

Oral Communications. 3 pts.

Course Description

This course is practice-oriented, aimed at equipping you with the oral communication skills you need to succeed in English-speaking business and social contexts. You will practice planning and delivering an engaging presentation, participating successfully in meetings and negotiations, and communicating fluently and appropriately in social and professional settings. Throughout the course, your instructor will provide practice and feedback to help you improve your English pronunciation, fluency, and grammar.

- **BUSI K4850. Oral Communications: Business. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: BUSI K4850					
BUSI 4850	22496 001	MW 2:00p - 4:30p TBA	Sandy L Singer	0 / 22	[More Info]

BUSI K4003Q (Section 001). Corporate Finance. 3 pts.

Prerequisite

BUSI K4001 Introduction to Finance/or Professor Approval is required

Course Description

Students will learn the critical corporate finance concepts including: financial statement analysis; performance metrics; valuation of stocks and bonds; project and firm valuation; cost of capital; capital investment strategies and sources of capital, and firm growth strategies. At the end of this course students will understand how to apply these concepts to current business problems.

- **BUSI K4003Q (Section 001). Corporate Finance. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: BUSI K4003					
BUSI 4003	83496 001	MW 6:10p - 9:30p TBA	B. Mallee	2 / 50	[More Info]

BUSI 4009. Financial Accounting. 3 pts.

Prerequisite

None

Course Description

Students will examine the generally accepted account principles (GAAP) underlying financial statements and their implementation in practice. The perspective and main focus of the course is from the users of the information contained in the statements, including investors, financial analysts, creditors and, management. By the end of this class students will be able to construct a cash flow statement, balance sheet and decipher a 10K report.

- **BUSI K4009Q (Section 001). Financial Accounting. 3 pts. Runs from the week of Jul 05 to Aug 12**

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: BUSI K4009					
BUSI 4009	96796 001	MW 6:10p - 9:30p TBA	M. Blatter	3 / 50	[More Info]

BUSI K4040Q. Security Analysis. 3 pts.

Prerequisite

BUSI K4001 Intro to Finance and BUSI K4003 Corporate Finance or Professor Approval required

Course Description

Students will learn about the valuation of publicly traded equity securities. By the end of the semester students will be able to perform fundamental analysis ("bottoms-up," firm-level, business and financial analysis), prepare pro forma financial statements, estimate free cash flows and apply valuation models.

- **BUSI K4040Q. Security Analysis. 3 pts. Runs from the week of Jul 05 to Aug 12**

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: BUSI K4040					
BUSI 4040	78029 001	TuTh 6:10p - 9:30p TBA	G. Miller	1 / 50	[More Info]

COMS S3134Q. Data Structures in JAVA. 3 pts.

Prerequisite

COMS W1004 or knowledge of JAVA

Course Description

Not intended for computer science majors. Data types and structures: arrays, stacks, singly and doubly linked lists, queues, trees, sets, and graphs. Programming techniques for processing such structures: sorting and searching, hashing, garbage collection. Storage management. Rudiments of the analysis of algorithms. Taught in Java. Note: Due to significant overlap, students may receive credit for only one of the following four courses: COMS W3133, W3134, W3137, and W3139.

- **COMS S3134Q. Data Structures in JAVA. 3 pts. Due to significant overlap, students may receive credit for only one of the following three courses: W3134, W3136, and W3137. Runs from the week of Jul 05 to Aug 12**

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
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Summer 2016 :: COMS S3134					
COMS	67500	MW 5:30p - 8:40p	P. Blaer	14	[More Info]
3134	001	TBA			

COMS S4115Q. Programming Languages and Translators. 3 pts.

Prerequisite

COMS W3134, COMS W3136, or COMS W3137(or equivalent), COMS W3261 Computer Science Theory, and CSEE W3827 Fundamentals of Computer Systems, or the instructor's permission.

Course Description

Modern programming languages and compiler design. Imperative, object-oriented, declarative, functional, and scripting languages. Language syntax, control structures, data types, procedures and parameters, binding, scope, run-time organization, and exception handling. Implementation of language translation tools including compilers and interpreters. Lexical, syntactic and semantic analysis; code generation; introduction to code optimization. Teams implement a language and its compiler.

