# Discipline: Public health and health care, health care economy

PLAN OF PRACTICAL CLASSES

|  |  |
| --- | --- |
| **Classes 1** | **THE ORGANIZATION AND CARRYING OUT OF STATISTICAL RESEARCH** |
| **Classes 2** | **BASIC TECHNIQUES FOR ANALYSING CATEGORICAL DATA** |
| **Classes 3** | **BASIC TECHNIQUES FOR ANALYSING NUMERICAL DATA** |
| **Classes 4** | **TIME SERIES AND THEIR ANALYSIS. CORRELATION ANALYSIS** |
| **Classes 5** | **A TECHNIQUE OF DEMOGRAPHIC PROCESSES STUDYING** |
| **Classes 6** | **METHOD OF STUDY AND ESTIMATION OF INDEXES OF GENERAL MORBIDITY** |
| **Classes 7** | **PRIMARY HEALTH CARE. ORGANIZATION OF OUTPATIENT CARE** |
| **Classes 8** | **ORGANIZATION OF THE IN-PATIENT AID TO THE POPULATION. INDICATORS OF HOSPITAL ACTIVITY** |
| **Classes 9** | **Public health economy. Methodology for calculating economic efficiency** |
| **Classes 10** | **HEALTH MANAGEMENT. HEALTH PLANNING** |
| **Classes 11** | **PUBLIC HEALTH PROBLEMS IN INDIA** |
| **Classes 12** | **FINAL TEST** |

**Classes № 1**

THEME: **THE ORGANIZATION AND CARRYING OUT OF STATISTICAL RESEARCH**

**Questions:**

1. Medical statistics as method of a research of public health and health care. Parts of medical statistics.
2. The plan of statistical research, maintenance. The statistical set. Kinds, types, peculiarities.
3. The program of statistical research. Registrational blank, types, requirements.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 2**

THEME: **BASIC TECHNIQUES FOR ANALYSING CATEGORICAL DATA**

**Questions:**

1. Аbsolute sizes, using in public health.
2. Relative sizes, types, methodic of calculation, using.
3. Standard Error of assessment and confidence intervals of relative sizes.
4. Estimation of statistical significance of differences in relative values (single proportion, two proportions, more than two categories).
5. Visualization and graphic representation of the relative values.

**Literature:**

1. Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.
2. A. Petrie, C. Sabin. Medical Statistics at a Glance. 3rd ed. — Wiley-Blackwell, 2009. — 183 p.

**Classes № 3**

THEME: **BASIC TECHNIQUES FOR ANALYSING NUMERICAL DATA**

**Questions:**

1. Theoretical distributions: the Normal and other distributions.
2. Variational line, types, construction.
3. Average sizes, types, using in health services. Arithmethic mean and median characteristics and peculiarities, methods of calculation.
4. Assessment of a variety of numerical data. Standard deviation, methods of calculation and practical implementation. Variety assessment by means of percentiles.
5. Standard Error of assessment and confidence intervals of average sizes.
6. Estimation of statistical significance of differences in average sizes. Parametrical and non-parametrical statistical methods.

**Literature:**

1. Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.
2. A. Petrie, C. Sabin. Medical Statistics at a Glance. 3rd ed. — Wiley-Blackwell, 2009. — 183 p.

**Classes № 4**

THEME: **TIME SERIES AND THEIR ANALYSIS. CORRELATION ANALYSIS**

**Questions:**

1. Time series, types, mean for health service. Indicators of dynamic series, calculation, analysis.
2. Transformation of time series.
3. Relationship between factors. Types of statistical relationship: functional, correlation.
4. Coefficients of correlation (Pearson, Spearmen), calculation and assessment.

**Literature:**

1. Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 5**

THEME: **A TECHNIQUE OF DEMOGRAPHIC PROCESSES STUDYING**

**Questions:**

1. Medical demography, subject and its maintenance.
2. Statics of population, definition, significance for health service.
3. Population dynamics, definition, significance for health service.
4. Reproduction of population, types, indexes.
5. Mortality of population, indexes, methodic of calculation.
6. Infant mortality rate, age peculiarities, reasons.
7. Perinatal mortality rate. Fetal mortality rate, early neonatal rate, methodic of calculation.
8. Average life expectancy.

