Government of the Russian Federation

Federal State Autonomous Educational Institution
for Higher Professional Education
«National Research University
«Higher School of Economics»

Sociology department

Discipline program
"Demography"

For course 040100.62 «Sociology», preparation for a Bachelor's degree.

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Approved at the meeting of the Department of demography, June 7, 2012.
Department chairman _____ M.B. Denisenko

Recommended by the Board of Education for Sociology _____20.
Chairman _____ I.F. Deviatko

Approved by the Academic Board of the Department of Sociology_____20
Academic Secretary _____E.V. Nadezhdina

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Areas of use and reference codes.

This educational discipline program establishes the minimal standards for attained student knowledge and skills, and determines the content and types of academic studies and reporting.

The program is intended for professors teaching this particular discipline, teaching assistants, and students in 040100.62 Sociology studying the Demography discipline.

The program was developed in accordance with:

- The educational standards set forth by Federal State Autonomous Educational Institution for Higher Professional Education, National Research University-Higher School of Economics in 0400100.62 Sociology, training students for a Bachelor's degree (http://www.hse.ru/data/2012/01/30/1264147981/040100.62%20Socio.pdf)
- Federal state educational standards for a Bachelor's in Sociology (http://www.hse.ru/data/2011/03/14/1211457578/1.pdf)
- The educational program of 040100.62 Sociology in preparation for a Bachelor's degree
- The University's working academic plan for 040100.62 Sociology that was approved in 2011 (2nd year course 2011/2012 academic year)

1. Goals for studying Demography discipline are:

– knowing the fundamentals of demography as a social science that studies the reproduction of the population as well as its social and historical implications, the methods used to collect and analyze data on the population, demographic processes and behavior, and the techniques of population projections and demographic policies;

--surveying the issues of modern demographic research, patterns of demographic change in Russia and abroad, and existing theoretical approaches to their explanation;

– mastering basic skills in the analysis and evaluation of the demographic situation, demographic trends and patterns, as well as the necessary skills for setting demographic forecasting goals, setting goals and choosing instruments for implementing demographic and migration policies.

2. Scope of student knowledge that will be acquired as a result of mastering the discipline.

As a result of mastering the discipline, the student will:

– Know the basics of collecting data on the population, the main sources of demographic data, the basic instruments of demographic analysis, the main theories of demographic development and main demographic processes in Russia and around the world, along with the meanings of demographic indicators;
– Be able to analyze and assess the demographic situation in the country and the region, implement forecasts of the age and gender composition of the population and interpret the results to make decisions about the need for certain social policies to address population issues and to evaluate their effectiveness;
–Acquire professional experience in obtaining information from various sources, including the Internet and foreign literature, have the skills to calculate and compare the main demographic indicators, and prepare data and hypotheses for demographic forecasts.

As a result of learning the discipline, the student acquires the following expert skills:

Skill	Code	Descriptors – main indicators of attainment (indicators of reaching results)	Forms and methods of learning that aid in formation and development of skills

