Course Requirements and Registration Priorities
Summer 2022

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
GSB											
Economics											
1	ECON 300	Research Assistance in Economics	1	2	ECON 101 Introduction to Microeconomics (379) (C- and above) AND ECON 102 Introduction to Macroeconomics (503) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above) OR CSCI 235 Programming Languages (638) (C- and above) OR CSCI 390 Artificial Intelligence (643) (C- and above) OR MATH 321 Probability (482) (C- and above) OR MATH 322 Mathematical Statistics (1165) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
2	ECON 399	Independent Study in Economics	3	6				Instructor's Permission Required. Registration through Add Course form only!			
3	ECON 580	Research and Thesis	0	0				Economics			
GSB											
4	BUS 101	Core Course in Business	3	6				2 year UG SOM, 3 year UG SEDS, 3 year UG SMG, 3 year UG SOM, 3 year UG SSH	4 year UG SEDS, 4 year UG SMG, 4 year UG SOM, 4 year UG SSH	SEDS, SMG, SSH, SoM	
5	MBA 20A	Internship	6	12				For GSB programs only! Registration by School admin.			
6	MBAE 22	Business Law	2	4				For GSB programs only! Registration by School admin.			
7	MBAE 6	International Finance	2	4				For GSB programs only! Registration by School admin.			
8	MHRM 09	Talent Management	2	4							
9	MSF 05	Internship	6	12				For GSB programs only! Registration by School admin.			
10	MSF 06	Credit Risk Modeling	2	4				For GSB programs only! Registration by School admin.			

GSPP											
Master in Public Administration											
11	MPA 607	Fiscal Management and Budgeting	4	8				1 year GSPP Public Administration			
12	MPA 699	Master's Project with Overseas Component	0	0				1 year GSPP Public Administration			
13	MPE 600	Internship in Public Policy	4	8	(MPP 601 Microeconomics and Public Policy (1449) (C- and above) AND MPP 602 Macroeconomics and Public Policy (1023) (C- and above) AND MPP 611 Statistics for Public Policy (1450) (C- and above) AND MPP 621 Public Policy and Analysis (1451) (C- and above) AND MPP 641 Public Management and Leadership (1907) (C- and above) AND MPP 603 Data Analytics in Public Policy (6618) (C- and above)) OR (MPA 602 Public Administration in Theory and Practice (2077) (C- and above) AND MPA 603 Economic Applications for Public Managers (2074) (C- and above) AND MPA 605 Research Methods for Public Managers (2108) (C- and above) AND MPE 608 Strategic Management and Leadership (2491) (C- and above) AND MPA 610 Program Evaluation (6617) (C- and above))			1 year GSPP Public Policy			
Master in Public Policy											
14	MPP 699-0	Policy Analysis Exercise with Overseas Component	0	0	MPP 613 Policy Research Design and Methods (1301) (C- and above)			1 year GSPP Public Policy			
PhD in Public Policy											
15	DPP 600	Developing Dissertation Research	0	0				Public Policy			
GSE											
MA in Multilingual Education											
16	EDML 680	Developing the Thesis Research Topic	0	0				1 year GSE MA in Multil.Education			
17	EDML 692	Thesis Research III	3	6				2 year GSE MA in Multil.Education			
MSc Educational Leadership HE											

18	EDHE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership				
19	EDHE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership				
20	EDHE 628	Higher Education Policy Analysis and Development	3	6				1 year GSE Educ.Leadership				
21	EDHE 629	Globalization and International Higher Education	3	6				1 year GSE Educ.Leadership				
22	EDUC 507	Academic English III	1.5	3				2 year GSE (pending graduation)				
23	EDUC 610	Management in Education	3	6				1 year GSE Educ.Leadership				
24	EDUC 627	Psychology of Learning	3	6				1 year GSE Educ.Leadership				
25	EDUC 630	Economics and Finance in Education	3	6				1 year GSE Educ.Leadership				
26	EDUC 729	Developing the Research Topic	0	0				1 year GSE PhD Education				
27	EDUC 730	Preparation for Proposal Defence	0	0				2 year GSE PhD Education				
28	EDUC 740	Doctoral Seminar	3	6								
MSc Educational Leadership IE												
29	EDIE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership				
30	EDIE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership				
31	EDIE 628	Inclusive Curriculum and Assessment	3	6				1 year GSE Educ.Leadership				
MSc Educational Leadership SE												
32	EDSE 601	Thesis Seminar 1	0	0				1 year GSE Educ.Leadership				
33	EDSE 602	Thesis Seminar 2	0	0				1 year GSE Educ.Leadership				
34	EDSE 629	Teacher Development and Identity	3	6				1 year GSE Educ.Leadership				
SoM												
Biological Science												
35	BIOL 301L	Molecular Cell Biology Laboratory	1	2	BIOL 120 Modern Biology II (1195) (C and above) OR BIOL 120L Modern Biology II Laboratory (5443) (C and above)	BIOL 301 Molecular Cell Biology (5809) (C and above)		3 year UG SSH Biological Sciences, 4 year UG SSH Biological Sciences, 5 year UG SSH Biological Sciences	Biological Sciences, Medical Sciences	SEDS, SMG, SSH, SoM		

