Mathematics Courses: Summer 2024

MATH100403

Finite Probability and Applications

Geist, Nathan T

Summer 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: On-line Asynchronous Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100404

Finite Probability and Applications Lema Perez, Joaquin Ignacio

Summer 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: On-line Asynchronous **Satisifies Core Requirement:** Mathematics

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100601

Thinking Like a Mathematician Belding, Juliana V;Ward, Erika;Zhang, Liyang Summer 2024

This course is designed for students with a desire to expand their problem-solving skills and strategies. Students will develop a flexible and transferable collection of skills and strategies for tackling unfamiliar problems in Mathematics and beyond, which will be helpful for quantitative aspects of STEM majors. In addition, students will work with select mathematics topics commonly used in General Chemistry, including rational expressions, exponential and logarithmic functions, dimensional analysis, and working with parameters.

Credits: 1

Room and Schedule: Maloney Hall 560 MTuWThF 10:00AM-11:45AM

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH103301

Introduction to Finite Math for OTE Haddad, Juliette M

Summer 2024

Introduction to Finite Math for OTE

Credits: 3

Room and Schedule: Stokes Hall 205S MTuThF 11:40AM-12:25PM; Stokes Hall 205S MTuWThF

09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None

Frequency: Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH103501

Intro to Probability and Statistics for OTE

Doherty, Amy L Summer 2024

TBD

Credits: 3

Room and Schedule: Stokes Hall 203S MTuThF 11:40AM-12:25PM; Stokes Hall 203S MTuWThF

09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH103601

Intro to Calculus for OTE

Lambert, Gerard S

Summer 2024

TBD

Credits: 3

Room and Schedule: Stokes Hall 217N MTuThF 11:40AM-12:25PM;Stokes Hall 217N MTuWThF

09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Summer

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110001

Calculus I

Gerraughty, Lorin E

Summer 2024

MATH1100 is not open to students who have completed a calculus course at the college level. Students contemplating majors in Chemistry, Computer Science/B.S., Environmental Geosciences, Geological Sciences, Mathematics, or Physics should enroll in MATH1102.For further information about selecting your Math courses given your background, please see this link to the BC Math Department. MATH1100 is a first course in the calculus of one variable intended for biology, computer science, economics, management, and premedical students. It is open to others who are qualified and desire a more rigorous mathematics course at the core level. Topics include a brief review of polynomials and trigonometric, exponential, and logarithmic functions, followed by discussion of limits, derivatives, and applications of differential calculus to real-world problem areas. The course concludes with an introduction to integration.

Credits: 3

Room and Schedule: On-line Asynchronous **Satisifies Core Requirement:** Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110002

Calculus I

Gerraughty, Lorin E

Summer 2024

MATH1100 is not open to students who have completed a calculus course at the college level. Students contemplating majors in Chemistry, Computer Science/B.S., Environmental Geosciences, Geological Sciences, Mathematics, or Physics should enroll in MATH1102.For further information about selecting your Math courses given your background, please see this link to the BC Math Department. MATH1100 is a first course in the calculus of one variable intended for biology, computer science, economics, management, and premedical students. It is open to others who are qualified and desire a more rigorous mathematics course at the core level. Topics include a brief review of polynomials and trigonometric, exponential, and logarithmic functions, followed by discussion of limits, derivatives, and applications of differential calculus to real-world problem areas. The course concludes with an introduction to integration.

Credits: 3

Room and Schedule: On-line Asynchronous **Satisifies Core Requirement:** Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110003 Calculus I

Gerraughty, Lorin E

Summer 2024

Credits: 3

Room and Schedule: On-line Asynchronous **Satisifies Core Requirement:** Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110301

Calculus II (Mathematics/Science Majors)

Goldstein, Ellen J

Summer 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 3

Room and Schedule: On-line Asynchronous **Satisifies Core Requirement:** Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490101

Readings and Research

Cheung, Chi-Keung

Summer 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490102

Readings and Research

Cheung, Chi-Keung

Summer 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

Mathematics Courses: Fall 2024

MATH100201

Functions and Differential Calculus Goldstein, Ellen J

Fall 2024

This course is intended for students who are required to take Calculus I (either MATH1100 or MATH1102) but whose backgrounds necessitate additional preparation. Topics include the real line and coordinate plane; linear and quadratic functions; higher degree polynomials and rational functions; trigonometry, emphasizing the trigonometric functions; and exponential and logarithmic functions. Note: This course does not satisfy the University Core Requirement in Mathematics. Department permission is required: see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: O'Neill Library 246 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100202

