O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI

SAMARQAND DAVLAT ARXITEKTURA – QURILISH UNIVERSITETI

“KELISHILGAN”
o‘quv ishlari bo‘yicha
prorektor _____
M.T.Shodmonqulov
Ro‘yxatga olindi: № 54/a
«___» avgust 2024 yil

“TASDIQLAYMAN”
Rektor
_____ Ch.J. Turkyilmaz
«___» avgust 2024 yil

EKONOMETRIYA 1

FAN DASTURI

Bilim sohasi:	**300000** – Ijtimoiy fanlar, jurnalistika va axborot
Ta’lim sohasi:	**310000** – Ijtimoiy va xulq atvorga mansub fanlar
Ta’lim yo’nalishi:	**60310100** – Iqtisodiyot (tarmoqlar va sohalar bo’yicha)

Samarqand – 2024

Kurs ma'lumotlari
Course Information Form

Modul kodi Code ITT 3270	O'quv yili 2024-2025	Semestr 5	ECTS – Kreditlar 5-semestr -6			
Modul turi Majburiy	Ta'lim tili O'zbek		Auditoriya soatlari			Mustaqil ta'lim (soat/hafta) Independent Education (hour/week)
Fan nomi Title	Jami yuklama		Ma'ruza (soat/hafta) Lecture (hour/week)	Amaliy (soat/hafta) Practical (hour/week)	Laboratoriya (soat/hafta) Laboratory (hour/week)	
Ekonometriya 1	5-semestr -180		5-semestr -4			5-semestr -8

Dastlabki shart Prerequisite	**Yo'q** None

Semestr Semestr	**Kuzgi** Fall

Kurs tili Course language	**O'zbek** Uzbek
O'quv kursi Level of Course	**Uchunchi kurs** Third Cycle
Ta'lim yo'nalishlari Course type	60310100 - Iqtisodiyot (tarmoqlar va sohalar bo'yicha)
Kurs toifasi Course Category	Asosiy Core Courses
Dars shakli Mode of Delivery	An'anaviy (Yuzma – yuz muloqot) Face – to - face

Ma'sul kafedra Owner academic unit	Iqtisodiyot Economy
Kursga ma'sul Cours Coordinator	I.X.Sobirov
O'qituvchilar Instructor(s)	M.A.Turayeva
Yordamchilar Asistant(s)	M.A.Rayimov

Fanni o'qitishdan maqsad Course objectives	Ushbu kursning maqsadi talabalarni asosiy ekonometrik usullar bilan qurollantirishdir. Ekonometrika - bu iqtisodiy ma'lumotlarni iqtisodiy nazariya asosida tahlil qiluvchi ijtimoiy fan. Iqtisodiy ma'lumotlarning tabiati statistik usullarni to'g'ridan-to'g'ri moslashtirishga imkon bermaganligi sababli, maxsus baholash va xulosa chiqarish usullari ishlab chiqilgan. Ekonometrika I ushbu usullarni kesma ma'lumotlar bazasida o'rgatadi. The aim of this course is to equip students with basic econometric methods. Econometrics is a social science that analyzes economic data under the light of economic theory. Since the nature of economic data does not permit straightforward adaptation of statistical methods special estimation and inference methods have been developed. Econometrics I teaches these methods in the cross-section data framework..
Fanning mazmuni Course content	Oddiy regressiya modeli, Oddiy eng kichik kvadratlarni baholash, Klassik regressiya modeli, Statistik xulosa, t, F va LM testlari,

