

**SCHOOL OF MEDICINE UNIVERSITY OF MOSTAR  
MEDICAL STUDIES IN ENGLISH**

**Department of Epidemiology**

**Head of Department: Professor Maja Miškulin, MD, PhD**

**1. Course:** Epidemiology with Clinical Rotation

**2. Course leader:** Professor Maja Miškulin, MD, PhD (Prof. M. M.)

**3. Course associates:** Kristina Bevanda, MD (K. B.); Rozalija Nedić, MD (R. N.)

**4. Academic Year:** 2025/2026

**5. Year of Study:** 6<sup>th</sup> Year

**6. Teaching period:** 11.5.2026. – 22.5.2026.

**7. Number of teaching hours per format of instruction:** Lectures 20 hours, Seminars 20 hours,  
Exercises 20 hours.

Number of teaching hours	L 20	S 20	E 20
Number of student groups	1	1	1
Scheduled teaching hours	20	20	20

**8. Credits (ECTS):** 3.0 ECTS credits

**9. Order of teaching:**

No.	Topic (teaching hours)	Format of instruction	Classrooms	Student Groups	Date and time	Teachers and associates
1.	L1: Historical development of epidemiology. (1)	L	Hall No. 2	All	11.5.2026. 9:00-9:45	Prof. M. M.
2.	L2: Definition and tasks of epidemiology. (1)	L	Hall No. 2	All	11.5.2026. 9:45-10:30	Prof. M. M.
3.	L3: Epidemiological measures and measuring events in a population. (1)	L	Hall No. 2	All	11.5.2026. 10:45-11:30	Prof. M. M.
4.	L4: Indicators of the health status of the population. (1)	L	Hall No. 2	All	11.5.2026. 11:30-12:15	Prof. M. M.
5.	E1: Relative numbers in epidemiology (proportion, ratio, rate). (2)	E	Hall No. 2	All	11.5.2026. 12:30-14:00	K. B.
6.	L5: Basics of research and application of epidemiological methods. (1)	L	Hall No. 2	All	12.5.2026. 9:00-9:45	Prof. M. M.

7.	L6: Descriptive epidemiology. (1)	L	Hall No. 2	All	12.5.2026. 9:45-10:30	Prof. M. M.
8.	E2: Epidemiological indicators of health status (age distribution of the population, birth rate, mortality rate, natural increase rate, infant mortality, perinatal mortality, proportional mortality, specific mortality, lethality). (2)	E	Hall No. 2	All	12.5.2026. 10:45-12:15	K. B.
9.	E3: Frequency measures in epidemiological research (incidence, prevalence). (2)	E	Hall No. 2	All	12.5.2026. 12:30-14:00	K. B.
10.	L7: Cohort study. (1)	L	Hall No. 2	All	13.5.2026. 9:00-9:45	Prof. M. M.
11.	L8: Case-control study. (1)	L	Hall No. 2	All	13.5.2026. 9:45-10:30	Prof. M. M.
12.	E4: Measures of association in cohort studies (relative risk, attributable risk) and their interpretation. (2)	E	Hall No. 2	All	13.5.2026. 10:45-12:15	R. N.
13.	E5: Measures of association in case-control studies (odds ratio) and its interpretation. (2)	E	Hall No. 2	All	13.5.2026. 12:30-14:00	R. N.
14.	L9: Cross-sectional study. (1)	L	Hall No. 2	All	14.5.2026. 9:00-9:45	Prof. M. M.
15.	L10: Basics of data analysis in epidemiology. (1)	L	Hall No. 2	All	14.5.2026. 9:45-10:30	Prof. M. M.
16.	E6: Measures of association in cross-sectional studies (prevalence ratio, prevalence odds ratio) and their interpretation. (2)	E	Hall No. 2	All	14.5.2026. 10:30-12:00	R. N.
17.	E7: Describing and presenting research data (data distributions, histograms, scatter plots, pie charts, measures of central value, dispersion). (1)	E	Hall No. 2	All	14.5.2026. 12:00-12:45	Prof. M. M.
18.	E8: Hypothesis testing, statistical tests and p-value. (1)	E	Hall No. 2	All	14.5.2026. 12:45-13:30	Prof. M. M.
19.	L11: Questionnaire - an instrument for collecting data. (1)	L	Hall No. 2	All	14.5.2026. 13:30-14:15	Prof. M. M.
20.	L12: Diagnostic tests and screening tests. (1)	L	Hall No. 2	All	15.5.2026. 9:00-9:45	Prof. M. M.
21.	L13: Experimental studies. (1)	L	Hall No. 2	All	15.5.2026. 9:45-10:30	Prof. M. M.
22.	L14: Causal relationship. (1)	L	Hall No. 2	All	15.5.2026. 10:30-11:15	Prof. M. M.