Functions and Differential Calculus Goldstein, Ellen J Fall 2024 This course is intended for students who are required to take Calculus I (either MATH1100 or MATH1102) but whose backgrounds necessitate additional preparation. Topics include the real line and coordinate plane; linear and quadratic functions; higher degree polynomials and rational functions; trigonometry, emphasizing the trigonometric functions; and exponential and logarithmic functions. Note: This course does not satisfy the University Core Requirement in Mathematics. Department permission is required: see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: O'Neill Library 246 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100401

Finite Probability and Applications

Doherty, Amy L

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100402

Finite Probability and Applications

Doherty, Amy L

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100403

Finite Probability and Applications

Fu, Yaoying Fall 2024 Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100404

Finite Probability and Applications Lema Perez, Joaquin Ignacio

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Higgins Hall 225 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100406

Finite Probability and Applications

Geist, Nathan T

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: O'Neill Library 246 MWF 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None
Status: Offered

MATH100701

Ideas in Mathematics

Ward, Erika

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson. This course is designed to introduce the student to the spirit, beauty, and vitality of mathematics. The emphasis is on development of ideas rather than problem solving skills. Topics vary, but are typically chosen from diverse areas such as geometry, number theory, computation, and graph theory.

Credits: 3

Room and Schedule: Gasson Hall 309 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100702

Ideas in Mathematics

Ward, Erika

Fall 2024

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson. This course is designed to introduce the student to the spirit, beauty, and vitality of mathematics. The emphasis is on development of ideas rather than problem solving skills. Topics vary, but are typically chosen from diverse areas such as geometry, number theory, computation, and graph theory.

Credits: 3

Room and Schedule: Gasson Hall 309 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110001

Calculus I

Belding, Juliana V

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 10:00AM-10:50AM; Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110002

Calculus I

Belding, Juliana V

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 11:00AM-11:50AM;Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

MATH110004

Calculus I

Fanelle, Sophia M

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110005

Calculus I

Assigned, Dept;Teplitskiy, Mayah

Credits: 0

Room and Schedule: Mcguinn Hall 30 Tu 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110007

Calculus I

Assigned, Dept;Fanelle, Sophia M

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110008

Calculus I

Assigned, Dept;Fanelle, Sophia M

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 08:00AM-08:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110009

Calculus I

Moss, Eric

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 12:00 Noon-12:50PM;Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110010

Calculus I

Yavuz, Cemre

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 01:00PM-01:50PM; Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110012

Calculus I

Dept;Feng, Enhao

Credits: 0

Room and Schedule: Mcguinn Hall 30 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110013

Calculus I

Dept;Feng, Enhao

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110014

Calculus I

Dept;Lyu, Qingfeng

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

MATH110015

Calculus I

Dept;Feng, Enhao

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate **Comments:** None

Status: Offered

MATH110016
Calculus I
Dept;Lyu, Qingfeng

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110017
Calculus I
Ganapathy, Gomathy

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm; Stokes Hall 115S MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110018

Calculus I

Dept;Teplitskiy, Mayah

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110019

Calculus I

Han, Zijian

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm; Stokes Hall 203S MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110020

Calculus I

Assigned, Dept;Khanna, Harshul

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110021

Calculus I

Assigned, Dept; Wang, Mujie

Credits: 4

Room and Schedule: Gasson Hall 207 MWF 01:00PM-01:50PM;Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110022

Calculus I

Assigned, Dept;Isayev, Edward

Credits: 0

Room and Schedule: Mcguinn Hall 30 Tu 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110023

Calculus I

Ward, Erika

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 02:00PM-02:50PM; Monday 7:15-8:45 pm

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110024

Calculus I

Assigned, Dept;Isayev, Edward

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110025

Calculus I

Assigned, Dept;Teplitskiy, Mayah

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110026

Calculus I

Assigned, Dept;Isayev, Edward

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110028

Calculus I

Assigned, Dept;Lyu, Qingfeng

Credits: 0

Room and Schedule: Mcguinn Hall 30 Tu 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110029