Able to learn, acquire new knowledge, skills, including in an area other than professional field	SK-B1	Acquires new knowledge about the population, demographic processes and structures	Lectures, classroom and independent work
Able to apply professional knowledge and skills in practice	SK-B2	Has the skills to calculate basic demographic indicators, interpret and evaluate population trends	Independent work, preparation for reports, tests, essays
Able to handle information, locate, evaluate, and use information from various sources necessary for solving scientific and professional problems (including systematic approaches)	SK-B6	Can find, select and use information on demographic processes and structures for solving problems	Preparation and presentation of reports, essays
Able to lead research activities, including problem analysis, setting goals and problems, allocation of the object and the subject of study, the methods of research, and the assessment of its quality	SK-B7	Demonstrates skills of setting goals and research problems, applies the basic tools of demographic analysis and main theoretical approaches to the interpretation of observed population trends	Report presentation, writing essays
Able to competently build communication based on goals and situations	SK-B9	Demonstrates knowledge of the fundamentals of demography, interprets and evaluates demographic indicators	Classroom work, presentation and discussion of reports, oral examination
Able to critically assess and reassess gained experience (own and others'), as well as reflect on professional and social activities	SK-B10	Demonstrates understanding of the relationships of demographic and other social processes, correctly applies and interprets demographic indicators	Classroom work, presentation and discussion of reports, oral examination
Able to participate in or organize professional activities on the basis of legal and professional standards and responsibilities	IK-B.1.1-1.2	Organizes independent research activities (basic skills)	Preparation and presentation of reports, essays
Able to perceive, create and edit texts for professional and academic purposes	IK-B.2.1-2.3	Understands and reproduces scientific and professional texts, using them to answer questions	Preparation and presentation of reports, essays
Capable of competently and convincingly publicly report the results of activities (scientific, professional, etc.), using modern ICT tools.	IK-B.4.1-4.2	Demonstrates the skill of public presentation of the report prepared on a given topic	Report presentation

3. The discipline's place within the overall educational program structure.

This discipline is part of the basic section of the professional discipline cycle, in preparation of a Bachelor's degree in 040100.62 Sociology.

The study of this discipline is based on the following prerequisite disciplines:
--Probability theory and mathematical statistics,
--Sociological Theory,
--Micro-and macroeconomics,
--Application software.

In order to study this discipline, the students must possess the following skills and competencies:
--Know the basics of probability theory and mathematical statistics,
--Have basic knowledge in the field of sociology,
--Have basic knowledge of economic theory,
--Be able to conduct an effective search for necessary statistical and sociological information, and understand its nature,
--Be familiar with basic methods of quantitative data processing and preparation of presentations and text using application software.

The main points/theses of this discipline must be subsequently used in studying the following disciplines:
--Sociological Theory,
--Methodology and methods of sociology,
--Economic and social statistics,
--Social structure and social stratification,
--Social theory of family and relationships,
--Contemporary social policy.

Topic plan for the academic discipline

№	Name of section	Total hours	Lecture hours	Seminar hours	Practice sessions hours	Self-Study hours
1	Introduction to the subject of demography. Sources of population data.	8	2	2	-	4
2	Fundamentals of demographic analysis.	8	2	2	-	4
3	Demographic tables. Mortality tables.	8	2	2	-	4
4	Mortality. Epidemiological transition theory.	8	2	2	-	4
5	Marriages	8	2	2	-	4
6	Birth rate	8	2	2	-	4
7	Analysis of the age-gender structure. Population aging.	8	2	2	-	4
8	Population reproduction. Demographic transition.	8	2	2	-	4
9	Migration	8	2	2	-	4
10	Demographic projections. Demographic and migration policy.	8	2	2	-	4

Work on essay, preparation for midterm exam and final exam	64	1	1	-	62
Total	**144**	**21**	**21**	**-**	**102**

5. Forms of student scholastic attainment control

Type of control	Form of control	4th module	Parameters
In-progress	Essay	9th week	Written work (about 3000 words) with necessary data, in tables and graphs
Final	Exam	12th week	Written in-class exam on course topics (80 minutess, grades within 2-3 days)
		13th week	Grades and appeals

5.1 Criteria for grading of skills and scholastic attainment

In the course, considerable space is devoted to student independent work. For each topic of lectures and seminars mandatory and secondary literature sources are offered. The course program includes preparation, presentation and discussion of reports on major topics, performance tests, including problem solving, and writing essays. In these assignments, students have to do independent work with statistical data, in accordance with the laws and decisions made by the Government of the Russian Federation, HSE, as well as academic literature in the field of population development.

Each student is to prepare a report on a seminar topic based on the literature offered in the discipline's program and by the instructor. Each seminar will include one to two presented reports, in which the student must clearly and concisely (10-12 minutes) present the essence of the chosen topic, as well as answer questions from the students and the instructor. It is desirable to have a discussion of the topic with other students (with additions and opposing views).