36	BIOL 392	Directed Study in Biology	3	6				Instructor's Permission Required. Registration through Add Course form only!			
37	BIOL 399	Biology Internship - 2B	3	6				Instructor's Permission Required. Registration through Add Course form only!			
38	BIOL 599	Master’s Thesis Research	0	0				Biological Sciences			
39	BIOL 800-0	Thesis Research	0	0							
MSMR											
40	MSMR 513	Internship in Sports Medicine and Rehabilitation	1.5	3							
PHD											
41	PHDBS 701-0	Thesis Research	0	0							
SSH											
Academic Success Centre, Communication and Composition											
42	WCS 150	Rhetoric and Composition	3	6				SoM	SEDS, SMG, SSH		
Area Studies											
43	EAS 504	Thesis II	12.5	25	EAS 500 Introduction to Eurasia (1632) (C- and above) AND EAS 501 General Methodology (1633) (C- and above) AND EAS 502 Disciplinary Methodology (1379) (C- and above) AND EAS 503 Thesis I (2141) (C- and above)			Eurasian Studies			
44	EAS 505	Research and Fieldwork Practicum	4	8				Instructor's Permission Required. Registration through Add Course form only!			
45	EAS 511	Independent Study in Eurasian Studies	4	8				Instructor's Permission Required. Registration through Add Course form only!			
46	EAS 800-0	Dissertation Research in Eurasian Studies	0	0				Instructor's Permission Required. Registration through Add Course form only!			
Chemistry											
47	CHEM 101L	General Chemistry I lab	1	2		CHEM 101 General Chemistry I (113) (C and above)		5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry, Medical Sciences	SEDS, SMG, SSH, SoM		

48	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			5 year UG SEDS, 5 year UG SSH, Biological Sciences, Chemistry	SEDS, SMG, SSH, SoM		
49	CHEM 189c	Independent Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
50	CHEM 211L	Organic Chemistry I Lab	1	2	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 211 Organic Chemistry I (154) (C and above)		5 year UG SEDS, 5 year UG SSH, Chemistry	Biological Sciences	SEDS, SMG, SSH, SoM	
51	CHEM 212	Organic Chemistry II	3	6	CHEM 211 Organic Chemistry I (154) (C and above) OR CHEM 191 Chemistry I for Engineers (1908) (C and above)			5 year UG SEDS, 5 year UG SSH, Chemistry	Biological Sciences	SEDS, SMG, SSH, SoM	
52	CHEM 560	Directed research in chemistry	0	0				Instructor's Permission Required. Registration through Add Course form only!			
53	CHEM 692	MSc Thesis in Chemistry	18	36	CHEM 691 Thesis Proposal (5858) (C- and above)			Chemistry			
History, Philosophy and Religious Studies											
54	HST 100	History of Kazakhstan	3	6				4 year UG SEDS, 4 year UG SMG, 4 year UG SSH, 5 year UG SEDS, 5 year UG SSH	1 year UG SEDS, 1 year UG SMG, 1 year UG SOM, 1 year UG SSH	SEDS, SMG, SSH, SoM	
55	PHIL 210	Ethics	3	6				SEDS, SMG, SSH, SoM			
56	PHIL 398	Independent Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
Kazakh Language and Turkic Studies											
57	KAZ 001	Kazakh Language Placement Test	0	0				Registration by Instructor Only!			
58	KAZ 150	Basic Kazakh	3	6	KLL "[A2] Basic"			5 year UG SEDS, 5 year UG SSH	SEDS, SMG, SSH, SoM		
59	KAZ 201	Academic Kazakh I	3	6	KAZ 150 Basic Kazakh (1215) (C- and above) OR KLL "[B1.2] Intermediate"			5 year UG SEDS, 5 year UG SSH	SEDS, SMG, SSH, SoM		
60	KAZ 202	Academic Kazakh II	3	6	KAZ 201 Academic Kazakh I (4561) (C- and above) OR KLL "[B2.2] Upper-Interm."			5 year UG SEDS, 5 year UG SSH	SEDS, SMG, SSH, SoM		
61	KAZ 371	Contemporary Kazakh Literature	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"			5 year UG SEDS, 5 year UG SSH	SEDS, SMG, SSH, SoM		

62	KFL 101	Elementary Kazakh as a Foreign Language I	4	8				Instructor's Permission Required. Registration through Add Course form only!			
63	KFL 102	Elementary Kazakh as a Foreign Language II	4	8	KFL 101 Elementary Kazakh as a Foreign Language I (4889) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
64	KFL 301	Advanced Kazakh as a Foreign Language I	4	8				Instructor's Permission Required. Registration through Add Course form only!			
65	KFL 302	Advanced Kazakh as a Foreign Language II	4	8	KFL 301 Advanced Kazakh as a Foreign Language I (4886) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
Languages, Literature and Linguistics											
66	WLL 400	Research Assistance in Linguistics and Literature	1	2				Instructor's Permission Required. Registration through Add Course form only!			
Physics											
67	PHYS 161	Physics I for Scientists and Engineers with Laboratory	4	8		MATH 161 Calculus I (118) (C and above)	PHYS 171 Physics I for Physics Majors with Laboratory (1401) (C- and above)	SEDS, SMG, SSH, SoM			
68	PHYS 162	Physics II for Scientists and Engineers with Laboratory	4	8	PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C- and above) OR PHYS 151 Introductory Physics I with Lab (649) (C- and above)		PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above)	SEDS, SMG, SSH, SoM			
69	PHYS 299	Research project and internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
70	PHYS 399	Physics Research Project	3	6				Instructor's Permission Required. Registration through Add Course form only!			
71	PHYS 600	Thesis Research	0	0				Physics			
72	PHYS 700-0	Thesis Research	0	0				Physics			
Political Science and International Relations											
73	PLS 395	Independent Study	3	6	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			