Calculus I

Fang, Tingting

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm; Stokes Hall 133S MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

MATH110030

Calculus I

Assigned, Dept;Liu, Tianxiang

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm; Stokes Hall 286S MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110031

Calculus I

Assigned, Dept;Khanna, Harshul

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110032

Calculus I

Yan, Yuzheng

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm;O'Neill Library 248 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None

Status: Offered

MATH110034

Calculus I

Assigned, Dept;Tee, Ming Hong

Credits: 4

Room and Schedule: Monday 7:15-8:45 pm; Stokes Hall 203S MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110035

Calculus I

Assigned, Dept;Khanna, Harshul

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110101

Calculus II

Yavuz, Cemre

Credits: 4

Room and Schedule: Gasson Hall 306 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110102

Calculus II

Yavuz, Cemre

Credits: 4

Room and Schedule: Gasson Hall 306 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110103

Calculus II

Assigned, Dept; Winters, Ethan

Credits: 0

Room and Schedule: Gasson Hall 301 Th 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110104

Calculus II

Assigned, Dept; Winters, Ethan

Credits: 0

Room and Schedule: Gasson Hall 301 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110105

Calculus II

Assigned, Dept; Winters, Ethan

Credits: 0

Room and Schedule: Gasson Hall 301 Th 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110201

Calculus I (Mathematics/Science Majors)

Slyman, Katherine

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 4

Room and Schedule: Gasson Hall 310 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Permission of Department

Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110202

Calculus I (Mathematics/Science Majors)

Slyman, Katherine

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 4

Room and Schedule: Gasson Hall 310 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110203

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Ramakrishnan, Pranavkrishnan

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 302 Th 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110204

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Ramakrishnan, Pranavkrishnan

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 301 Th 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110205

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Ramakrishnan, Pranavkrishnan

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110206

Calculus I (Mathematics/Science Majors)

Moss, Eric Fall 2024 Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 4

Room and Schedule: Gasson Hall 204 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110207

Calculus I (Mathematics/Science Majors)

Moss, Eric

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 4

Room and Schedule: Gasson Hall 202 MWF 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110208

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Brown, Sarah V

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 302 Th 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110209

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Brown, Sarah V

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 302 Th 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110210

Calculus I (Mathematics/Science Majors)

Assigned, Dept;Brown, Sarah V

Fall 2024

Not open to students who have completed a calculus course at the college level.. MATH1102 is a first course in the calculus of one variable intended for Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics, and Physics majors. It is open to others who are qualified and desire a more rigorous calculus course than MATH1100. Topics covered include the algebraic and analytic properties of the real number system, functions, limits, derivatives, and an introduction to integration.

Credits: 0

Room and Schedule: Gasson Hall 302 Th 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110301

Calculus II (Mathematics/Science Majors)

Zhang, Liyang

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Campion Hall 204 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110302

Calculus II (Mathematics/Science Majors)

Zhang, Liyang

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Campion Hall 231 MWF 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110303

Calculus II (Mathematics/Science Majors)

Assigned, Dept;Zimmerman, Arieh

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110304

Calculus II (Mathematics/Science Majors)

Assigned, Dept;Zimmerman, Arieh

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None

Frequency: Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110305

Calculus II (Mathematics/Science Majors)

Assigned, Dept;Zimmerman, Arieh

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110306

Calculus II (Mathematics/Science Majors)

Roy, Agniva

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110307

Calculus II (Mathematics/Science Majors)

Roy, Agniva

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None
Status: Offered

MATH110308

Calculus II (Mathematics/Science Majors)

Martinez Alvarez, Jordi Andres

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None **Cross-listed with:** None

Frequency: Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110309

Calculus II (Mathematics/Science Majors)

Assigned, Dept; Martinez Alvarez, Jordi Andres

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110310

Calculus II (Mathematics/Science Majors)

Assigned, Dept; Martinez Alvarez, Jordi Andres

Fall 2024

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 306 Th 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH119001

Fundamentals of Mathematics I Goldstein, Ellen J

Fall 2024

Restricted to Lynch School of Education students.. MATH1190-1191 is a course sequence designed for those who plan to teach mathematics in grades K-8. The emphasis is on building conceptual understanding of the mathematics present in the emerging K-8 curriculum and on deepening content knowledge. Number and number systems through the real number system will be studied; functions and the structure of algebra will be developed. Problem solving and reasoning, applications and making connections will be featured.

