DEPARTMENT OF MATHEMATICS AND STATISTICS

This is a schedule of courses that will be offered in 2017 - 2021.

 $This \, scheedule, \, together \, with \, the \, notes, \, indicates \, the \, pattern \, of \, course \, of ferings \, into \, the \, future.$

Courses not listed here may be offered from time to time.

Approved by consensus at the departmental council on January 26, 2017.

Approved		2017			2018		-		ai co					Notes
	_		WE	-	2018 SE F		_	_		WE	_	2020- <i>i</i> E FE		Notes
Mathematics Undergraduate Courses	30	FU	VVE	Ш)E F		wo	130	FO	VVE	J		WO	
62-101 Access to Differntial Calculus	П	1		П	1	1	I		1		I	1		Every Fall
62-102 Access to Linear Algebra.			1				1			1			_	Every Winter
62-120 Linear Algebra I	1	1	1	Ш	_	1	1	1		1	1		1	Every semester
62-125 Vectors and Linear Algebra 62-126 Linear Algebra (Engineering)		2	1	Н	_	2	1		2	1		2	1	Every Fall Every Fall and Winter
62-139 Functions and Differential Calculus	Н	2	1	H	_	_	1	Н	2	1	H	2	_	Every Fall and Winter
62-140 Differential Calculus		4	1		_	_	1		4	1		4		Every Fall and Winter
62-141 Integral Calculus	1		4	_	1		4	1		4	1	_	_	Every Winter and Summer
62-190 Mathematical Foundations	1	2	1		1 2	,	2	1		2	1			Every Winter and Summer
62-194: Mathematics for Business 62-215 Vector Calculus	1	2	2	_	_	2		1	2	2	1	2		Every term. 1 DE section in Winter Every Summer and Fall
62-216 Differential Equations	1	1	1	_	_	1	1	1	1	1	1	_	1	Every Fall and Winter and Summer
62-220 Linear Algebra II		1			1	1			1			1		Every Fall
62-221 Linear Algebra III		_	1	Ш		_	1			1			1	Every Winter
62-314 Introduction to Analysis I 62-315 Introduction to Analysis II		1	1	Н	1	1	1		1	1		1	1	Every Fall Every Winter
62-318 Complex Variables	Н		1	H	+	+	1	Н		1	H			Every Winter
62-321 Abstract Algebra		1			1	1	Ī		1		Т	1		Every Fall
62-322 Number Theory			1				1			1			1	Every Winter
62-342 Combinatorics		1		Н	+		_		1		-			Every Odd Fall (Alternates with 343)
62-343 Introduction to Graph Theory 62-360 Introduction to Fourier Series and Special Functions	┢		1	H	1	L	1	\vdash		1	+	1	1	Every Even Fall (Alternates with 342) Every Winter
62-369 Numerical Analysis for Computer Scientists	Н	1	Ė	Ħ	1	1		Н	1	_		1	1	Every Fall
62-374 Linear Programming		1			_	1			1			1		Every Fall
62-380 Numerical Methods		1			_	1			1			1		Every Fall
62-392 Financial Mathematics, Theory of Interest (with 502)	_	1	<u> </u>			1		1	1			1	<u> </u>	Every Fall
62-410 Measure Theory and Integration (with 510)	-	1	1	H	1	1	1	\vdash	1	1	+	1	1	Every Fall
62-413 Functional Analysis (with 512) 62-420 Introduction to Group Theory (with 520)	\vdash	1	1	H	1	1	1	\vdash	1	1	+	1	1	Every Winter Every Fall
62-422 Introduction to Field Theory (with 598-14)	Н	_		Ħ	Ť	-	1	Н	-			+-	1	Every Odd Winter (Alternates with 498-17)
62-482 Portfolio Optimization (with 598-38)							1						1	Every Odd Winter
62-490 Actuarial Mathematics I (with 505)			1				1			1			1	Every Winter
62-492 Actuarial Mathematics II (with 506)	-	1		H		1 1	-	\vdash	1		+	1		Every Fall
62-498-12 General Topolgy (with 530) 62-498-17 Introduction to Ring Theory (with 521)	Н	1	1	H	+	L	-	+	1	1	+	1		Every Fall Every Even Winter (Alternates with 422)
Mathematics Graduate Courses						!_		1					1	erery eren traiter paternates than 1227
62-510 Functions of a Real Variable I (with 410)		1			1	l			1			1		Every Fall
62-512 Functional Analysis I (with 413)			1	Ш			1			1			1	Every Winter
62-520 Abstract Algebra (with 420) 62-521 Ring Theory and Modules (with 498-17)		1	1	Н	1	1	-		1	1		1		Every Fall Every Even Winter (Alternates with 598-14)
62-530 General Topology (with 498-12)	Н	1	1	H	1	1	-	+	1	1	+	1		Every Fall
62-598-14 Field Theory (with 422)		_					1		_			1	1	Every Odd Winter (Alternates with 521)
62-598-38 Portfolio Optimization (with 482)							1						1	Every Odd Winter
Statistics Undergraduate Courses							. 1		1 2				-	E
65-205 Statistics for Sciences 65-250 Introduction to Probability	1	2	2	H		1	2	1	1	2	1	1	2	Every term. 1 DE section in Fall Every Fall
65-251 Introduction to Statistics	Н	_	1	H	+	-	1	Н	_	1	Н	+	1	Every Winter
65-350 Probability		1			1	1			1			1		Every Fall
65-351 Statistics			1	Ш			1			1			_	Every Winter