The in-progress control of scholastic attainment is monitored after the first 1-2 seminars by quizes that last about 30 minutes each.

The essay must show independent work skills with literature, documentary sources, statistical and sociological data, characterizing population development. Using acquired knowledge in the field of demography and sociology and economic theory. It is suggested that the student:
--analyze the demographic situation in a country or region of the world;
- analyze the specific changes in the individual demographic processes, structures and behavior;
- trace the impact of demographic processes on the social or economic development, and vice versa;
- discover the essence of various socio-demographic theories;
- outline the scope and outline of various methods of demographic analysis.

If necessary, the essay text can be accompanied with tables and figures should they be on topic, necessary, and brief. The length of the essay with tables and figures should not exceed 11 pages using size 12 font, and 1.5 line spacing (or about 3000 words). The essay format should include a title page, an outline, a bibliography (no less than 3 sources cited using standard formatting), and conclusions.

Grades on all forms of in-progress and final control are given on a 10-point scale.

6. Discipline contents.

<u>Section 1. Introduction to the subject of demography. Sources of population data.</u>

The subject of demographics. The concept of population. Demographic processes, demographic structure, demographic behavior. Demographic situation. Demographic methods. Approaches to defining demography. Structure of demographic science. The system of information about the population. History of demography as a science (short overview).

Population data systems. Census. Principles and content of censuses. Census in Russia and the USSR. Current registration of demographic events. Current registration of migrants. Administrative sources of population data. The concept of population registers. Selected socio-demographic surveys (minicensus in Russia in 1994, DHS, GGS, CAP, WFS, RLMS).
4 hours of classroom work (lecture - 2 hours, seminar - 2 hours).
4 hours of independent work to prepare for seminars.

Section 2. Fundamentals of demographic analysis.

Time and age in demographic research. Lexis diagram. Demographic units. Longitudinal and cross-sectional analysis. Conditional and real generations. Odds and probability. The infant mortality rate. Total coefficients. Calendar of demographic events. Age-gender pyramid. The influence of age and gender structure on demographic transitions. Direct and indirect standardization. Population growth and demographic balance equation.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).
4 hours independent work to prepare for seminars.

Section 3. Demographic tables. Mortality tables.

Demographic tables as a demographic method. Mortality tables. Indicators of mortality tables and their relationships. Calculation of indicators for the first and last age interval. Life expectancy. The paradox of child mortality. Stages of mortality tables construction. Model (data) table. Mortality tables as a model of stationary population. Areas of use for mortality tables.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).
4 hours independent work to prepare for seminars.

Section 4. Mortality. Epidemiological transition theory.

Death and mortality. The system of mortality indicators. Mortality factors. Self-preserving behavior. The causes of death and the international classification of diseases. Infant mortality. Differential mortality. Mortality and health. The historical evolution of mortality. The theory of epidemiological transition. Modern trends in mortality. Mortality in Russia: incomplete modernization.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).
4 hours independent work to prepare for seminars.

Section 5. Marriages.

Correlation of the concepts of "marriage", "family" and "household." Formation of marriage structure of the population. Marriages, divorces, widowhood. Age of marriage. Remarriages, registered and unregistered marriages. The system of indicators of marriage and divorce. Age at first marriage. The marriage market. Age model of marriage and divorce. Historical types of marriage. Modern trends in marriage.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).
4 hours independent work to prepare for seminars.

Section 7. Birth rate.

Birth and the birth rate. Reproductive behavior. Measuring the birth rate. Age-related birth patterns. Birth order. Birthing trends. Extra-marital birth. Birth factors. Bongaarsta's intermediate variables model. Macroeconomic factors in the theories of demographic transition, the second demographic transition. Isterlin's and Caldwell's theories. The microeconomic approach to birth rate analysis (Becker, Schultz). The sociology of birth (Antonov, Friedman, K.Devis, Lesteyg). The birth rate in the future.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).

