Казахский национальный университет имени аль-Фараби

Факультет географии и природопользования

Кафедра географии, землеустройства и кадастра

Магистратура

ПРОГРАММА

**«ГИС в демографии»**

**«7M05204 – Геопространственное управление окружающей средой», 1 курс, а/о**

**Алматы, 2021**

**Лабораторная работа №1**

Topic: Creation and discussion of dynamic population processes according to the area of interest.

**Лабораторная работа №2**

Topic: Creation and analysis of metadata, catalog and database based on the results of ongoing technical analysis processes in the beginning of transferring data.

**Лабораторная работа №3**

Topic: Methods of data collection: direct and indirect.

**Лабораторная работа №4**

Topic: Analysis of variations in crude birth rate, general fertility rate and age-specific fertility.

**Лабораторная работа №5**

Topic: Analysis of variations in crude death rate, infant mortality rate and expectation of life.

**Лабораторная работа №6**

Topic: Creation and analysis of attributive values, taking into account the data set, taking into account the likely conduct of databases.

**Лабораторная работа №7**

Topic: Study of local methods for performing demographic processes with quality characteristics.

**Лабораторная работа №8**

Topic: Examining insert, update and delete anomalies when performing normalizing demographic database.

**Лабораторная работа №9**

Topic: Create and analyze choropleth, isoline and dot maps.

**Лабораторная работа №10**

Topic: Creation and analysis of aggregation with variable population phenomena.

**Лабораторная работа №11**

Topic: Geoinformatics as a basis for analyzing social processes in urban areas.

**Лабораторная работа №12**

Topic: Principles for creating demographic maps.

**Лабораторная работа №13**

Topic: Technologies as a way to perform fertility and mortality processes.

**Лабораторная работа №14**

Topic: Demography with visualization techniques.

**Лабораторная работа №15**

Topic: Research institutes as a basis for performing current demographic processes.

**Литература:**

1.Glad, John. 2008. Future Human Evolution: Eugenics in the Twenty-First Century. Hermitage Publishers, ISBN 1-55779-154-6 [1]

2.Preston, Samuel, Patrick Heuveline, and Michel Guillot. 2000. Demography: Measuring and Modeling Population Processes. Blackwell Publishing.

3.Paul R. Ehrlich (1968), The Population Bomb Controversial Neo-Malthusianist pamphlet

4.Leonid A. Gavrilov & Natalia S. Gavrilova (1991), The Biology of Life Span: A Quantitative Approach. New York: Harwood Academic Publisher, ISBN 3-7186-4983-7

5.Phillip Longman (2004), The Empty Cradle: how falling birth rates threaten global prosperity and what to do about it

6.Joe McFalls (2007), Population: A Lively Introduction, Population Reference Bureau [2]

7.Ben J. Wattenberg (2004), How the New Demography of Depopulation Will Shape Our Future. Chicago: R. Dee, ISBN 1-56663-606-X

8.Andrey Korotayev, Artemy Malkov, & Daria Khaltourina (2006). Introduction to Social Macrodynamics: Compact Macromodels of the World System Growth. Moscow: URSS, ISBN 5-484-00414-4 [3]

9.Demographic Winter 52 minute documentary on demography and global underpopulation

10.Demographic Bomb Part II documentary (to Demographic Winter) on demography and the effects of population control