 30% of all classes.

Monitoring student work

Attending classes	x	Class activity	x	Seminar work		Experimental work	
Written exam	x	Oral exam	x	Essay		Research	
Project		Continuous knowledge verification		Paper		Practical work	x
Portfolio							

Grading and evaluation of student work during classes and of the final examination

Students' work is evaluated during classes and on the final exam. Students are evaluated numerically and descriptively (insufficient (1), sufficient (2), good (3), very good (4), excellent (5)). During the course, the student will be able to collect a maximum of 100 evaluation points. Students can earn a maximum of 20 points during classes through various forms of activity. At the final exam, students can obtain a maximum of 80 points. The final grade represents the sum of the grade points obtained during classes and on the final exam.

Required reading

1. Ritschl V, Weigl R, Stamm T. Wissenschaftliches Arbeiten und Schreiben. Springer:1. Aufl. 2016

Additional reading

Number of copies of required literature in relation to the number of students currently attending classes in the course

Title	Number of copies	Number of students
Ritschl V, Weigl R, Stamm T. Wissenschaftliches Arbeiten und Schreiben. Springer:1. Aufl. 2016)	https://bfdproxy48.bfd-online.de/login.htm?back=http%3a%2f%2fpartner.bfd-online.info.bfdproxy48.bfd-online.de%2fameos%2fbfdAboGateway%3fabold%3d264117	

Course evaluation procedures

The quality of course performance is monitored through an anonymous student survey on the quality of the organization and conduction of classes, the course content and the work of professors. The usefulness of the lectures from the students' perspective, the curriculum content, the professor preparedness, the clarity of the presentation, the amount of new content and the quality of the presentation are evaluated. The curriculum and its execution are administratively compared. The participation of students in lectures and exercises, as well as the excuses for missing classes, are controlled and analyzed.