65-376 Stochastic Operations Research 65-452 Experimental Design (with 552)			1	Н	-	4	1			1		-		Every Winter
65-454 Sampling Theory (with 554)	┢	1		H	_		-	Н	1		+	+-	1	Every Odd Winter (65-452 and 455-23 alternate) Every Odd Fall (65-455-03 and 65-454 alternate)
65-455-03 Generalized Linear Models (with 550)	Н	1		Ħ	1	1		Н	Ť		т	1		Every Odd Fall (65-455-03 and 65-454 alternate)
65-455-05 Statistical Data Analysis (with 546)		1								1				Fall and Winter: 65-455-08, 455-15, 455-05, 455-11, 455-07 cycle.
65-455-07 Survival Analysis (with 559-07)				Ш	1	1	_						1	Fall and Winter: 65-455-08, 455-15, 455-05, 455-11, 455-07 cycle.
65-455-08 Stochastic Processes (with 541) 65-455-09 Actuarial Regression & Time Series (with 97-520)			1	Н	1		1			1			1	Fall and Winter: 65-455-08, 455-15, 455-05, 455-11, 455-07 cycle. Every Winter / except for 2018-2019 when it is in the summer
65-455-11 Discrete Multivariate Analysis (with 549)	Н		1	H	_		_			-		1	_	Fall and Winter: 65-455-08, 455-15, 455-05, 455-11, 455-07 cycle.
65-455-15 Statistical Consulting (with 559-15)		L	Ė	Ħ					1			Ī		Fall and Winter: 65-455-08, 455-15, 455-05, 455-11, 455-07 cycle.
65-455-23 Regression Analysys (with 555)			1	П						1				Every Even Winter (65-452 and 455-23 alternate)
Statistics Graduate Courses													1	[- - - - - - - - - -
65-541 Stochastic Processes (with 455-08) 65-542 Advanced Mathematical Statistics	┢	1		H	1	1	1	\vdash	1		₽	1		Fall and Winter: 65-541, 559-15, 546, 549, 559-7 cycle. Every Fall
65-543 Statistical Inference	Н	-	1	H	+	-	1	Н	-	1	-	+-	1	Every Winter
65-546 Statistical Data Analysis (with 455-05)	Т	1	Ť	Ħ		1	1			1		+	Ť	Fall and Winter: 65-541, 559-15, 546, 549, 559-7 cycle.
65-549 Discrete Multivariate Analysis (with 455-11)			1						L			1		Fall and Winter: 65-541, 559-15, 546, 549, 559-7 cycle.
65-550 Generalized Linear Models (with 455-03)				П	1	1	П				Γ	1		Every Even Fall (65-550 and 65-554 alternate)
65-552 Experimental Design (with 452)	\vdash	_	<u> </u>	H		4	1		_	Ш		1	1	Every Odd Sall (C5 550 and C5 554 alternate)
65-554 Sampling and Surveys (with 454) 65-555 Regression Analysis (with 455-23)	\vdash	1	1	H		+		\vdash	1	1	+	-	 	Every Odd Fall (65-550 and 65-554 alternate) Every Even Winter (65-552 and 555 alternate)
65-559-07 Survival Analysis (with 455-07)	1		_	H	1	1		1	\vdash	Ė	+	+	1	Fall and Winter: 65-541, 559-15, 546, 549, 559-7 cycle.
65-559-15 Statistical Consulting (with 455-15)									1					Fall and Winter: 65-541, 559-15, 546, 549, 559-7 cycle.
Actuarial Science Graduate Courses														
Actuarial Science Graduate Courses		1	<u> </u>		1	_		\vdash	1			1	 	Every Fall
97-501 Probability For Risk and Actuarial Science			4			1	1	\vdash	1	1	+	1		Every Fall Every Winter
97-501 Probability For Risk and Actuarial Science 97-502 Financial Mathematics, Theory of Interest (with 392)	H	1	1								and the same		1 1	Every vvincer
97-501 Probability For Risk and Actuarial Science	1	1	1		1	+	1	1			1	L		Every Summer
97-501 Probability For Risk and Actuarial Science 97-502 Financial Mathematics, Theory of Interest (with 392) 97-503 Derivatives Markets I	1	1	1		1		1	1		1	1	L	1	Every Summer Every Winter
97-501 Probability For Risk and Actuarial Science 97-502 Financial Mathematics, Theory of Interest (with 392) 97-503 Derivatives Markets I 97-504 Derivatives Markets II 97-505 Life Contingencies I (with 490) 97-506 Life Contingencies II (with 492)	1	1			1	1		1	1	1	1	1	1	Every Winter Every Fall
97-501 Probability For Risk and Actuarial Science 97-502 Financial Mathematics, Theory of Interest (with 392) 97-503 Derivatives Markets I 97-504 Derivatives Markets II 97-505 Life Contingencies I (with 490) 97-506 Life Contingencies II (with 492) 97-507 Special Topics in Actuarial Science					1	1		Ė	1 1	1		1 1	1	Every Winter Every Fall Every Fall
97-501 Probability For Risk and Actuarial Science 97-502 Financial Mathematics, Theory of Interest (with 392) 97-503 Derivatives Markets I 97-504 Derivatives Markets II 97-505 Life Contingencies I (with 490) 97-506 Life Contingencies II (with 492)	1	1			1	_		1		1	1	1 1	1	Every Winter Every Fall