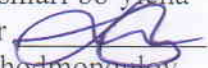


O‘ZBEKISTON RESPUBLIKASI
OLIY TA’LIM, FAN VA INNOVATSIYALAR VAZIRLIGI
SAMARQAND DAVLAT ARHITEKTURA – QURILISH UNIVERSITETI

“KELISHILGAN”
o‘quv ishlari bo‘yicha
prorektor 
M.T. Shodmonqulov
Ro‘yxatga olindi: № 46/a
«___» avgust 2024 yil



EKONOMETRIYA 2

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)

Kurs ma'lumotlari
Course Information Form

Modul kodi Code ITT3280	O'quv yili 2024-2025	Semestr 6	ECTS – Kreditlar 6-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	6-semestr -180	6-semestr -4			6-semestr -8

Dastlabki shart Prerequisite	Yo'q None
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Semestr Semestr	Bahorgi Spring
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Kurs tili Course language	O'zbek Uzbek
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O'quv kursi Level of Course	Uchunchi kurs Third Cycle
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Ta'lim yo'nalishlari Course type	60310100 – Iqtisodiyot (tarmoqlar va sohalar bo'yicha)
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Kurs toifasi Course Category	Asosiy Core Courses
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Dars shakli Mode of Delivery	An'anaviy (Yuzma – yuz muloqot) Face – to - face
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Ma'sul kafedra Owner academic unit	Iqtisodiyot Economy
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Kursga ma'sul Cours Coordinator	I.X.Sobirov
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O'qituvchilar Instructor(s)	M.A.Turayeva
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Yordamchilar Asistant(s)	M.A.Rayimov
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Fanni o'qitishdan maqsad Course objectives	Ushbu kursning maqsadi talabalarni asosiy ekonometrik usullar bilan qurollantirishdir. Ekonometrika II vaqt seriyalari va panel ma'lumotlar kontekstida baholash va xulosa chiqarishga qaratilgan. The aim of this course is to equip students with basic econometric methods. Econometrics II focuses on the estimation and inference in the context of time series and panel data...
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Fanning mazmuni Course content	Matritsa algebra si yordamida ko'p regressiya tahlili, vaqt seriyasi ma'lumotlari yordamida regressiya tahlili, OLS baholovchilarining xususiyatlari, avtokorrelyatsiya, stokastik jarayonlar, statsionarlik va zaif bog'liqlik, birlik ildiz testlari, kointegratsiya, vektor avtoregressiya va xatolarni tuzatish modellari, panel ma'lumotlar tahlili Multiple regression analysis using matrix algebra, regression analysis using time series data, properties of OLS estimators, Autocorrelation, Stochastic processes, Stationarity and weak
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	dependency, Unit root tests, Cointegration, Vector autoregression and Error correction models, Panel data analysis
Tavsiya qilingan yoki talab qilinadigan adabiyotlar ro'yxati Recommended Or Required Reading	<p>Asosiy adabiyotlar:</p> <ol style="list-style-type: none"> 1. Eric Matthes. Python Crash Course Paperback. England 2015. 205p. 2. Discovering Computers 2016. Tools, Apps, Devices, and the Impact of Technology. 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. <p>Qo'shimcha adabiyotlar:</p> <ol style="list-style-type: none"> 10. Eshtemirov S. Nazarov F. Algoritmash 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 Ziyozakovat" 2023 yil. <p>Axborot manbalari:</p> <ol style="list-style-type: none"> 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 vaqt qatorlari kontekstida ekonometrik tahlilning asosiy usullaridan foydalana oladilar. Students will be able to use basic methods of econometric analysis in the context of times series.
2	Talabalar vaqt seriyalari ma'lumotlarini tahlil qilish bilan bog'liq mumkin bo'lgan muammolarni hal qilishlari mumkin. Students will be able to handle potential problems associated with the analysis of time series data.
3	Talabalar ushbu usullarni amaliyotda va o'zlarining ilmiy loyihalarida qo'llashlari mumkin. Students will be able to apply these methods in practice and in their research projects.
4	Talabalar kontekstda ekonometrik tahlilning asosiy usullaridan foydalana oladilar Students will be able to use basic methods of econometric analysis in the context of panel data.
5	Talabalar diagnostik testlarni bajarishlari va sharhlashlari mumkin. Students will be able to do and interpret diagnostic tests.

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-illovalar)
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.	Funksional 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 / participation	15	20
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	30
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	15	4	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	6

Qo'shimcha eslatmalar Extra Notes	Yo'q (bor bolsa yoziladi) None
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Fan dasturi Mirozo Ulug'bek nomidagi Samarqand davlat Arxitektura-qurilish universiteti kengashining 2024 yil 30 -avgustdagi 1 -sonli bayonnomasi bilan ma'qullangan.

Kafedra mudiri:

Komilova M.Sh.

Tuzuvchilar:

I.X.Sobirov

M.X.Turayeva