	Cheklangan namuna va asimptotik xususiyatlar, Soxta o'zgaruvchilar, Spetsifikatsiya xatosi va heteroskedastiklik. Simple regression model, Ordinary Least Squares Estimation, Classical regression model, Statistical inference, t, F and LM tests, Finite sample and asymptotic properties, Dummy variables, Specification error and heteroskedasticity
Tavsiya qilingan yoki talab qilinadigan adabiyotlar ro'yxati Recommended Or Required Reading	**Asosiy adabiyotlar:** 1. Eric Matthes. Python Crash Course Paperback.England 2015.205p. 2. Discovering Computers 2016. Tools, Apps, Devices, and the Impact of Texnology. 691 pg. 3. Krishna Rungta. Learn Python in 1 Day: Complete Python Guide with Examples. India 2016. -182 p. 4. Narasimha Karumanchi. Data Structure and Algorithmic Thinking with Python Paperback. India 2015. 170p. 5. Lentin Joseph, Fundamentals of Python for Robotics Programming, 2018 6. John Hunt, A Beginners Guide to Python 3 Programming, http://www.springer.com/series/7592, 2019 7. Michael J. Ware, Introduction to Python Department of Physics and Astronomy Brigham Young University, 2019 8. Hetland, M. L., Norton, P, Wilson, H. B. Introduction to Python Programming, Lecture Notes used in Semester 1 of the module Introduction to computational Physics (U24200, years 2019/2020, 2020/2021) 9. Axadov A., Nazarov F. Python tilida dasturlash asoslari (1-qism), SamDU-2020. **Qo'shimcha adabiyotlar:** 10. Eshtemirov S. Nazarov F. Algoritmlash va dasturlash asoslari. O'quv qo'llanma. Samarqand 2019. -208 b. 11. U.A. Nazarov, Informatika faniga kirish, darslik – 2023 12. M.T. Shodmonqulov Informatika faniga kirish, o'quv qo'llanma (amaliy mashg'ulotlarni bajarish uchun), "Ilm Ziyo Zakovat" 2023 yil. **Axborot manbalari:** 1. www.lex.uz – O'zbekiston Respublikasi Qonun hujjatlari ma'lumotlari milliy bazasi; 2. http://www.bologna.yildiz.edu.tr/index.php?r=program/bachelor 3. https://dasturchi.uz/programming-tutorials/piton-darsliklar https://pythonworld.ru/samouchitel-python
Tavsiya etilgan qo'shimcha dastur komponentlari Recommended Optional Program Components	Yo'q\ (bor bo'lsa yoziladi) None

Kursni o'rganish natijalari Course learning outcomes	
1	Talabalar kesma ma'lumotlar kontekstida ekonometrik tahlilning asosiy usullaridan foydalanish qobiliyatiga ega bo'ladilar Students will be capable of using basic methods of econometric analysis in the context of cross-section data
2	Muvaffaqiyatli talabalar regressiya modellarini baholash uchun zarur bo'lgan bilim va ko'nikmalar bilan jihozlangan bo'ladi Muvaffaqiyatli talabalar regressiya modellarini baholash uchun zarur bo'lgan bilim va ko'nikmalar bilan jihozlangan bo'ladi

3	Muvaffaqiyatli talabalar oddiy eng kichik kvadratlar tizimida qo'llaniladigan taxminlar bilan bog'liq muammolar manbalarini aniqlay oladilar.. Successful students will be able to determine the sources of problems associated with the assumptions used in the Ordinary Least Squares framework.
4	Talabalar GRETL va Eviews kabi ekonometrik dasturlar paketlaridan foydalanishlari mumkin. Students will be able to use econometric software packages such as GRETL and Eviews.
5	Muvaffaqiyatli talabalar regressiya sharoitida gipoteza testlarini o'tkazish uchun zarur bo'lgan bilim va ko'nikmalar bilan jihozlangan bo'ladi. Successful students will be equipped with the knowledge and skills necessary to conduct hypothesis tests in a regression setting.