- **COMS S4115Q. Programming Languages and Translators. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: COMS S4115					
COMS	22942	MW 5:30p - 8:40p	S. Edwards	9	[More Info]
4115	001	TBA			

COMS S4771. Machine Learning. 3 pts.

Prerequisite

Any introductory course in linear algebra and any introductory course in statistics are both required. Highly recommended: COMS W4701 or knowledge of Artificial Intelligence.

Course Description

Topics from generative and discriminative machine learning including least squares methods, support vector machines, kernel methods, neural networks, Gaussian distributions, linear classification, linear regression, maximum likelihood, exponential family distributions, Bayesian networks, Bayesian inference, mixture models, the EM algorithm, graphical models and hidden Markov models. Algorithms implemented in Matlab.

- **COMS S4771D. Machine Learning. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: COMS S4771					
COMS 4771	68698 002	MW 5:30p - 8:40p TBA	G. Creamer	5	[More Info]

MATH S1003D. College Algebra and Analytic Geometry. 3 pts.

Prerequisite

Mathematics score of 550 on the SAT exam, taken within the past year

Course Description

Recommended preparation: Math S0065. Algebra review, graphs and functions, polynomial functions, rational functions, conic sections, systems of equations in two variables, exponential and logarithmic functions, trigonometric functions and trigonometric identities, applications of trigonometry, sequences, series, and limits.

- **MATH S1003D. College Algebra and Analytic Geometry. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S1003					
MATH 1003	75683 002	MTuWTh 10:00a - 12:25p 407 MATHEMATICS BUILDING	V. Petkov	2 / 49	[More Info]

ECON S3025Q. Financial Economics. 3 pts.

Prerequisite

Intermediate Microeconomics (ECON W3211), Intermediate Macroeconomics(W3213), and Intro to Statistics with Calculus (STAT W1211)

Course Description

Topics include behavior uncertainty, expected utility hypothesis, insurance, portfolio choice, principle agent problems, screening and signaling, and information theories of financial intermediation.

- **ECON S3025Q. Financial Economics. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: ECON S3025					
ECON 3025	60638 001	MTuWTh 11:00a - 12:35p TBA	Instructor To Be Announced	8	[More Info]

MATH S1101Q (Section 2). Calculus, I. 3 pts.

Prerequisite

High school mathematics through trigonometry or MATH S1003, or the equivalent

Course Description

Functions, limits, derivatives, introduction to integrals.

- **MATH S1101Q (Section 2). Calculus, I. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S1101					
MATH 1101	23430 002	MTuWTh 10:45a - 12:20p 520 MATHEMATICS BUILDING	Z. Huang	1 / 64	[More Info]

MATH S1102Q (Section 2). Calculus, II. 3 pts.

Prerequisite

MATH S1101, or the equivalent.

Course Description

Methods of integration, applications of the integral, Taylor's theorem, infinite series.

- **MATH S1102Q (Section 2). Calculus, II. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S1102					
MATH 1102	27060 002	MTuWTh 4:30p - 6:05p 407 MATHEMATICS BUILDING	X. Wu	3 / 49	[More Info]

MATH S1201Q (Section 2). Calculus, III. 3 pts.

Prerequisite

MATH S1102, or the equivalent; Columbia College students who aim at an economics major AND have at least the grade of B in Calculus I may take Calculus III directly after Calculus I. However, all students majoring in engineering, science, or mathematics should follow Calculus I with Calculus II

Course Description

Vectors in dimensions 2 and 3, complex numbers and the complex exponential function with applications to differential equations, Cramer's rule, vector-valued functions of one variable, scalar-valued functions of several variables, partial derivatives, gradients, surfaces, optimization, the method of Lagrange multipliers.

- **MATH S1201Q (Section 2). Calculus, III. 3 pts.**
Runs from the week of May 26 to Jul 02

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S1201					
MATH 1201	18149 002	MTuWTh 6:15p - 7:50p 417 MATHEMATICS BUILDING	S. Li	6 / 64	[More Info]

MATH S1202Q (Section 2). Calculus, IV. 3 pts.

Prerequisite

MATH S1201, or the equivalent

Course Description

Double and triple integrals. Change of variables. Line and surface integrals. Grad, div, and curl. Vector integral calculus: Green's theorem, divergence theorem, Stokes' theorem.

