Course Requirements and Registration Priorities
Fall 2017

#	Abbr	Title	Cr(US)	Cr(ECTS)	PreRequisite	CoRequisite	AntiRequisite	1st priority registration	2nd priority registration	3rd priority registration	4th priority registration
SHSS											
Economics											
1	ECON 329	International Finance	3	6	ECON 202 Intermediate Macroeconomics (207) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
Kazakh Language and Turkic Studies											
2	KAZ 314	Speech Culture in Business	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
3	KAZ 358	Technique of Translation	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
4	KAZ 370	Kazakh for Career Development	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
Political Science and International Relations											
5	PLS 521	Theories of Political Obligations	4	8				1 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
CPS											
NUFYP											
6	FEAP 001	English for Academic Purposes	0	0							
7	FHUM 001	Humanities	0	0							
8	FMAT 020	Foundation 'Statistics'	0	0							
9	FMAT 030	Mathematics for Life Sciences (Biology And Chemistry)	0	0							
10	FMAT 040	Mathematics for Physical Sciences	0	0							

11	FSCI 006	Foundation Chemistry and Biology	0	0							
12	FSCI 008	Foundation 'Physics'	0	0							
NUZYP											
13	ZCOM 040	Academic Communications for Graduate Studies I	0	0							
14	ZRDG 030	Academic Reading for Graduate Studies I	0	0							
15	ZWRT 020	Academic Writing for Graduate Studies I	0	0							
GSB											
Economics											
16	ECON 101	Introduction to Microeconomics	3	6				1 year UG SHSS	2 year UG SHSS	SHSS, SST	
17	ECON 102	Introduction to Macroeconomics	3	6				1 year UG SHSS	2 year UG SHSS	SHSS, SST	
18	ECON 201	Intermediate Microeconomics	3	6	ECON 101 Introduction to Microeconomics (379) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))			2 year UG SHSS	SHSS	SST	
19	ECON 202	Intermediate Macroeconomics	3	6	ECON 102 Introduction to Macroeconomics (503) (B- and above) AND (MATH 161 Calculus I (118) (B- and above) OR MATH 162 Calculus II (170) (B- and above))			2 year UG SHSS	SHSS	SST	
20	ECON 211	Economic Statistics	3	6	ECON 101 Introduction to Microeconomics (379) (C and above) OR ECON 102 Introduction to Macroeconomics (503) (C and above)			2 year UG SHSS	SHSS	SST	
21	ECON 301	Econometrics I	3	6	ECON 211 Economic Statistics (2280) (C- and above) OR (MATH 321 Probability (482) (C- and above) AND (MATH 322 Mathematical Statistics (1165) (C- and above) OR MATH 310 Applied Statistical Methods (82) (C- and above)))			4 year UG SHSS	3 year UG SHSS	SHSS, SST	

22	ECON 302	Game Theory and Economic Analysis	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) OR ECON 101 Introduction to Microeconomics (379) (C- and above) AND MATH 251 Discrete Mathematics (85) (C- and above)		PLS 315 Political Game Theory (704) (C- and above)	4 year UG SHSS	3 year UG SHSS	SHSS, SST	
23	ECON 320	Money and Banking	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
24	ECON 341	Economic Simulation Modeling	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
25	ECON 403	Introduction to Contract Theory and Auctions	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
26	ECON 405	Behavioral and Experimental Economics	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
27	ECON 413	Econometrics II	3	6	ECON 301 Econometrics I (664) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
28	ECON 415	Industrial Organization	3	6	ECON 301 Econometrics I (664) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
29	ECON 416	Empirical Industrial Organization	3	6	ECON 201 Intermediate Microeconomics (133) (C- and above) AND ECON 301 Econometrics I (664) (C- and above)			4 year UG SHSS	3 year UG SHSS	SHSS, SST	
30	ECON 501	Microeconomics I	4	8				1 year Gr SHSS Economics	SHSS, SST		
31	ECON 502	Macroeconomics I	4	8				1 year Gr SHSS Economics	SHSS, SST		
32	ECON 503	Introduction to Contract Theory and Auctions	4	8				2 year Gr SHSS Economics	SHSS, SST		
33	ECON 505	Behavioral and Experimental Economics	4	8				2 year Gr SHSS Economics	SHSS, SST		
34	ECON 511	Statistics	4	8				1 year Gr SHSS Economics	SHSS, SST		
35	ECON 512	Mathematical Economics	4	8				1 year Gr SHSS Economics	SHSS, SST		
36	ECON 515	Industrial Organization	4	8	ECON 531 Econometrics (2505) (C- and above)			2 year Gr SHSS Economics	SHSS, SST		

37	ECON 516	Empirical Industrial Organization	4	8	ECON 501 Microeconomics (2187) (C- and above) AND ECON 531 Econometrics (2505) (C- and above)			2 year Gr SHSS Economics	SHSS, SST		
38	ECON 532	Applied Econometrics	4	8				2 year Gr SHSS Economics	SHSS, SST		
39	ECON 589	Thesis I	4	8				2 year Gr SHSS Economics	SHSS, SST		
GSB											
40	EMBAE 700	Entrepreneurial Finance	2.5	5							
41	GSBF 501	Team Building and Business Communications	1	2							
42	GSBF 511	Introduction to Quantitative Methods	2	4							
43	GSBF 512	Principles of Finance	2	4							
44	GSBF 513	Financial Econometrics	2	4							
45	GSBF 515	Investments	2	4							
46	GSBF 516	Financial Markets and Institutions	2	4							
47	GSBF 517	Financial Economics	2	4							
48	MBA 01	Consequential Leadership	1	2							
49	MBA 02	Business Mathematics and Business Computer Application	1	2							
50	MBA 03	Financial Accounting	2	4							
51	MBA 04	Probability and Statistics	2	4							
52	MBA 05	Business Communication	2	4							
53	MBA 07	Managerial Effectiveness	2	4							
54	MBA 08	Managerial Economics	2	4							
55	MBA 09	Marketing Management	2	4							
56	MBA 17	Negotiations	2	4							
57	MBA 19	Distinguished Speaker Series	0	1							
58	MBA 20	Practicum Project	2.5	5							
59	MBAE 12	Data Analytics for Business	2	4							
60	MBAE 6	International Finance	2	4							
61	MBAE 9	Marketing Strategy	2	4							
GSPP											
Master in Public Administration											

62	MPA 602	Public Administration in Theory and Practice	4	8							
63	MPA 603	Economic Applications for Public Managers	4	8							
64	MPA 605	Research Methods for Decision Making	4	8							
65	MPA 618	Current Issues in Macroeconomic Policy	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
66	MPA 619	Contemporary Issues in Foreign Policy	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
67	MPA 622	Public Policy and Economics of Health Systems	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
68	MPA 684	Selected Topics on Global Energy Policy	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
69	MPA 699	Master’s Project with Overseas Component	6	12							
70	MPP 671	Game Theory and Public Policy	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
71	MPP 682	Sustainable Development and Environmental Governance	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
Master in Public Policy											
72	MPP 601	Microeconomics and Public Policy	4	8							
73	MPP 611	Statistical Techniques for Public Policy	4	8							