Credits: 3

Room and Schedule: Stokes Hall 295S MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220201

Multivariable Calculus

Gross, Robert

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 202 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220202

Multivariable Calculus

Gross. Robert

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 204 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220203

Multivariable Calculus Dept;Schmidt, August

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 301 Th 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220204

Multivariable Calculus Dept;Schmidt, August

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 301 Th 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220205

Multivariable Calculus Dept;Schmidt, August

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 302 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220206

Multivariable Calculus

Assigned, Dept; Hameister, Thomas

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 202 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220207

Multivariable Calculus

Assigned, Dept; Hameister, Thomas

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Stokes Hall 201S MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220208

Multivariable Calculus

Dept; Naseri Sadr, Seyed Ali

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220209

Multivariable Calculus

Dept;Naseri Sadr, Seyed Ali

Fall 2024

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220210

Multivariable Calculus

Dept;Naseri Sadr, Seyed Ali

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220301

Multivariable Calculus (Honors)

Reeder. Mark

Fall 2024

TBD

Credits: 4

Room and Schedule: Stokes Hall 295S MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220302

Multivariable Calculus (Honors)

Reeder, Mark

Fall 2024

TBD

Credits: 0

Room and Schedule: Gasson Hall 302 Th 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH221001

Linear Algebra

Kelmer, Dubi

Fall 2024

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 206 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221002

Linear Algebra

Ash, Avner D

Fall 2024

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221003

Linear Algebra

Ash. Avner D

Fall 2024

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 03:00PM-03:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221004

Linear Algebra

Kelmer, Dubi

Fall 2024

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 206 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221601

Introduction to Abstract Mathematics

Bridgeman, Martin

Fall 2024

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221602

Introduction to Abstract Mathematics

Biringer, Ian P

Fall 2024

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Gasson Hall 201 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221604

Introduction to Abstract Mathematics

Biringer, Ian P

Fall 2024

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Gasson Hall 202 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH225001

Mathematical Foundations of Data Science

Zhang, Liyang

Fall 2024

Introduction to the mathematical foundations of data science, including calculus, linear algebra and probability. The first part of the course covers linear algebra, including matrices, systems of linear equations, vector spaces, and eigenvalues and eigenvectors. The second part of the course introduces random variables and provides an introduction to calculus based probability. The third part of the course introduces optimization techniques used in data science. Prerequisite:Math 1101 or Math 1103 or equivalent Calculus 2 background.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH331001

Introduction to Abstract Algebra

Boninger, Joseph

Fall 2024

Students may not take both MATH3310 and MATH3311.. This course studies four fundamental algebraic structures: groups, including subgroups, cyclic groups, permutation groups, symmetry groups, and Lagrange's Theorem; rings, including sub-rings, integral domains, and unique factorization domains; polynomials, including a discussion of unique factorization and methods for finding roots; and fields, introducing the basic ideas of field extensions and ruler and compass constructions.

Credits: 3

Room and Schedule: Gasson Hall 209 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2210/ADMT2210 or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH331101

Algebra I

Madapusi, Keerthi S

Fall 2024

Students may not take both MATH3310 and MATH3311.. This course, with MATH3312, studies the basic structures of abstract algebra. Topics include groups, subgroups, factor groups, Lagrange's Theorem, the Sylow Theorems, rings, ideal theory, integral domains, field extensions, and Galois theory.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2210/ADMT2210 or Permission of Department

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH332001

Introduction to Analysis

Cheung, Chi-Keung

Students may not take both MATH3320 and MATH3321.. This course gives students the theoretical foundations for the topics taught in Calculus. It covers algebraic and order properties of the real numbers, the least upper bound axiom, limits, continuity, differentiation, the Riemann integral, sequences, and series. Definitions and proofs will be stressed throughout the course.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2202 or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH332101

Analysis I

Reeder, Mark

Fall 2024

Students may not take both MATH3320 and MATH3321.. This course, with MATH3322, studies the basic structure of the real numbers. Topics include the least upper bound principle, compactness of closed intervals (the Heine-Borel theorem), sequences, convergence, the Bolzano-Weierstrass theorem, continuous functions, boundedness and intermediate value theorems, uniform continuity, differentiable functions, the mean value theorem, construction of the Riemann integral, the fundamental theorem of calculus, sequences and series of functions, uniform convergence, the Weierstrass approximation theorem, special functions (exponential and trig), and Fourier series.