4 hours independent work to prepare for seminars.

Section 7. Analysis of the age-gender structure. Population aging.

Primary, secondary and tertiary sex ratio. The causes and consequences of sex composition deformation. The age structure of the population in the past and the present. Factors of change in the age structure. Potential population growth. Demographic waves and their demographic and socio-economic consequences. Dependency ratio coefficients. Old age and demographic aging. The criteria of demographic aging. World population aging tendency. The consequences of demographic aging. Intergenerational solidarity and redistribution of resources between generations. Demographic aspects of pension reform. Pension systems and retirement age.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).

4 hours independent work to prepare for seminars.

Section 8. Population reproduction. Demographic transition.

Population reproduction and demographic growth. Indicators of reproduction. General characteristics of the model of a stable population. Gross and net reproduction rates. Mode and the type of reproduction. Demographic transition and demographic revolution. Stages of demographic transition. Population explosion. How many demographic transitions have there been? The future of the world's population.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).

4 hours independent work to prepare for seminars.

Section 9. Migration.

Definitions of migration. Typology of migration processes. Migration statistics. Measurement of migration. Selectivity of migration. Stages of the migration process. Pull and push factors. Migration models. Patterns of internal migration. Trends in international migration. Illegal migration. Brain drain. The theory of migration transition. The consequences of migration. Migration outlook.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).

4 hours independent work to prepare for seminars.

Section 10.Demographic projections. Demographic and migration policy.

The objectives and types of population projections. Forecast errors. Methods of population forecasting. Cohort-component method of forecasting the size and age-gender composition. Long-term demographic projections. Probabilistic forecasts. Functional population projections.

Objectives, main directions and measures of population policy. Birth control and family planning. The correlation of social and family policy, health policy and population policy. The experience of conducting demographic policy. Population policy in the Soviet Union and the Russian Federation. Objectives, main directions and measures of migration policy.

4 hours classroom work (lecture - 2 hours, seminar - 2 hours).

4 hours independent work to prepare for seminars.

8. Grading criteria of student progress and overall assessment.

8.1. Topics of in-progress control assignments.

Approximate topics for essays and reports:

1. Why collect demographic data?
2. Census in Russia: is there continuity?
3. Problems in the current account of demographic events in Russia
4. Can registers and sample surveys replace the census?
5. Determining time and age in demographics?
6. Generational and longitudinal analysis in demography and economics
7. Trends in mortality and its differentiation across countries and regions of the world.
8. Life expectancy for men and women: facts, differences, and their causes.
9. Particularities of mortality in modern Russia
10. Why is the mortality rate high in Russia?
11. Has Russian epidemiological transition ended?
12. Self-preservation behavior as a factor in life expectancy
13. What are the features of a European-style marriage?
14. Is marriage changing in modern Russia?
15. Why do people in developed countries no longer officially marry?
16. Why is there talk of the second demographic transition in Western and Northern Europe?
17. Why is the birth rate declining?
18. What are the consequences of birth rate decline?
19. What are the trends in births in Russia?
20. Demographic waves and their demographic and socio-economic consequences.
21. What are the specific trends in the aging of the world population?
22. Social and economic aspects of demographic aging
23. Demographic aspects of pension reform.
24. Advantages and limitations of the countries with a high proportion youth
25. Advantages and limitations of the countries with a high proportion of elderly
26. International migration: evil or good?
27. Can Russia make do without migrants?
28. What are the current characteristics of internal migration in Russia?
29. Why make population projections?
30. Population projections for Russia and the world
31. What lessons can be learned from the experience of conducting population policy?
32. Population policy in the Soviet Union and Russia: overview and the differences
33. Features of the socio-demographic behavior of young people in different countries (optional)
34. Demographic development of the regions of Russia and other world countries (using a region or a country as an example)
35. History of the Russian population and its regions (i.e., the CIS countries).

The instructor must approve the essay topic for each student on an individual basis.