23.	L15: Types of samples and sampling. (1)	L	Hall No. 2	All	15.5.2026. 11:15-12:00	Prof. M. M.
24.	E9: Test sensitivity. Test specificity. Positive predictive value of a diagnostic test. Negative predictive value of a diagnostic test. (2)	E	Hall No. 2	All	15.5.2026. 12:00-13:30	R. N.
25.	L16: Systematic epidemiological monitoring of the health status of the population. (1)	L	Hall No. 2	All	18.5.2026. 9:00-9:45	Prof. M. M.
26.	S1: Epidemiology of respiratory diseases. (2)	S	Hall No. 2	All	18.5.2026. 9:45-11:15	Prof. M. M.
27.	S2: Epidemiology of diseases transmitted through the digestive system. (2)	S	Hall No. 2	All	18.5.2026. 11:15-12:45	Prof. M. M.
28.	S3: Epidemiology of diseases transmitted by contact. (2)	S	Hall No. 2	All	18.5.2026. 12:45-14:15	Prof. M. M.
29.	L17: Disease prevention. (1)	L	Hall No. 2	All	19.5.2026. 9:00-9:45	Prof. M. M.
30.	L18: The most important branches of epidemiology. (1)	L	Hall No. 2	All	19.5.2026. 9:45-10:30	Prof. M. M.
31.	S4: Epidemiology of zoonoses. (2)	S	Hall No. 2	All	19.5.2026. 10:30-12:00	Prof. M. M.
32.	S5: Epidemiology of natural focal infections. (2)	S	Hall No. 2	All	19.5.2026. 12:00-13:30	Prof. M. M.
33.	E10: Introduction to the organization and work of the epidemiological service in Bosnia and Herzegovina (fieldwork of epidemiologists, vaccination station, work of epidemiologists in emergency situations). (4)	E	Health Center Mostar	All	20.5.2026. 9:00-12:00	K. B.
34.	L19: International health. (1)	L	Hall No. 2	All	21.5.2026. 9:00-9:45	Prof. M. M.
35.	L20: Ethical principles in epidemiological research. (1)	L	Hall No. 2	All	21.5.2026. 9:45-10:30	Prof. M. M.
36.	S6: Epidemiology of cardiovascular diseases. (2)	S	Hall No. 2	All	21.5.2026. 10:30-12:00	Prof. M. M.
37.	S7: Epidemiology of malignant neoplasms. (2)	S	Hall No. 2	All	21.5.2026. 12:00-13:30	Prof. M. M.
38.	S8: Epidemiology of mental illnesses and disorders. (2)	S	Hall No. 2	All	22.5.2026. 9:00-10:30	Prof. M. M.
39.	S9: Epidemiology of diabetes. (2)	S	Hall No. 2	All	22.5.2026. 10:30-12:00	Prof. M. M.
40.	S10: Epidemiology of accidents. (2)	S	Hall No. 2	All	22.5.2026. 12:00-13:30	Prof. M. M.
	<i>Pre-exam consultations</i>		<i>Hall No. 2</i>		<i>22.5.2025. 13:30-15:00</i>	Prof. M. M.

## LITERATURE

### Required literature:

1. Celentano DD, Szklo M. Gordis Epidemiology, sixth edition (e-book). Elsevier, Philadelphia, 2019.
2. Baker C. Epidemiology (e-book). Open Education Initiative, University Libraries at Virginia Tech, Blacksburg, 2023.
3. Bovbjerg ML. Foundations of Epidemiology (e-book). Oregon State University, Corvallis, OR, 2020.

### Optional literature:

1. Banatvala N, Bovet P. Noncommunicable diseases. A compendium. Routledge, London and New York, 2023.
2. Southwick F. Infectious diseases: a clinical short course. 4th edition. McGraw-Hill, 2020.
3. Bonita R, Beaglehole R, Kjellström. Basic epidemiology 2nd edition (e-book). World Health Organization, Geneva, 2006.
4. Ferenczi E, Muirhead N. One stop doc – Statistics and Epidemiology. Oxford University Press, New York, 2006.
5. Materials from lectures, seminars and exercises.

## EXAM METHODS AND TERMS

**Exam method: Written and oral exam.**

### Exam terms:

1. exam term	29.5.2026.
2. exam term	2.7.2026.
3. exam term	16.7.2026.
4. exam term	24.8.2026.
5. exam term	7.9.2026.