74	MPP 612	Public Policy Research and Evaluation	4	8							
75	MPP 621	Introduction to Public Policy and Analysis	4	8							
76	MPP 625	Central Asian politics: Comparative Analysis	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
77	MPP 626	International Political Economy of Energy and Climate Change	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
78	MPP 631	Politics and Public Policy	4	8							
79	MPP 632	Public International Law	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
80	MPP 636	Weapons of Mass Destruction Nonproliferation and Disarmament	4	8				-, 2 year GSPP Public Administration, 2 year GSPP Public Policy	Economics, Eurasian Studies, Political Science and International Relations		
PhD in Public Policy											
81	DPP 601	Microeconomics in the Public Sector	4	8							
82	DPP 603	Public Administration and Management	4	8							
83	DPP 611	Statistics in Public Policy	4	8							
84	DPP 621	Public Policy and Analysis	4	8							
GSE											
MA in Multilingual Education											
85	EDML 610	Foundations of Multilingual Education	3	6							
86	EDML 613	The Multilingual School	3	6							
87	EDML 614	Multilingual curriculum development and assessment	3	6							
88	EDML 623	Globalization and Language Education	3	6							

89	EDML 630	Language Policy and Education Reform Across Contexts	3	6							
90	EDML 690	Thesis Research I	3	6							
91	EDUC 630	Introduction to Linguistics	3	6							
MSc Educational Leadership HE											
92	EDHE 609	Introduction to Educational Leadership: Higher Education	3	6							
93	EDHE 621	Education Policy Analysis and Development	3	6							
94	EDHE 642	Globalisation and higher education	3	6							
95	EDHE 649	Fundamentals of Higher Education	3	6							
96	EDHE 691	Thesis Seminar II	1.5	3							
97	EDUC 502	English for Research	3	6							
98	EDUC 505	Academic English 1	1.5	3							
99	EDUC 507	Academic English III	1.5	3							
100	EDUC 510	Advanced English for Education Professionals	3	6							
101	EDUC 571	Basic Kazakh	3	6							
102	EDUC 590	Academic English Writing for Doctoral Students I	1.5	3							
103	EDUC 600	Research Methods I	3	6							
104	EDUC 602	Educational Context and Reform in Kazakhstan	3	6							
105	EDUC 701	Education Research Methods	3	6							
106	EDUC 703	Kazakh Language	3	6							
107	EDUC 709	Introduction to Scholarship in Education	3	6							
108	EDUC 712	Educational Policy and Reform	3	6							
109	EDUC 720	Philosophy of Education	3	6							
110	EDUC 731	Proposal Defence	3	6							

111	EDUC 740	Doctoral Seminar	3	6							
112	EDUC 750	Dissertation Research	9	18							
113	EDUC 800	International Study	12	24							
MSc Educational Leadership IE											
114	EDIE 609	Introduction to Educational Leadership: Inclusive Education	3	6							
115	EDIE 621	Education Policy Analysis and Development	3	6							
116	EDIE 624	Psychology of Learning (Children as Learners)	3	6							
117	EDIE 691	Thesis Seminar II	1.5	3							
MSc Educational Leadership SE											
118	EDSE 609	Introduction to Educational Leadership: School Education	3	6							
119	EDSE 620	Perspectives on Inclusive Education	3	6							
120	EDSE 632	School Improvement and Effectiveness	3	6							
121	EDSE 634	Assessment: Theories, policies, practices	3	6							
122	EDSE 691	Thesis Seminar II	1.5	3							
123	EDUC 608	Preparing Children for the Future: Skills and Employability	3	6							
Other											
Other											
124	T-CMM 181	Introduction to Mass Communication	3	6							
125	T-ECN 332	Managerial Economics	3	6							
126	T-GOV 382	American Political Concepts	3	6							
127	T-PHI 104	Philosophy of Religion	3	6							
128	T-PP 5178	Leadership and Decision-Making Skills	4	8							
129	T-PP 5196	Education Economics and Policy	4	8							
130	T-PP 5203	Behavioral Economics and Public Policy	4	8							

131	T-PP 5215	Changes in Singapore Political Economy	4	8							
132	T-PP 5267	Urban Transport Policy: A Global View	4	8							
133	T-PP 5269	Environmental Economics and Public Policy	4	8							
134	T-PP 5298	Singapore's Development Experience	4	8							
SoM											
Biological Science											
135	BIOL 101	Biology for non-Science majors	3	6			BIOL 110 Modern Biology I (1070) (C- and above)	SHSS			
136	BIOL 110	Modern Biology I with Lab	4	8				Biological Sciences, Chemistry	SST	SHSS	
137	BIOL 210	Introduction to Microbiology with Lab	4	8	BIOL 110 Modern Biology I (1070) (C and above) AND BIOL 120 Modern Biology II (1195) (C and above)			Biological Sciences	SST	SHSS	
138	BIOL 230	Human Anatomy and Physiology I	4	8	BIOL 110 Modern Biology I (107) (C and above) OR BIOL 110 Modern Biology I (1070) (C and above)			Biological Sciences	SST	SHSS	
139	BIOL 320	Developmental Biology	3	6	BIOL 230 Human Anatomy and Physiology I (72) (C and above) OR BIOL 230 Human Anatomy and Physiology I (6217) (C and above)			Biological Sciences	SST	SHSS	
140	BIOL 330	Introduction to Immunology	3	6	BIOL 301 Molecular Biology of Cell with Lab (1197) (C and above) OR BIOL 305 Introduction to Microbiology with Lab (1642) (C and above) OR BIOL 301 Molecular Cell Biology (5809) (C and above) OR BIOL 305 Introduction to Microbiology (5789) (C and above)			Biological Sciences	SST	SHSS	
141	BIOL 340	Introduction to Bioinformatics with Lab	4	8	(BIOL 120 Modern Biology II (1195) (C and above) OR (BIOL 120 Modern Biology II (1195) (C and above) AND BIOL 120L Modern Biology II Laboratory (5443) (C and above))) AND MATH 310 Applied Statistical Methods (82) (C and above)			Biological Sciences	SST	SHSS	

142	BIOL 352	Biology of Cancer	3	6	BIOL 231 Human Anatomy and Physiology II (479) (C and above) OR BIOL 301 Molecular Biology of Cell with Lab (1197) (C and above) OR BIOL 331 Human Anatomy and Physiology II (6218) (C and above) OR BIOL 301 Molecular Cell Biology (5809) (C and above)			Biological Sciences	SST	SHSS	
143	BIOL 355	Jr. Research Seminar	3	6	BIOL 120 Modern Biology II (1195) (C and above)			Biological Sciences	SST	SHSS	
144	BIOL 399	Biology Internship - 2B	3	6				Biological Sciences	SST	SHSS	
145	BIOL 455	Biotechnology	3	6	BIOL 301 Molecular Biology of Cell with Lab (1197) (C- and above) OR (BIOL 301 Molecular Cell Biology (5809) (C- and above) AND BIOL 301L Molecular Cell Biology Laboratory (5678) (C- and above))			Biological Sciences	SST	SHSS	
146	BIOL 470	Advanced Cell Biology	3	6	BIOL 120 Modern Biology II (1195) (C and above) AND BIOL 110L Modern Biology I Laboratory (5448) (C and above) AND (BIOL 341 Biochemistry I (2002) (C and above) OR CHEM 341 Biochemistry I (1058) (C and above))			Biological Sciences	SST	SHSS	
147	BIOL 490	Senior Honors Thesis	4	8	BIOL 355 Critical Research Reasoning (1000) (B and above)			Biological Sciences	SST	SHSS	
148	BIOL 501	Fundamentals of Biological Sciences	3	6							
149	BIOL 511	Critical Appraisal of Scientific Literature	3	6							
150	BIOL 520	Statistical Methods in Research	3	6							
151	BIOL 600	Graduate Seminar Series	3	6							
152	BIOL 670	Gene Therapy	3	6							
153	BIOL 690	Research Thesis I	6	12							
MMM											
154	MMMM 501	Molecular Basis of Infection	3	6							