74	PLS 441	Advanced Topics in Comparative Politics	3	6	PLS 140 Introduction to Comparative Politics (223) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
75	PLS 495	Research Practicum in PSIR	1	2	PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)			Instructor's Permission Required. Registration through Add Course form only!			
76	PLS 597	Research for Thesis	6	12				Political Science and International Relations			
SSH											
77	SSH 300	School of Sciences and Humanities Internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
78	SSH 301	School of Sciences and Humanities Internship: Second Experience	3	6				Instructor's Permission Required. Registration through Add Course form only!			
79	SSH 398	Independent Study	1	2				Instructor's Permission Required. Registration through Add Course form only!			
Sociology and Anthropology											
80	ANT 399	Special Topics in Anthropology	3	6				Instructor's Permission Required. Registration through Add Course form only!			
SoE											
Chemical and Materials Engineering											
81	CHME 466	Directed Research Study	3	6				Only 4th Year ChME students by instructor's approval			
82	DCHME 700-0	Thesis Research	0	0				Chemical Engineering, Civil Engineering, Computer Science , Electrical Engineering, Mechanical Engineering, Robotics Engineering, Science, Engineering and Technology			
Civil and Environmental Engineering											
83	DCEE 700-0	Thesis Research	0	0				Chemical Engineering, Civil Engineering, Computer Science , Electrical Engineering, Mechanical Engineering, Robotics Engineering, Science, Engineering and Technology			
Electrical and Computer Engineering											
84	DELCE 700-0	Thesis Research	0	0				Electrical Engineering			

85	ELCE 399	Internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
Mechanical and Aerospace Engineering											
86	DMAE 700-0	Thesis Research	0	0				Chemical Engineering, Civil Engineering, Computer Science , Electrical Engineering, Mechanical Engineering, Robotics Engineering, Science, Engineering and Technology			
87	ENG 400	Capstone Project	3	6				Instructor's Permission Required. Registration through Add Course form only!			
Mining Engineering											
88	MINE 890-0	Thesis Research	0	0				Mining Engineering			
Petroleum Engineering											
89	PETE 890-0	Thesis Research	0	0				Petroleum Engineering			
School of Engineering											
90	DENG 700-0	Thesis Research	0	0				Science, Engineering and Technology			
91	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)			Science, Engineering and Technology			
92	DENG 796	Thesis Completion	0	0				Science, Engineering and Technology			
93	DENG 797	Oral Defence of PhD Dissertation	0	0	DENG 785 PhD Proposal Oral Defence (2604) (P) AND DENG 789 Doctoral Seminar I (4598) (P) AND DENG 790 Doctoral Seminar II (4599) (P)			Science, Engineering and Technology			
SCAI											
Computer Science											
94	CSCI 152	Performance and Data Structures	4	8	CSCI 151 Programming for Scientists and Engineers (192) (C- and above)			Computer Science, Robotics Engineering, Robotics and Mechatronics			
95	CSCI 299	Internship I	3	6				Instructor's Permission Required. Registration through Add Course form only!			
96	CSCI 398	Directed Study	3	6				Instructor's Permission Required. Registration through Add Course form only!			
97	CSCI 399	Internship II	3	6				Instructor's Permission Required. Registration through Add Course form only!			
98	CSCI 700-0	Thesis Research	0	0				Computer Science			

Mathematics											
99	MATH 161	Calculus I	4	8				5 year UG SSH, Biological Sciences, Chemistry, Mathematics, Physics, SEDS, SMG, Undeclared SSH	SSH, SoM		
100	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			1 year UG SSH Biological Sciences, 2 year UG SSH Biological Sciences, 5 year UG SSH, Chemistry, Mathematics, Physics, SEDS, SMG	SSH, SoM		
101	MATH 497	Directed Study in Mathematics I	3	6				Instructor's Permission Required. Registration through Add Course form only!			
102	MATH 499	Capstone Project	3	6				Instructor's Permission Required. Registration through Add Course form only!			
103	MATH 599	Thesis Research Preparation	0	0				Applied Mathematics			
104	MATH 700-0	Thesis Research	0	0				Mathematics			
Robotics and Mechatronics											
105	ROBT 399	Internship	3	6				Instructor's Permission Required. Registration through Add Course form only!			
106	ROBT 700-0	Thesis Research	0	0				Robotics Engineering			