Haftalik mavzular va tegishli tayyorgarlik ishlari
Weekly Subjects and Related Preparation Studies

Hafta Week	**Mavzular** Themes	**Resurslar** Related preparation
1.	Statistikani ko'rib chiqish, Ekonometrikaning ta'rifi, ko'lami va maqsadi, iqtisodiy ma'lumotlar turlari, ekonometrik tahlil bosqichlari	Darslik (1-bob, A, B,C-ilovalar)
2.	Oddiy regressiya modeli, oddiy eng kichik kvadratlar (OLS) bahosi, Funktsional shakl va o'lchov shkalalari	Darslik Ch. 2
3.	Ko'p chiziqli regressiya modelining OLS bahosi, xususiyatlari OLS hisoblagichlari	Darslik Ch. 3
4.	OLS baholovchilarining chekli namunaviy xususiyatlari, xolislik va samaradorlik, Gauss-Markov teoremasi	Darslik Ch. 4
5.	Ko'p regressiya modelida xulosa chiqarish, Namuna taqsimoti OLS hisoblagichlari	Darslik Ch. 5
6.	Gipotezani tekshirish: t-test, intervalni baholash	Darslik Ch. 6
7.	Gipotezani tekshirish: F-testi, chiziqli cheklovlarni tekshirish	Darslik Ch. 7
8.	OLS baholovchilarining asimptotik xossalari, izchillik, asimptotik samaradorlik, asimptotik normallik, LM testi	Darslik Ch. 8
9.	OLS baholovchilarining asimptotik xossalari, izchillik, asimptotik samaradorlik, asimptotik normallik, LM testi	Darslik Ch. 9
10.	Funktsional shakl, yaxshilik o'lchovlari, prognozlash va qoldiq tahlil qilish	Darslik Ch. 10
11.	Soxta o'zgaruvchi	Darslik Ch. 11
12.	Soxta o'zgaruvchi	Darslik Ch. 12
13.	Geteroskedastizm I	Darslik Ch. 8
14.	Geteroskedastizm II	Darslik Ch. 8
15.	Yakuniy nazorat	Darslik Ch. 9

Baholash jarayoni
Evaluation System

Mashg'ulot turi Activities	**Soni** Number	**Baholash** Percentage of Grade
Darsga qatnashish Attendance / particition	15	30
Laboratoriya ishi Laboratory		
Amaliy ish (qo'shimcha vazifa) Application		

Kurs ishi Field work		
Maxsus kurs amalyoti (ish joyida) Special course internship (work placement)		
Testlar Quizzes / studio crtics		
Uyga vazifani baholash Homework assignments		
Ijodiy ish (taqdimot) Presentations / jury		
Loyiha ishi Project		
Seminar Seminar / workshop		
Oraliq nazorat Mid -Terms	2	20
Yakuniy nazorat Final	1	50
O'zlashtirish ko'rsatgichi Percentage of in – term studies		**50**
Yakuniy imtihon bahosi Percentage of final examination		**50**
Jami Total		**100**

ECTS taqsimoti ECTS workload table			
Topshiriqlar Activities	**Soni** Number	**Davomiyligi (soat)** Duration (hour)	**Umumiy yuklama** Total workload
Mashg'ulot soati Course hours	30	2	60
Laboratoriya ishi Laboratory			
Amaliy ish (qo'shimcha vazifa) application			
Kurs ishi Field work			
Mustaqil ta'lim (maslahat) Study hours out of class	15	8	120
Maxsus kurs amalyoti (ish joyida) Special course internship (work placement)			
Uyga vazifani baholash Homework assignments			
Testlar / Viktorina Quizzes / studio critics			
Loyiha ishi Project			
Ijodiy ish (taqdimot) Presentations / seminar			
Oraliq nazorat Mid – terms (Examination +Examination prep. Duration)			
Yakuniy nazorat (nazorat va nazoratga tayyorlanish soati) Final (examination +examination			

prep.Duration)			
		Jami yuklama Total workload	180
		Jami yuklama / 30 (soat) Total workload / 30(h)	180/30=6
		Kredit ECTS credit	4

Qo‘shimcha eslatmalar Extra Notes	Yo‘q\ (bor bolsa yoziladi) None

Fan dasturi Mirzo Ulug'bek nomidagi Samarqand davlat Arxitektura-qurilish universiteti boshqaruv kengashning 2024 yil 30-avgustdagi 1-sonli bayonnomasi bilan ma’qullangan.

Kafedra mudiri: Komilova M.Sh.

Tuzuvchilar: Sobirov I.X.

Turayeva M.X.