155	MMMM 503	Bioethics in Research: Principles and Practice	3	6							
156	MMMM 505	Inferential Biostatistics	2	4							
157	MMMM 506	Biocomputing	1	2							
Master of Sciences in Biomedicine											
158	MMMM 502	Molecular Pathology of Cancer	3	6							
159	MMMM 504	Molecular Basis of Genetic Disease	3	6							
Nursing											
160	NUR 301	Nutrition for Clinical Practice	3	6							
161	NUR 302	Physical Assessment Across the Lifespan	4	8							
162	NUR 303	Nursing Care of Older Adults	4	8							
163	NUR 304	Introduction to Basic Statistics for Evidence Based Practice	3	6							
Public Health											
164	PUBH 501	Principles of Public Health Problem Solving	3	6							
165	PUBH 511	Inferential Biostatistics	3	6							
166	PUBH 521	Principles of Analytical Epidemiology	3	6							
167	PUBH 528	Qualitative Research Methods	3	6							
168	PUBH 531	Emerging Infectious Diseases	3	6							
169	PUBH 551	Health Services Management, Health Economic and Health Policy	3	6							
170	PUBH 601	Health Education and Promotion	3	6							
171	PUBH 641	Problem Investigations in Environmental Health	3	6							
172	PUBH 662	Graduate Research Seminar II	3	6							
173	PUBH 681	Master’s Project Planning	3	6							
SSH											
Academic Success Centre, Communication and Composition											

174	SHSS 150	Rhetoric and Composition	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS	SST	
Area Studies											
175	EAS 500	Introduction to Eurasia	4	8				Eurasian Studies	SHSS, SST		
176	EAS 501	General Methodology	4	8				Eurasian Studies	SHSS, SST		
177	EAS 503	Thesis I	7.5	15	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)			2 year Gr SHSS Eurasian Studies			
Area Studies, Political Science and International Relations, Sociology and Anthropology											
178	EAS 506/PLS 514/SOC 514	Qualitative Research Methods	4	8				Eurasian Studies	SHSS, SST		
Chemistry											
179	CHEM 090	Chemistry for Non-Science majors	3	6				SHSS			
180	CHEM 091	Survey of Physical Science	3	6				SHSS			
181	CHEM 101	General Chemistry I	3	6				Biological Sciences, Chemistry	SST	SHSS	
182	CHEM 101L	General Chemistry I lab	1	2		CHEM 101 General Chemistry I (113) (C and above)		Biological Sciences, Chemistry	SST	SHSS	
183	CHEM 102	General Chemistry II	3	6	CHEM 101 General Chemistry I (113) (C and above)			Chemistry	Biological Sciences	SST	
184	CHEM 102L	General Chemistry II lab	1	2	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 102 General Chemistry II (232) (C and above)		Chemistry	Biological Sciences	SST	
185	CHEM 189c	Independent Study	3	6							
186	CHEM 211	Organic Chemistry I	3	6	CHEM 102 General Chemistry II (232) (C and above)			Chemistry	Biological Sciences	SST	
187	CHEM 211L	Organic Chemistry I Lab	2	4	CHEM 101L General Chemistry I lab (179) (C and above)	CHEM 211 Organic Chemistry I (154) (C and above)		Chemistry	Biological Sciences	SST	
188	CHEM 220	Quantitative Chemical Analysis with lab	4	8	CHEM 102 General Chemistry II (232) (C and above)			Chemistry	Biological Sciences	SST	

189	CHEM 331	Physical Chemistry I	3	6	CHEM 220 Quantitative Chemical Analysis (555) (C and above) AND PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C and above)			Chemistry	Biological Sciences	SST	
190	CHEM 331L	Physical Chemistry Lab	1	2		CHEM 331 Physical Chemistry I (634) (C and above)		Chemistry	Biological Sciences	SST	
191	CHEM 341	Biochemistry I	3	6	CHEM 211 Organic Chemistry I (154) (C and above)			Chemistry	Biological Sciences	SST	
192	CHEM 341L	Biochemistry I Lab	1	2	CHEM 212L Organic Chemistry II Lab (444) (C and above)	CHEM 341 Biochemistry I (1058) (C and above)		Chemistry	Biological Sciences	SST	
193	CHEM 350	Descriptive Inorganic Chemistry	3	6	CHEM 101 General Chemistry I (113) (C and above)			Chemistry	Biological Sciences	SST	
194	CHEM 400	Chemistry Seminar	3	6	CHEM 380 Research Methods (636) (C and above)			Chemistry	Biological Sciences	SST	
195	CHEM 410	Structural Spectroscopy	4	8	CHEM 212 Organic Chemistry II (443) (C and above)			Chemistry	Biological Sciences	SST	
196	CHEM 431	Computational Chemistry	3	6	CHEM 332 Physical Chemistry II (1056) (C and above) AND (CSCI 111 Web Programming and Problem Solving (110) (C- and above) OR CSCI 150 Fundamentals of Programming (1501) (C- and above) OR CSCI 151 Programming for Scientists and Engineers (192) (C- and above))			Chemistry	Biological Sciences	SST	
197	CHEM 450	Advanced Inorganic Chemistry	4	8	CHEM 212 Organic Chemistry II (443) (C and above) AND CHEM 212L Organic Chemistry II Lab (444) (C and above) AND CHEM 250 Descriptive Inorganic Chemistry (445) (C and above)			Chemistry	Biological Sciences	SST	
Communication and Composition											
198	COMM 102	Communication Foundations II	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			SHSS	SST		
199	COMM 225	Science Writing for Popular Media	3	6				SST	SHSS		

200	SHSS 250	Advanced Rhetoric and Composition	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (C- and above)			2 year UG SHSS	SHSS	SST	
201	SHSS 330	Writing Fellows: Composition and Collaboration in Theory and Practice I	3	6	WCS 150/ASC 100 Advanced English for Academic Purposes (2183) (B and above) AND (WCS 220 Science Writing (5686) (B+ and above) OR WCS 230 Say What you Mean: Clarity, Precision, and Style in Academic Writing (3026) (B+ and above) OR WCS 250 Advanced Rhetoric and Composition (3027) (B+ and above))			Through Add form only			
History, Philosophy and Religious Studies											
202	HST 100	History of Kazakhstan	3	6				4 year UG SENG, 4 year UG SHSS, 4 year UG SST	1 year UG SENG, 1 year UG SHSS, 1 year UG SST	SEng, SHSS, SST	
203	HST 123	Introduction to the History of Science and Technology	3	6				1 year UG SHSS, 2 year UG SHSS, History	SHSS, SST		
204	HST 124	Introduction to the History of Medicine	3	6				1 year UG SHSS, 2 year UG SHSS, History	SHSS, SST		
205	HST 131	European History I (to 1700)	3	6				SHSS, SST			
206	HST 182	East Asian History II (from 1500)	3	6				1 year UG SHSS, 2 year UG SHSS, History	SHSS, SST		
207	HST 240	Representations of Nature in the Early Modern World	3	6	HST 100 History of Kazakhstan (172) (C- and above)			History	SHSS, SST		