- **MATH S1202Q (Section 2). Calculus, IV. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S1202					
MATH 1202	25844 002	MTuWTh 4:30p - 6:05p 417 MATHEMATICS BUILDING	P. Lee	2 / 35	[More Info]

MATH S2010Q (Section 2). Linear Algebra. 3 pts.

Prerequisite

MATH S1201, or the equivalent

Course Description

Matrices, vector spaces, linear transformation, Eigenvalues and Eigenvectors, canonical forms, applications.

- **MATH S2010Q (Section 2). Linear Algebra. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S2010					
MATH 2010	16933 002	MTuWTh 6:15p - 7:50p 407 MATHEMATICS BUILDING	Q. Li	3 / 35	[More Info]

MATH S3027Q (Section 2). Ordinary Differential Equations. 3 pts.

Prerequisite

MATH S1201, or the equivalent.

Course Description

Equations of order one, linear equations, series solutions at regular and singular points. Boundary value problems. Selected applications.

- **MATH S3027Q (Section 2). Ordinary Differential Equations. 3 pts.**
Runs from the week of May 26 to Jul 02

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S3027					
MATH 3027	63435 002	MTuWTh 4:30p - 6:05p 203 MATHEMATICS BUILDING	H. Chang-Lara	2 / 64	[More Info]

MATH S4062Q. Introduction to Modern Analysis, II. 3 pts.

Prerequisite

MATH S4061, or the equivalent with the instructor's permission

Course Description

Equicontinuity. Contraction maps with applications to existence theorems in analysis. Lebesgue measure and integral. Fourier series and Fourier transform.

- **MATH S4062Q. Introduction to Modern Analysis, II. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: MATH S4062					
MATH 4062	15717 001	MTuWTh 10:45a - 12:20p 417 MATHEMATICS BUILDING	G. Di Cerbo	4 / 64	[More Info]

STAT S1111Q. Introduction to Statistics (without calculus). 3 pts.

Prerequisite

Some high school algebra

Course Description

Designed for students in fields that emphasize quantitative methods. This course satisfies the statistics requirements of all majors except statistics, economics, and engineering. Graphical and numerical summaries, probability, theory of sampling distributions, linear regression, confidence intervals, and hypothesis testing are taught as aids to quantitative reasoning and data analysis. Use of statistical software required. Illustrations are taken from a variety of fields. Data-collection/analysis project with emphasis on study designs is part of the coursework requirement.

- **STAT S1111Q. Introduction to Statistics (without calculus). 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/Section	Days & Times/Location	Instructor	Enrollment	
Summer 2016 :: STAT S1111					
STAT 1111	26226 002	MTuWTh 6:15p - 7:50p TBA	Instructor To Be Announced	0	[More Info]

STAT S1211. Introduction to Statistics (with calculus). 3 pts.

Prerequisite

Working knowledge of calculus (differentiation and integration)

Course Description

Designed for students who desire a strong grounding in statistical concepts with a greater degree of mathematical rigor than in STAT W1111. Random variables, probability distributions, pdf, cdf, mean, variance, correlation, conditional distribution, conditional mean and conditional variance, law of iterated expectations, normal, chi-square,

F and t distributions, law of large numbers, central limit theorem, parameter estimation, unbiasedness, consistency, efficiency, hypothesis testing, p-value, confidence intervals. maximum likelihood estimation. Satisfies the prerequisites for ECON W3412.

- **STAT S1211Q. Introduction to Statistics (with calculus). 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: STAT S1211					
STAT 1211	17315 002	MTuWTh 6:15p - 7:50p TBA	B. Baydil	3	[More Info]

STAT S4107Q. Statistical Inference. 3 pts.

Prerequisite

STAT W3105 or W4105, or the equivalent

Course Description

Calculus-based introduction to the theory of statistics. Useful distributions, law of large numbers and central limit theorem, point estimation, hypothesis testing, confidence intervals, maximum likelihood, likelihood ratio tests, nonparametric procedures, theory of least squares and analysis of variance.

- **STAT S4107Q. Statistical Inference. 3 pts.**
Runs from the week of Jul 05 to Aug 12

Course Number	Call Number/ Section	Days & Times/ Location	Instructor	Enrollment	
Summer 2016 :: STAT S4107					
STAT	68351	MTuWTh 6:15p - 7:50p	A. Safikhani	5	[More Info]

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TBA