Credits: 3

Room and Schedule: Gasson Hall 301 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2202 or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH431201

Logic for Mathematicians and for Computer Scientists

Straubing, Howard

Fall 2024

A course in mathematical logic for both mathematics and computer science majors. There will be an emphasis on applications in computer science, alongside traditional subject matter. Topics covered include propositional and predicate logic, first-order arithmetic, completeness and incompleteness theorems, computability, automated proof assistants, and satisfiability solvers.

Credits: 3

Room and Schedule: Fulton Hall 250 TuTh 12:00 Noon-01:15PM

Satisifies Core Requirement: None

Prerequisites: CSCI1101 or Some experience and comfort reading and writing mathematical

proofs: MATH2216 Introduction to Abstract Mathematics or CSCI2243 Logic and

Computationshould provide the basics. Strongly recommended: CSCI1101Computer Science 1,

or the equivalent

Corequisites: None

Cross-listed with: CSCI3392

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH441001
Differential Equations
Chen, Qile
Fall 2024

This course is a junior-senior elective intended primarily for students interested in applications of mathematics. Topics include first order linear equations, higher order linear equations with constant coefficients, linear systems, qualitative analysis of non-linear systems, and an introduction to stability and bifurcations.

Credits: 3

Room and Schedule: Gasson Hall 202 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

MATH441002

Differential Equations

Chen, Qile

Fall 2024

This course is a junior-senior elective intended primarily for students interested in applications of mathematics. Topics include first order linear equations, higher order linear equations with constant coefficients, linear systems, qualitative analysis of non-linear systems, and an introduction to stability and bifurcations.

Credits: 3

Room and Schedule: Gasson Hall 202 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

Probability

Wolf, Jamison B

Fall 2024

This course provides a general introduction to modern probability theory. Topics include probability spaces, discrete and continuous random variables, joint and conditional distributions, mathematical expectation, the central limit theorem, and the weak law of large numbers. Applications to real data will be stressed, and we will use the computer to explore many concepts.

Credits: 3

Room and Schedule: Gasson Hall 302 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH442602

Probability

Wolf, Jamison B

Fall 2024

This course provides a general introduction to modern probability theory. Topics include probability spaces, discrete and continuous random variables, joint and conditional distributions, mathematical expectation, the central limit theorem, and the weak law of large numbers. Applications to real data will be stressed, and we will use the computer to explore many concepts.

Credits: 3

Room and Schedule: Gasson Hall 302 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH442701

Mathematical Statistics

Cheung, Chi-Keung

Fall 2024

Topics studied include the following: sampling distributions, parametric point and interval estimation, hypothesis testing, goodness-of-fit, and parametric and nonparametric two-sample analysis. Applications to real data will be stressed, and the computer will be used to explore concepts and analyze data.

Credits: 3

Room and Schedule: Carney Hall 202 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: MATH4426

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH445101

Euclidean and Non-Euclidean Geometry

Meyerhoff, G R

Fall 2024

This course surveys the history and foundations of geometry from ancient to modern times. Topics will be selected from Mesopotamian and Egyptian mathematics, Greek geometry, the axiomatic method, history of the parallel postulate, the Lobachevskian plane, Hilbert's axioms for Euclidean geometry, elliptic and projective geometry, the trigonometric formulas, models, and geometry and the study of physical space.

Credits: 3

Room and Schedule: Campion Hall 300 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2216

Corequisites: None
Cross-listed with: None
Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH445501

Mathematical Problem Solving Lehmann, Brian T

Fall 2024

This course is designed to deepen students' mathematical knowledge through solving, explaining and extending challenging and interesting problems. Students will work both individually and in groups on problems chosen from polynomials, trigonometry, analytic geometry, pre-calculus, one-variable calculus, probability and numerical algorithms. The course will emphasize explanations and generalizations rather than formal proofs and abstract properties. Some pedagogical issues, such as composing good problems and expected points of confusion in explaining various topics, will come up, but the primary goal is mathematical insight. The course will be of particular use to future secondary math teachers.