208	HST 327	Global Cold War	3	6	HST 100 History of Kazakhstan (172) (C- and above) OR HST 103 Central Asian History I (to 1700) (197) (C- and above) OR HST 104 Central Asian History II (1700 - 1991) (1192) (C- and above) OR HST 121 World History I (to 1500) (1193) (C- and above) OR HST 122 World History II (from 1500) (1162) (C- and above) OR HST 131 European History I (to 1700) (201) (C- and above) OR HST 132 European History II (from 1700) (139) (C- and above) OR HST 151 US History I (to 1877) (668) (C- and above) OR HST 152 US History II (from 1877) (465) (C- and above) OR HST 172 Middle Eastern History II (from 1800) (1194) (C- and above) OR HST 182 East Asian History II (from 1500) (213) (C- and above) OR HST 199 Freshman Seminar (241) (C- and above)			History	SHSS, SST		
209	HST 328	History of the Anthropocene	3	6	Subject "HST" BETWEEN 100 and 199			History	SHSS, SST		

210	HST 335	European Nationalisms	3	6	HST 100 History of Kazakhstan (172) (C- and above) OR HST 103 Central Asian History I (to 1700) (197) (C- and above) OR HST 104 Central Asian History II (1700 - 1991) (1192) (C- and above) OR HST 121 World History I (to 1500) (1193) (C- and above) OR HST 122 World History II (from 1500) (1162) (C- and above) OR HST 131 European History I (to 1700) (201) (C- and above) OR HST 132 European History II (from 1700) (139) (C- and above) OR HST 151 US History I (to 1877) (668) (C- and above) OR HST 152 US History II (from 1877) (465) (C- and above) OR HST 172 Middle Eastern History II (from 1800) (1194) (C- and above) OR HST 182 East Asian History II (from 1500) (213) (C- and above) OR HST 199 Freshman Seminar (241) (C- and above)			History	SHSS, SST		
211	HST 423	Orthodox Christianity in Modern and Revolutionary Russia	3	6	Subject "HST" BETWEEN 200 and 299 OR Subject "HST" BETWEEN 300 and 399			History	SHSS, SST		
212	HST 498	Directed Reading	3	6							
213	HST 523	Orthodox Christianity in Modern and Revolutionary Russia	4	8				SHSS, SST			
214	PHIL 101	Introduction to Philosophy	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS, SST		
215	PHIL 110	The Good Life in Practice	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS, SST		
216	PHIL 124	Knowledge and Reality	3	6				1 year UG SHSS, 2 year UG SHSS	SHSS, SST		
217	PHIL 205	Introduction to Modern Philosophy	3	6				SHSS	SST		
218	PHIL 215	Bioethics	3	6				SHSS, SST			
219	PHIL 223	Philosophy of Science	3	6				SHSS, SST			
220	PHIL 240	Formal Logic	3	6				SHSS, SST			
221	PHIL 325	Truth, Lies, Media, and Propaganda	3	6				SHSS, SST			

222	PHIL 361	Philosophy of Language	3	6				SHSS, SST			
223	PHIL 399	Special Topics in Philosophy	3	6	PHIL 101 Introduction to Philosophy (242) (C- and above) OR PHIL 210 Ethics (459) (C- and above) OR PHIL 320 Truth, Knowledge and Belief (470) (C- and above) OR PHIL 230/PLS 230 Religion and Democracy (671) (C- and above)						
224	REL 410	Buddhism in Central Asia	3	6	Subject "REL" BETWEEN 100 and 199			SHSS, SST			
225	REL 510	Buddhism in Central Asia	4	8				Eurasian Studies	SHSS, SST		
History, Philosophy and Religious Studies, History, Philosophy and Religious Studies											
226	HST 261/REL 261	History of Islam (570s to 1258)	3	6	Subject "HST" BETWEEN 100 and 199 OR Subject "REL" BETWEEN 100 and 199			History	SHSS, SST		
227	HST 329/REL 329	Women in Islamic History	3	6				History	SHSS, SST		
History, Philosophy and Religious Studies, Political Science and International Relations											
228	PHIL 231/PLS 222	Global Justice	3	6				SHSS	SST		
History, Philosophy and Religious Studies, Sociology and Anthropology											
229	HST 381	AIDS and Society	3	6	Subject "HST" BETWEEN 101 and 199 OR HST 100 History of Kazakhstan (172) (B- and above)			History	SHSS, SST		
Kazakh Language and Turkic Studies											
230	KAZ 001	Kazakh Language Placement Test	0	0							
231	KAZ 100	Elementary Kazakh	3	6							
232	KAZ 101	Basic Kazakh I	3	6	KLL "[A2] Basic"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
233	KAZ 111	Intermediate Kazakh I	3	6	KLL "[B1.2] Intermediate"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	

234	KAZ 121	Upper-Intermediate Kazakh	3	6	KLL "[B2.2] Upper-Interm."				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
235	KAZ 211	Kazakh Rhetoric	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"		KAZ 303 Academic Speaking in Kazakh (702) (C- and above) OR KAZ 304 Academic Writing in Kazakh (703) (C- and above)		1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
236	KAZ 212	Academic Kazakh	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"		KAZ 304 Academic Writing in Kazakh (703) (C- and above) OR KAZ 303 Academic Speaking in Kazakh (702) (C- and above)		1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
237	KAZ 213	Kazakh Terminology	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
238	KAZ 225	Kazakh Diplomacy	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
239	KAZ 226	Kazakh for Medical School	3	6	KLL "[B1.2] Intermediate"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	

240	KAZ 230	Kazakh Culture through Ethnography, Literature, and Film	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
241	KAZ 263	Business Etiquette	3	6	KLL "[B2.2] Upper-Interm." OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
242	KAZ 264	Language and ethnicity	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
243	KAZ 313	Kazakh for Business	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
244	KAZ 351	Kazakh Short Stories	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
245	KAZ 354	Kazakh Drama	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
246	KAZ 356	Kazakh Music History	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	

247	KAZ 357	Literature of Alash	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
248	KAZ 362	Creative Writing in Kazakh Language	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
249	KAZ 363	Language and Globalization	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
250	KAZ 364	Kazakh for Civil Service	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
251	KAZ 365	Abai’s World	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"						
252	KAZ 366	Kazakh Language for Engineers	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
253	KAZ 368	Onomastics: History and Function of Names	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	
254	KAZ 371	Contemporary Kazakh Literature	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"				1 year UG SENG, 1 year UG SST, 4 year UG SENG, 4 year UG SST	1 year UG SHSS, 2 year UG SHSS, 3 year UG SHSS, 4 year UG SHSS, SEng, SST	