**Literature:**

1. Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 6**

THEME: **METHOD OF STUDY AND ESTIMATION OF INDEXES OF GENERAL MORBIDITY**

**Questions:**

1. Basic terminology of morbidity. A role and place of morbidity in the system of indexes of health of population.
2. Methods of study and types of morbidity.
3. Registration and current documents, that are used at the study of morbidity from data of official statistics, rule of their filling and account.
4. Basic data, necessary for the calculation of indexes of morbidity.
5. International classification of illnesses of traumas and reasons of death of tenth revision (ICI-10): principles of construction and value for the study of morbidity.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 7**

THEME: **PRIMARY HEALTH CARE. ORGANIZATION OF OUTPATIENT CARE**

**Questions:**

1. Definition of a concept primary health care. Basic elements and principles of primary health care.
2. System of organization of ambulatory-polyclinic help. Structure and functions of city hospital – polyclinic.
3. Maintenance of work of district doctor.
4. General practitioner; main tasks, organization of activity.
5. Main kinds of report documentation of city hospital. Basic indexes of activity of polyclinic.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 8**

THEME: **ORGANIZATION OF THE IN-PATIENT AID TO THE POPULATION. INDICATORS OF HOSPITAL ACTIVITY**

1. The organization of in-patient (hospital) aid to urban population. Classification, the main organization-methodical principles of work and tasks of a hospital.
2. The structure and tasks of a city hospital inpatient department.
3. Organization of activity of reception of hospital
4. Functional duties of the doctor of a hospital.
5. Name the basic indicators of inpatient activity.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 9**

THEME: **Public health economy. Methodology for calculating economic efficiency**

1. Economics of Public Health: its subject, tasks.
2. Place and role of health care in the country's economy.
3. Types of health care effectiveness. Medical, social and economic efficiency; basic indicators.
4. Methodology for calculating economic efficiency.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 10**

THEME: **HEALTH MANAGEMENT. HEALTH PLANNING**

1. Management. Definition, core principles of management.
2. Management functions and their characteristics.
3. Levels, styles and methods of management.
4. Planning in health care: definition, principles and tasks.
5. Types of plans in health care. The basic methods of planning, their brief characteristics.

**Literature:**

Course book for practical training in the sphere of public health and health care /Begun D.N., Borshchuk E.L., Begun T.V. – Orenburg: OrSMU 2018. – 121 р.

**Classes № 11**

THEME: **PUBLIC HEALTH PROBLEMS IN INDIA**

***Practical сlass are conducted in the form of a conference. The student should prepare a presentation and a text of the report on one of the proposed topics.***

**Sample topics for the report:**

1. Problems of the size and composition of the population in India. State demographic policy.
2. Fertility and mortality in India. State and dynamics of processes.
3. Morbidity of the population of India. Method of study. Status and main trends.
4. Disability of the population and organization of rehabilitation in India.
5. The basic characteristics of the health care system in India.
6. Health system management in India.
7. Financing Health in India.
8. The primary health care in India.
9. Organization of ambulatory care in India.
10. Organization of the in-patient aid in India.
11. Protection of motherhood and infancy in India.
12. The organization of the out-patient-polyclinic obstetric-gynecologic aid in India.
13. Organization of the treatment-and-prophylactic aid to children in India.
14. Medical prophylaxis in India.
15. The organization of the treatment-and-prophylactic aid to rural population in India.
16. Medical examination of disability and invalidity in India.

***Reports can also be devoted to other topics of public health and care. May provide for a detailed discussion of individual parts of the proposed topics. The topics are pre-approved by the teacher.***

**Classes № 12 FINAL TEST**

**The final test is carried out at the department and includes:**

**1. Computer testing on all subjects of the discipline**

**2. A written answer to a theoretical question.**

**3. The decision of practical tasks**