8.2 Subjects for assessing discipline attainment

A rough list of subjects for the final examination:

1. Subject of demographics.
2. Demographic growth and population reproduction.
3. History of demography as a science (short overview).
4. The system of information about the population.

5. The census.
6. Current registration of demographic events. Current registration of migrants.
7. Administrative sources of population data. Population registers.
8. Selected socio-demographic surveys.
9. Time and age demographic research. Longitudinal and cross-sectional analysis. Conditional and real generations.
10. Lexis diagram. Demographic units.
11. Odds and probability in demography.
12. Age-gender pyramid. Types of age pyramids.
13. Direct and indirect standardization.
14. Mortality tables.
15. Stages of building of mortality tables.
16. Model (data) table.
17. Mortality table as a model of stationary population.
18. The system of mortality indicators.
19. Mortality factors. Self-preserving behavior.
20. Infant mortality rates and patterns of change
21. The historical evolution of mortality. The theory of epidemiological transition.
22. Modern trends in mortality in Russia
23. Trends in mortality and its differentiation across countries and regions of the world.
24. Formation of the marriage structure of the population.
25. The system of indicators of marriage and divorce.
26. Age model of marriage and divorce. Historical types of marriage.
27. Modern trends in marriage and the second demographic transition.
28. Households and their demographic evolution.
29. Reproductive behavior.
30. The measurement of birth rates.
31. Historical trends in birth rates.
32. Modern trends in birth rates in developed countries.
33. Current trends in birth rates in developing countries.
34. Bongaarsta's intermediate variables model.
35. Macroeconomic factors in the theories of the demographic transition, the second demographic transition.
36. The microeconomic approach to birth rate analysis (Becker, Schultz).
37. Birth trends in the Russian Federation.
38. Definitions of migration. Typology of migration.
39. Measurement of migration.
40. Functions of migration processes.
41. Migration patterns.
42. Patterns of internal migration.
43. Migration processes in Russia.
44. Current trends in international migration.
45. The theory of migration transition.
46. Gender structure of the population
47. The age structure of the population: its quantitative characteristics and drivers of change.
48. Demographic waves and their demographic and socio-economic consequences.
49. Demographic aging and its consequences.
50. The tendency of aging of the world population.
51. Demographic aspects of pension reform.
52. Reproduction indicators.
53. Demographic transition and demographic revolution.
54. World population prospects.

55. The objectives and types of population projections.
56. Mathematical methods of population forecasting.
57. Cohort-component method of forecasting the number and sex composition.
58. Functional population projections.
59. Objectives, main directions and measures of population policy.
60. The experience of conducting demographic policy.
61. Demographic policy in the Soviet Union and the Russian Federation.
62. Goals, guidelines and measures of migration policy.
63. Modern migration policies in foreign countries
64. Migration policy in Russia.

9. Discipline grading.

The instructor grades student work at the seminars based upon the students' active participation, role in discussions, quality of questions and answers, etc. The instructor enters grades for seminar work into a worksheet. The cumulative grade for work at the seminars is marked on a 10-point scale and determined before the final grade.

The instructor grades student independent work through the quality of prepared reports, the report presentations, wide understanding of the topic during report discussions and test assignments. The instructor enters grades for independent work into a worksheet. The cumulative grade for independent work is marked on a 10-point scale and determined before the final grade.

Cumulative in-progress control grade is calculated as follows:

Cumulative In-Progress Grade = 0.6*Essay Grade + 0.2*Classroom Grade + 0.2*Individual Work

The final grade is calculated as follows:

Final Grade = 0.5*Cumulative In-Progress Grade + 0.5*Final Exam Grade

The final exam will be in the form of a written, in-class examination.

All grades are based on a 10-point scale. Following the above, weighted calculations, all grades are rounded up to the nearest whole number.

During appeals a student may receive an additional question (on an essay or exam, in accordance with the course program). The answer to an additional question is worth an additional 1 point.