255	TUR 231	Istanbul in Literature and Culture	3	6				SHSS	SST		
256	TUR 305	Introduction to Chagatay and Ottoman Turkish	3	6	KAZ 202 Academic Kazakh II (4562) (C- and above) OR KLL "[C1.1] Advanced"			SHSS, SST			
257	TUR 411	Advanced Readings in Turkish Literature	3	6				SHSS, SST			
Languages, Literature and Linguistics											
258	CHN 101	Beginning Mandarin I	4	8				World Languages, Literature and Culture	1 year UG SHSS	1 year UG SST	
259	CHN 201	Intermediate Mandarin I	4	8	CHN 102 Beginning Mandarin II (1844) (C and above)			SHSS, SST			
260	CHN 202	Intermediate Mandarin II	4	8	CHN 201 Intermediate Mandarin I (2181) (C and above)			SHSS, SST			
261	FRE 201	Intermediate French I	4	8	FRE 102 Beginning French II (454) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
262	FRE 312	Advanced Expression	3	6	FRE 201 Intermediate French I (667) (C- and above)			SHSS, SST			
263	GER 102	Beginning German II	4	8	GER 101 Beginning German (3173) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
264	GER 201	Intermediate German I	4	8	GER 102 Beginning German II (3335) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
265	SPA 101	Beginning Spanish I	4	8				World Languages, Literature and Culture	1 year UG SHSS	1 year UG SST, 2 year UG SHSS, 2 year UG SST	
266	SPA 201	Intermediate Spanish I	4	8	SPA 102 Beginning Spanish II (1128) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
267	SPA 314	Advanced Spanish Grammar and Composition	3	6	SPA 202 Intermediate Spanish II (1842) (C- and above)			SHSS, SST			
268	WLL 101	Introduction to Critical Issues in the Humanities and Social Sciences	3	6				World Languages, Literature and Culture	SHSS	SST	
269	WLL 110	Introduction to Literary Studies	3	6				World Languages, Literature and Culture	SHSS	SST	
270	WLL 131	Introduction to Linguistics	3	6				World Languages, Literature and Culture	SHSS	SST	

271	WLL 201	World Literature I	3	6				World Languages, Literature and Culture	SHSS	SST	
272	WLL 244	Survey of Nineteenth-Century Russian Literature	3	6				World Languages, Literature and Culture	SHSS	SST	
273	WLL 248	Survey of Soviet Literature and Culture	3	6				World Languages, Literature and Culture	SHSS	SST	
274	WLL 250	From Page to Screen	3	6				World Languages, Literature and Culture	SHSS	SST	
275	WLL 272	Language and the Mind	3	6				World Languages, Literature and Culture	SHSS	SST	
276	WLL 273	Survey of Research Methods in Linguistics	3	6	LING 131 Introduction to Linguistics (1394) (C- and above)			1 year UG SHSS	SHSS	SST	
277	WLL 275	Language Contact in Central Asia	3	6	LING 131 Introduction to Linguistics (1394) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
278	WLL 277	Language Diversity and Language Universals	3	6	LING 131 Introduction to Linguistics (1394) (C and above)			World Languages, Literature and Culture	SHSS	SST	
279	WLL 278	Sounds of the World’s Languages	3	6				World Languages, Literature and Culture	SHSS	SST	
280	WLL 345	Modern Japanese Literature	3	6	Subject "WLL" BETWEEN 1 and 499 OR Subject "" BETWEEN 1 and 499 OR Subject "" BETWEEN 1 and 499 OR Subject "HST" BETWEEN 1 and 499 OR Subject "" BETWEEN 1 and 499 OR Subject "" BETWEEN 1 and 499 OR Subject "" BETWEEN 1 and 499			World Languages, Literature and Culture	SHSS	SST	
281	WLL 355	Graphic Narrative: Advanced Readings in Sequential Art	3	6	WLL 155 Introduction to the Comic Book (3046) (C- and above) OR WLL 255 The Comic Book in Japan and America (1849) (C- and above)			World Languages, Literature and Culture	SHSS	SST	
282	WLL 399	Independent Study	3	6				Through Add form only			
283	WLL 498	Languages and Literature Capstone I	1	2				4 year UG SHSS World Language and Literature			
Languages, Literature and Linguistics, Languages, Literature and Linguistics											

284	SPA 254/WLL 254	Superstition, Magical Realism, and Horror in Hispanic Culture	3	6	Subject "WLL" BETWEEN 100 and 499 OR Subject "HST" BETWEEN 100 and 499			World Languages, Literature and Culture	SHSS	SST	
Languages, Literature and Linguistics, Sociology and Anthropology											
285	ANT 275/WLL 271	Language and Society	3	6				2 year UG SHSS, Anthropology	SHSS	SST	
286	ANT 385/WLL 385	Postcolonial Theory and its Applications in Eurasia	3	6	ANT 110 Introduction to Sociocultural Anthropology (501) (C- and above) OR SOC 101 Introduction to Sociology (508) (C- and above) OR WLL 121 Introduction to Cultural Studies (243) (C- and above) OR WLL 102 /PHIL 102 Language, Experience, Culture (2481) (C- and above)			Anthropology, Sociology, World Languages, Literature and Culture	3 year UG SHSS, 4 year UG SHSS	SHSS, SST	
Physics											
287	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)	SST	SHSS		
288	PHYS 201	Introductory Astronomy I	3	6				SHSS, SST			
289	PHYS 221	Classical Mechanics I	3	6	(PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above)) AND MATH 273 Linear Algebra with Applications (84) (C- and above)			Physics	SHSS, SST		
290	PHYS 261	Modern Physics with laboratory	4	8	MATH 162 Calculus II (170) (C- and above) AND (PHYS 152 Introductory Physics II with Lab (1176) (C- and above) OR PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))			Physics	SHSS, SST		

291	PHYS 315	Mathematical Methods of Physics	3	6	(PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above) OR PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above)) AND MATH 274 Introduction to Differential Equations (484) (C- and above)			Physics	SHSS, SST		
292	PHYS 361	Classical Electrodynamics I	3	6		PHYS 315 Applied Mathematical Methods (653) (D and above) OR PHYS 411 Advanced Mathematical Physics (3142) (D and above)		SHSS, SST			
293	PHYS 452	Quantum Mechanics II	3	6	PHYS 451 Quantum Mechanics I (1415) (C- and above)			SHSS, SST			
294	PHYS 465	Advanced Experimental Physics	3	6	PHYS 370 Optics with Laboratory (1405) (C- and above)			Physics			
295	PHYS 474	Lasers and Photonics	3	6	PHYS 370 Optics with Laboratory (1405) (C- and above)			SHSS, SST			
296	PHYS 491	Directed Study of Advanced Physics Topics	3	6				Through Add form only			
297	PHYS 505	Classical Mechanics	3	6							
298	PHYS 511	Computational Modeling and Simulation	3	6							
299	PHYS 515	Classical Electrodynamics	3	6							
300	PHYS 545	Advanced Instrumentation Methods	3	6							
301	PHYS 550	Advanced Mathematical Physics	3	6							
302	PHYS 574	Lasers and Photonics	3	6							
303	SST 501	Teaching and Learning	3	6							
Political Science and International Relations											
304	PLS 101	Introduction to Political Science	3	6				SST	1 year UG SHSS	SHSS	

305	PLS 120	Introduction to Political Theory	3	6				1 year UG SHSS, Political Science and International Relations	SHSS	SST	
306	PLS 140	Introduction to Comparative Politics	3	6				1 year UG SHSS	Political Science and International Relations	SHSS, SST	
307	PLS 150	Introduction to International Relations	3	6						SHSS, SST	
308	PLS 210	Political Science Research Methods	3	6				Political Science and International Relations	SHSS		
309	PLS 211	Quantitative Methods in Political Science	3	6			ECON 211 Economic Statistics (2280) (C- and above)	Political Science and International Relations	SHSS		
310	PLS 340	Politics of East Asia	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS		
311	PLS 359	United Nations	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS		
312	PLS 360	Foreign Policy Analysis	3	6	PLS 150 Introduction to International Relations (511) (C- and above)			Political Science and International Relations	SHSS		
313	PLS 370	Law, Politics and Society	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS		
314	PLS 391	Intermediate Special Topics in Comparative Politics	3	6	PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS		
315	PLS 412	Scientific Research in International Relations	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above) AND PLS 211 Quantitative Methods (221) (C- and above)			Political Science and International Relations	SHSS		
316	PLS 421	Theories of Political Obligations	3	6	PLS 325 Ancient Political Theory (675) (C- and above) OR PLS 326 Modern Political Theory (1131) (C- and above)			Political Science and International Relations	SHSS, SST		
317	PLS 422	Just War Theory	3	6	PLS 120 Introduction to Political Theory (512) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS, SST		

