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| Subject | **PUBLIC HEALTH WITH EPIDEMIOLOGY AND STATISTICS**  |
| Study program | **Three year professional studies for graduate medical nurse/technician** |
| **Code:** | SMN/T-223 |
| **Study year:** | Second |
| **Semester** | Fourth |
| **Total no. of hours**  | 110 |
| **Credits** | 4 |
| **Type of the subject** | Mandatory |
| **Preconditions** | Fulfilled condition for enrollment to second study year |
| **Conducted by:** | Department of Social Medicine, Department of Occupational Medicine, Department of Epidemiology |
| **Responsible Teacher** | Assoc. Prof. Dr. Fimka Tozija, Prof. Dr. Jovanka Bislimovska, Prof. Dr. Elisaveta Stikova, Assoc. Prof. Dr. Beti Zafirova  |
| **Address:** | Institute of Social Medicine, 50 Divizija br. 6, 1000 Skopje,Tel.: +389 2 31 47 039, e-mail: ftozija@medf.ukim.edu.mk |
| **Key words** | Studies for medical nurses and technicians, basic subjects, public health, statistics |
| **Aims of the study** | * Become introduced with public health actions in our country and in the world
* Become aware of one’s own health, family health, health of special vulnerable groups and population
* Become acquainted with preventive measures in health and professional protection
* Become acquainted with epidemiologic methods in health
* Become skillful for evaluation of results validity of epidemiologic and clinical studies
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| **Brief content** | **Theoretical course:** **Public health** (15 hours):* Public health development in medical science
* Determination of health and disease
* Family health
* Special health needs of community
* Health and social protection of vulnerable groups
* Monitoring and evaluation of health risks and their prevention
* Indicators of health condition and health protection
* Action strategies in the domain of public health – organization of public health systems
* Globalization of health
* Occupational medicine (professional mortality and morbidity, prevention)

**Epidemiology** (10 hours):* Epidemiology (epidemiologic methods, disease frequency, mortality, morbidity)
* Epidemiological and clinical studies
* Epidemiology and prevention of infectious diseases and intrahospital infections (preventive measures)

**Statistics** (5 hours):* Statistical methods (testing of hypothesis, correlation, probability, relative and absolute risk, number needed for treatment, reliability coefficient, predictive values, sensitivity and specificity, tables and graphs of survival)

**Seminars** (80 hours)* Evaluation of health systems (20 hours)
* Professional protection (20 hours)
* Use of statistical methods in diagnostic, therapeutic and/or prognostic aims – their processing and evaluation of validity of the used statistical methods (40 hours)
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| **Organization** | Theoretical course: 30 hoursSeminars: 80 hours |
| **Methods of studying** | Lectures, seminars  |
| **Anticipated study results** | **Knowledge and understanding**:The student will acquire basic knowledge in the field of public health, preventive measures in health and professional protection.**Key skills**:The student will become skilled to apply his/her knowledge in learning other medical subjects and will be skilled for evaluation of results validity from epidemiologic and clinical studies. |
| **Specific recommendations for the course** | The student is obliged to participate actively in all anticipated activities, including the continual assessment of knowledge in order to get a signature.**Points for the activities of the student:**

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| **Type of activity** | Points |
|  | Pub. Health | Epidemiol. | Statistics |
| Theoretical course\* | 5-10 |
| Seminars\*\* | 5-6 | 5-6 | 15-18 |
| Continual assessment | 10-20 | 10-20 | 10-20 |
| Total | 60-100 |

\* Attendance at Theoretical course: 51% - 60% - 5points; 61% - 70% - 6 points; 71% - 80% - 7 points; 91% - 100% - 10 points.\*\* Attendance at Seminars:51% - 60% - 1 point; 61% - 70% - 2 points; 71% - 80% - 3 points; 81% - 90% - 4 points; 91% - 100% - 5 points.\*\*Active participation at Seminars: 20-25 pointsattendance – 0.1 pointsactive participation – 0.1 points**Conditional criteria:**  In order to approach continual assessment, the student must regularly attend theoretical course and seminars. Continual assessments are in a written form and are conducted after completion of lectures and seminars of each segment separately. The grade of the entire exam is obtained according to the table of grades based on the sum of points gained in all activities, including the continual assessment as well as the practical part of the exam. In case the student has not achieved minimum points (60%) from the continual assessment, he/she applies to take the complete final exam. **Complete final exam**: The exam is in written form. It is consisted of continual assessment on which the student has not obtained minimum points. |
| **Textbooks** | **Basic**:* Teodor Tulcinski, Elena Varavikova. Novoto javno zdravstvo – voved vo 21 vek. NIP “Studentski zbor”, Skopje, 2003.
* Authorized lectures by the members of the Department.
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