318	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)			Political Science and International Relations	SHSS, SST		
319	PLS 445	Political Violence	3	6	(PLS 140 Introduction to Comparative Politics (223) (C- and above) OR PLS 150 Introduction to International Relations (511) (C- and above)) AND PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS, SST		
320	PLS 465	Politics of International Finance	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS, SST		
321	PLS 469	International Relations of Eurasia	3	6	PLS 150 Introduction to International Relations (511) (C- and above) AND PLS 210 Political Science Research Methods (129) (C- and above)			Political Science and International Relations	SHSS, SST		
322	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)			Through Add form only			
323	PLS 511	Advanced Research I	4	8				1 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
324	PLS 512	Scientific Research in International Relations	4	8				2 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
325	PLS 513	Research and Writing in Political Science	4	8				2 year Gr SHSS Political Sciences and Int. Relations			
326	PLS 522	Just War Theory	4	8				1 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
327	PLS 541	Advanced Topics in Comparative Politics	4	8				2 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
328	PLS 545	Political Violence	4	8				2 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
329	PLS 550	Core Seminar in IR	4	8				1 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		

330	PLS 565	Politics of International Finance	4	8				2 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
331	PLS 569	International Relations of Eurasia	4	8				2 year Gr SHSS Political Sciences and Int. Relations	SHSS, SST		
SSH											
332	SHSS 301	School of Humanities and Social Sciences Internship: Second Experience	3	6				Through Add form only			
Sociology and Anthropology											
333	ANT 101	Introduction to Sociocultural Anthropology	3	6				1 year UG SHSS, Anthropology	2 year UG SHSS	SHSS, SST	
334	ANT 140	World Prehistory	3	6				1 year UG SHSS, Anthropology	2 year UG SHSS	SHSS, SST	
335	ANT 160	Introduction to Biological Anthropology	3	6			ANT 361 Human Evolution: Bones, Stones and Genomes (160) (C- and above)	1 year UG SHSS, Anthropology	2 year UG SHSS	SHSS, SST	
336	ANT 231	Frauds and Fallacies in Archaeology	3	6				2 year UG SHSS, Anthropology	SHSS	SST	
337	ANT 400	Research Assistance in Anthropology	1	2							
338	ANT 403	Research Assistance in Anthropology	2	4							
339	ANT 498	Capstone Seminar I	3	6				4 year UG SHSS Anthropology			
340	SOC 101	Introduction to Sociology	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology, Biological Sciences, Sociology		SHSS	
341	SOC 115	Global Social Problems	3	6				1 year UG SHSS	2 year UG SHSS	SHSS, SST	
342	SOC 203	Quantitative Methods in Sociology	3	6				Anthropology, Sociology	SHSS	SST	
343	SOC 215	Sociology of Race and Ethnicity	3	6				Anthropology, Sociology	SHSS	SST	
344	SOC 301	Classical Sociological Theory	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above) OR ANT 110 Introduction to Sociocultural Anthropology (501) (C- and above)			Anthropology, Sociology	3 year UG SHSS, 4 year UG SHSS	SHSS, SST	

345	SOC 314	Organizations and Society	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above)			Anthropology, Sociology	SHSS	SST	
346	SOC 318	Sexuality and Gender in a Transnational World	3	6	SOC 101 Introduction to Sociology (508) (C- and above) OR SOC 115 Global Social Problems (1032) (C- and above) OR SOC 210 Gender and Society (226) (C- and above)			Anthropology, Sociology	3 year UG SHSS, 4 year UG SHSS	SHSS, SST	
347	SOC 321	Applied Policy Analysis: Tools and Perspectives	3	6	SOC 101 Introduction to Sociology (508) (C and above)			Anthropology, Sociology	3 year UG SHSS, 4 year UG SHSS	SHSS, SST	
348	SOC 400	Research Assistance in Sociology	1	2							
349	SOC 403	Research Assistance in Sociology	2	4							
350	SOC 498	Capstone Seminar Part I	3	6				Anthropology, Sociology	SHSS	SST	
Sociology and Anthropology, Sociology and Anthropology											
351	ANT 216	Marriage and Kinship	3	6				1 year UG SHSS, 2 year UG SHSS, Anthropology	SHSS	SST	
352	ANT 285/SOC 212	Food and Society	3	6				Anthropology, Sociology	1 year UG SHSS, 2 year UG SHSS	SHSS, SST	
SEDS											
Chemical Engineering											
353	MCHE 600	MSc Thesis in Chemical Engineering	15	30							
354	MCHE 613	Physical Chemistry of Oil & Gas	1.5	3							
355	MCHE 614	Applied Chemical Engineering Thermodynamics	1.5	3							
356	MCHE 615	Advanced Unit Operations	1.5	3							
357	MCHE 616	Advanced Chemical Reactor Engineering	1.5	3	ECHE 481 Chemical Reaction Engineering (1985) (D and above)						
358	MCHE 618	Plant Economics and Planning	1.5	3							
359	MCHE 619	Safety Engineering and Loss Prevention	1.5	3							
Civil Engineering											
360	MCE 600	MSc Thesis in Civil Engineering	15	30							

361	MCE 601	Sustainable Development	3	6							
362	MCE 604	Advanced Project Management	3	6							
363	MCE 606	Environmental Impacts and Assessments	3	6							
364	MSC 616	Research Methods	3	6							
Electrical and Electronic Engineering											
365	MEE 600	MSc Thesis in Electrical and Electronics Engineering	15	30							
366	MEE 607	Statistical Signal Processing	3	6							
367	MEE 608	Special Topics in Circuits Theory	3	6							
368	MEE 622	Modern Control Theory	3	6							
369	MEE 623	Random Processes	3	6							
Mechanical Engineering											
370	MME 600	Master Thesis in Mechanical Engineering	15	30							
371	MME 604	Engineering Mathematics	3	6							
372	MME 605	Numerical Techniques for Engineers	3	6							
373	MME 606	Advanced Control Systems	3	6							
School of Engineering											
374	BENG 117	Engineering Mechanics	3	6							
375	BENG 124	Engineering Mathematics I	3	6							
376	BENG 145	Occupal and Environment Health and Safety	3	6							
377	BENG 146	Programming for Engineers	3	6							
378	BENG 215	Sensors and Actuators	3	6							
379	BENG 221	Engineering Materials	3	6							
380	BENG 228	Engineering Mathematics III	3	6	BENG 124 Engineering Mathematics I (101) (D and above) AND BENG 225 Engineering Mathematics II (48) (D and above)						

381	BENG 304	Internship	2	4							
382	BENG 308	Internship	4	8							
383	BENG 312	Internship	6	12							
SoE											
Chemical and Materials Engineering											
384	ECHE 126	Introduction to Chemical Engineering	3	6							
385	ECHE 222	Chemistry I	3	6							
386	ECHE 319	Chemical Engineering Thermodynamics	3	6							
387	ECHE 333	Separation Processes-I	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above)						
388	ECHE 369	Transport Phenomena-II	3	6							
389	ECHE 385	Research Practice	3	6							
390	ECHE 418	Capstone project 1	3	6	ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						
391	ECHE 419	Advanced Process Simulation	3	6	ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						
392	ECHE 481	Chemical Reaction Engineering	3	6	ECHE 126 Introduction to Chemical Engineering (33) (D and above) AND BENG 124 Engineering Mathematics I (101) (D and above) AND BENG 225 Engineering Mathematics II (48) (D and above)						

393	ECHE 482	Computational Methods in Chemical Engineering-II	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above) AND ECHE 333 Separation Processes-I (1271) (D and above) AND ECHE 383 Separation Processes II (1982) (D and above) AND ECHE 481 Chemical Reaction Engineering (1985) (D and above) AND ECHE 323 Computational methods in Chemical Engineering-I (1272) (D and above)						
394	ECHE 484	Multi-Phase Flows	3	6	ECHE 319 Chemical Engineering Thermodynamics (1218) (D and above) AND ECHE 270 Transport Phenomena-l (735) (D and above)						
Civil Engineering											
395	MSC 615	Advanced Statistics and Probability	3	6							
Civil and Environmental Engineering											
396	ECE 215	Surveying	3	6							
397	ECE 216	Civil Engineering CAD	3	6							
398	ECE 217	Structural Analysis I	3	6	BENG 117 Engineering Mechanics (740) (D and above)						
399	ECE 302	Civil Engineering Materials	3	6	BENG 221 Engineering Materials (47) (D and above)						
400	ECE 307	Engineering Geology and Rock Mechanics	3	6							
401	ECE 318	Structural Design - Concrete	3	6	ECE 479 Structural Analysis II (2460) (C- and above)						
402	ECE 401	Capstone Project 1	3	6							
403	ECE 404	Construction Technologies and Processes	3	6	BENG 148 Engineering Practice (1073) (D and above) AND ECE 302 Civil Engineering Materials (1040) (D and above)						
404	ECE 405	Environmental Engineering	3	6	ECE 473 Environmental Systems (1953) (D and above) OR ECE 218 Environmental Chemistry (3296) (D and above)						
405	ECE 416	Highway Engineering	3	6	ECE 302 Civil Engineering Materials (1040) (D and above)						

406	ECE 473	Environmental Systems	3	6							
407	EMEM 507	Project Management	3	6							
408	EMEM 523	Supply Chain Management	3	6							
409	EMEM 527	Globalization and Engineering	3	6							
410	EMEM 533	Engineering Management and Engineering Economy	3	6							
411	EMEM 537	Engineering Decision Tools	3	6							
412	EMEM 538	Knowledge and Innovation Management	3	6							
413	EMEM 539	Big Data and Information Management	3	6							
414	EMEM 542	Production and Service Operations Management	3	6							
Electrical and Computer Engineering											
415	EEE 212	Signals and Systems	3	6	BENG 225 Engineering Mathematics II (48) (D and above)						
416	EEE 238	Digital Signal and Image Processing	3	6							
417	EEE 250	Microelectronic Devices and Circuits	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
418	EEE 251	Electronic Engineering Design Principles	3	6	BENG 114 Introduction to Electrical Systems (1076) (D and above)						
419	EEE 342	Electromagnetics	3	6							
420	EEE 345	Power Electronics	3	6	ELCE 201 Circuit Theory (5507) (D and above)						
421	EEE 382	Antennas and Propagation	3	6							
422	EEE 384	Digital Integrated Circuits Design	3	6	EEE 250 Microelectronic Devices and Circuits (3152) (C- and above)						
423	EEE 435	Digital Communications	3	6							
424	EEE 437	Capstone Project 1	3	6							
425	EEE 448	Power Transmission and Distribution plants	3	6							
426	EEE 450	RF and Microwave Circuit Design	3	6							
427	EEE 451	High Voltage Engineering	3	6							
428	EEE 452	Power Systems Protection	3	6	ELCE 303 Power System Analysis (6180) (D and above)						

429	EEE 482	Mobile Communications	3	6	EEE 239 Communication systems (534) (C- and above)						
Mechanical and Aerospace Engineering											
430	EME 253	Computer Aided Engineering	3	6							
431	EME 254	Mechanics of Materials	3	6							
432	EME 262	Machine Dynamics I	3	6							
433	EME 354	Advanced Control Systems	3	6	BENG 219 Control Systems (728) (D and above)						
434	EME 358	Heat Transfer	3	6	BENG 226 Engineering Thermodynamics (1553) (D and above) AND EME 275 Fluid Mechanics I (1988) (D and above)						
435	EME 361	Machine Design	3	6							
436	EME 410	Aerodynamics	3	6	EME 357 Fluid Mechanics II (1280) (D and above)						
437	EME 412	Heating, Ventilating and Air Conditioning	3	6	MAE 301 Engineering Thermodynamics (5927) (D and above)						
438	EME 413	Computer Aided Geometric Design	3	6	EME 253 Computer Aided Engineering (1050) (C- and above)						
439	EME 451	Capstone Project 1	3	6							
440	EME 456	Feasibility Analysis of Clean Energy Technologies	3	6							
441	EME 463	Machine Dynamics II	3	6							
442	EME 467	Vehicle Propulsion Systems	3	6							
443	EME 486	Oscillation of Mechanical Systems	3	6							
Mining Engineering											
444	MINE 500	Foundations of Mining	3	6							
445	MINE 511	Applied Geostatistics	3	6							
446	MINE 512	Mining and Engineering Geology	3	6							
447	MINE 513	Rock Excavation Methods	3	6							
448	MINE 518	Advanced Rock Mechanics	3	6							

SMG											
449	DENG 783	Statistics	1.5	3							
School of Engineering											
450	BENG 405	Project Management	3	6							
451	DENG 782	Personal and Professional Skills Development	1.5	3							
452	DENG 784	Doctoral Proposal I	0	6							
453	DENG 794	Dissertation Research	12	24	DENG 785 PhD Proposal Oral Defence (2604) (P)						
SCAI											
Computer Science											
454	CSCI 151	Programming for Scientists and Engineers	4	8			CSCI 111 Web Programming and Problem Solving (110) (D and above) OR CSCI 115 Programming Fundamentals (5257) (D and above) OR ENG 101 Programming for Engineers (4517) (B- and above)	1 year UG SST	SST	SHSS	
455	CSCI 231	Computer Systems and Organization	3	6	CSCI 151 Programming for Scientists and Engineers (192) (C- and above)			Computer Science			
456	CSCI 241	Database Systems	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science			
457	CSCI 262	Software Project Management	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science	SST	SHSS	
458	CSCI 281	Human-Computer Interaction	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science	SST	SHSS	
459	CSCI 307	Computer Science Seminar	3	6				Computer Science			
460	CSCI 344	Data Mining and Decision Support	3	6	CSCI 341 Database Systems (195) (C- and above) AND MATH 273 Linear Algebra with Applications (84) (C- and above)			Computer Science			

461	CSCI 390	Artificial Intelligence	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Computer Science			
462	CSCI 408	Senior Project I	3	6				Computer Science			
463	CSCI 434	Information Security	3	6		CSCI 333 Computer Networks (1145) (D and above)		Computer Science			
464	CSCI 471	Complexity and Computability	3	6	MATH 251 Discrete Mathematics (85) (C- and above)			Computer Science			
465	CSCI 501	Software Principles and Practice	3	6							
466	CSCI 511	CS Track Core-Theory	3	6							
467	CSCI 525	Quantum Computing	3	6							
468	CSCI 545	Big Data Analytics	3	6							
469	SST 503	Laboratory Practicum	3	6	SEDS 502 Teaching Practicum (2824) (P)						
470	SST 591	Research Methods	3	6							
471	SST 693	Thesis Proposal	3	6	SEDS 591 Research Methods (3184) (C- and above)						
Mathematics											
472	MATH 109	Mathematical Discovery	3	6			MATH 161 Calculus I (118) (C- and above)	SHSS	SST		
473	MATH 161	Calculus I	4	8				1 year UG SST	SST	SHSS	
474	MATH 162	Calculus II	4	8	MATH 161 Calculus I (118) (C and above)			3 year UG SHSS, 4 year UG SHSS, Economics, SST	SHSS		
475	MATH 251	Discrete Mathematics	3	6	MATH 161 Calculus I (118) (C and above)			Computer Science, Mathematics	SST	SHSS	
476	MATH 263	Calculus III	4	8	MATH 162 Calculus II (170) (C and above)			3 year UG SHSS, 4 year UG SHSS, SST	SHSS		
477	MATH 273	Linear Algebra with Applications	4	8	MATH 161 Calculus I (118) (C and above)	MATH 162 Calculus II (170) (C and above)		4 year UG SHSS, SST	SHSS		
478	MATH 274	Introduction to Differential Equations	3	6	MATH 162 Calculus II (170) (C and above)			4 year UG SHSS, SST	SHSS		

479	MATH 301	Introduction to Number Theory	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)			Mathematics	SHSS, SST		
480	MATH 310	Applied Statistical Methods	3	6	MATH 161 Calculus I (118) (C and above)		MATH 321 Probability (482) (C and above)	2 year UG SST Biological Sciences, 2 year UG SST Computer Science, 3 year UG SST Biological Sciences, 3 year UG SST Computer Science, 4 year UG SST Biological Sciences, 4 year UG SST Computer Science, 5 year UG SST Biological Sciences, 5 year UG SST Computer Science	Mathematics, SHSS		
481	MATH 321	Probability	3	6	MATH 162 Calculus II (170) (C and above)		ECON 211 Economic Statistics (2280) (C- and above) OR PLS 211 Quantitative Methods (221) (C- and above)	4 year UG SHSS, Computer Science, Mathematics	SHSS, SST		
482	MATH 323	Actuarial Mathematics I	3	6	MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above) OR (MATH 162 Calculus II (170) (C and above) AND MATH 310 Applied Statistical Methods (82) (C and above))			Mathematics	SHSS, SST		
483	MATH 351	Numerical Methods with Applications	3	6	MATH 274 Introduction to Differential Equations (484) (C and above) AND MATH 263 Calculus III (81) (C and above)		ENG 202 Numerical Methods in Engineering (5506) (C and above)	Mathematics	SHSS, SST		
484	MATH 361	Real Analysis I	3	6	MATH 263 Calculus III (81) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)			Mathematics	SHSS, SST		
485	MATH 402	Abstract Algebra I	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 251 Discrete Mathematics (85) (C and above)			Mathematics	SHSS, SST		

486	MATH 411	Linear Programming	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 263 Calculus III (81) (C and above)			Mathematics	SHSS, SST		
487	MATH 425	Stochastic Processes	3	6	MATH 321 Probability (482) (C and above) OR ECON 211 Economic Statistics (2280) (C and above)			Mathematics	SHSS, SST		
488	MATH 440	Regression Analysis	3	6	MATH 322 Mathematical Statistics (1165) (C and above)		SOC 203 Quantitative Methods in Sociology (1377) (C and above) OR PLS 211 Quantitative Methods (221) (C and above)	Mathematics	SHSS, SST		
489	MATH 471	Nonlinear Differential Equations	3	6	MATH 273 Linear Algebra with Applications (84) (C and above) AND MATH 274 Introduction to Differential Equations (484) (C and above)			Mathematics	SHSS, SST		
490	MATH 481	Partial Differential Equations	3	6	MATH 274 Introduction to Differential Equations (484) (C and above)	MATH 480 Complex Analysis (618) (C and above)		Mathematics	SHSS, SST		
491	MATH 517	Scientific Modeling and Simulation with Mathematics	3	6							
492	MATH 540	Statistical Analysis	3	6							
Robotics and Mechatronics											
493	ROBT 201	Mechanics: Statics and Dynamics	3	6	MATH 162 Calculus II (170) (C- and above) AND (PHYS 161 Physics I for Scientists and Engineers with Laboratory (116) (C- and above) OR PHYS 171 Physics I for Physics Majors with Laboratory (1401) (C- and above))			Robotics and Mechatronics	SHSS, SST		

494	ROBT 203	Electrical and Electronic Circuits I with Lab	4	8	MATH 162 Calculus II (170) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above) OR (PHYS 141 Physics I for non-majors with Lab (1437) (C- and above) AND PHYS 142 Physics II for non-majors with Lab (1438) (C- and above)))			Robotics and Mechatronics	SHSS, SST		
495	ROBT 205	Signals and Sensing with Lab	4	8	MATH 162 Calculus II (170) (C- and above) AND (PHYS 162 Physics II for Scientists and Engineers with Laboratory (173) (C- and above) OR PHYS 172 Physics II for Physics Majors with Laboratory (1402) (C- and above))			Robotics and Mechatronics	SHSS, SST		
496	ROBT 301	Mechanical Design I	3	6	ROBT 201 Mechanics: Statics and Dynamics (475) (C- and above)			Robotics and Mechatronics	SHSS, SST		
497	ROBT 303	Linear Control Theory with Lab	4	8	ROBT 202 System Dynamics and Modeling (68) (C- and above)			Robotics and Mechatronics	SHSS, SST		
498	ROBT 305	Embedded Systems	3	6	ROBT 206 Microcontrollers with Lab (476) (C- and above)			Robotics and Mechatronics	SHSS, SST		
499	ROBT 307	Power Electronics	3	6	ROBT 204 Electrical and Electronic Circuits II with Lab (491) (C- and above)			Robotics and Mechatronics	SHSS, SST		
500	ROBT 401	Robot Dynamics and Control	3	6	ROBT 303 Linear Control Theory with Lab (623) (C- and above)			Robotics and Mechatronics	SHSS, SST		
501	ROBT 407	Statistical Methods and Machine Learning	3	6	MATH 273 Linear Algebra with Applications (84) (C- and above) AND MATH 321 Probability (482) (C- and above) AND CSCI 152 Performance and Data Structures (489) (C- and above)			Robotics and Mechatronics	SHSS, SST		
502	ROBT 414	Human-Robot Interaction	3	6	CSCI 152 Performance and Data Structures (489) (C- and above)			Robotics and Mechatronics	SHSS, SST		
503	ROBT 501	Robot Manipulation and Mobility	3	6							

504	ROBT 503	Dynamic Systems and Control	3	6							
505	ROBT 611	Industrial Robotics	3	6	ROBT 501 Advanced Robot Kinematics (2263) (C- and above)						
506	ROBT 613	Brain-Machine Interfaces	3	6							