Credits: 3

Room and Schedule: Stokes Hall 111S MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2216 and MATH2202 or Permission of the

instructor required for students outside the Lynch School of Education.

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH446001

Complex Variables
Treumann. David L

This course gives an introduction to the theory of functions of a complex variable, a fundamental and central area of mathematics. It is intended for mathematics majors and well-prepared science majors. Topics covered include complex numbers and their properties, analytic functions and the Cauchy-Riemann equations, the logarithm and other elementary functions of a complex variable, integration of complex functions, the Cauchy integral theorem and its consequences, power series representation of analytic functions, and the residue theorem and applications to definite integrals.

Credits: 3

Room and Schedule: Gasson Hall 307 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2202 and MATH2210/ADMT2210

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH446101

Stochastic Processes

Wolf, Jamison B

Fall 2024

A stochastic process describes the evolution of a system that changes over time in a random manner. This course introduces and studies various properties of some fundamental stochastic processes, including Markov chains in discrete and continuous time, renewal processes, and Brownian motion.

Credits: 3

Room and Schedule: Stokes Hall 201S MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH4426

Corequisites: None

Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH447001

Mathematical Modeling

Slyman, Katherine

Fall 2024

This course introduces students to methods of mathematical modeling. The emphasis is on ways to analytically represent and study today's complex modeling problems, with cases from the natural and social sciences. Topics include the model building process, mathematical models of systems, and modeling data to discover properties and hidden characteristics. The calculus of finite differences and solutions to classes of difference equations will serve as the core mathematical theory taught in this course. The dynamics of certain linear and nonlinear models will be explored from various domains (e.g., population models, economic models, Markov models). The course will conclude with an introduction to mathematical graph theory and its application to modeling interacting and interdependent systems and networks.

Credits: 3

Room and Schedule: 245 Beacon Street Room 214 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Fall, Periodically in the Spring

Student Level: Both Comments: None Status: Offered

MATH490101

Readings and Research

Cheung, Chi-Keung

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490102

Readings and Research

Goldstein, Ellen J

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 1

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490103

Readings and Research

Howard, Benjamin V

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490104

Readings and Research Madapusi Pera, Keerthi S

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490105

Readings and Research

Greene, Joshua E

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH496101

Honors Thesis

Lindsey, Kathryn A

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496102

Honors Thesis

Mirollo, Renato

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496103

Honors Thesis

Kelmer, Dubi

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496104

Honors Thesis

Greene, Joshua E

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH496105

Honors Thesis

Wolf, Jamison B

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496106

Honors Thesis

Lehmann, Brian T

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496107

Honors Thesis

Reeder, Mark

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496108

Honors Thesis

Baldwin, John A

Fall 2024

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH550001

Advanced Independent Research I

Madapusi Pera, Keerthi S

Fall 2024

TBD

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH550002

Advanced Independent Research I Mirollo, Renato;Tristan, Jean-Baptiste

Fall 2024

TBD

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH550004

Advanced Independent Research I

Mirollo, Renato

Fall 2024

TBD

Credits: 6

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH810201

INTERIM STUDY

Mirollo, Renato

Fall 2024

INTERIM STUDY

Credits: 0

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Annually

Student Level: Graduate

Comments: None **Status:** Offered

MATH880601

Algebra I

Friedberg, Solomon

Fall 2024

This course, with MATH8807, will cover the following topics: group theory (group actions, Sylow, nilpotent/solvable, simple groups, Jordan-Holder series, presentations); commutative algebra (uniqueness of factorization, Jordan decomposition, Dedekind rings, class groups, local rings, Spec); finite fields; algebraic numbers; Galois theory; homological algebra; semisimple algebra.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None
Frequency: Every Fall
Student Level: Both
Comments: None

MATH880801

Status: Offered

Geometry/Topology I

Li, Tao

Fall 2024

This course, with MATH8809, will cover the following topics: point-set topology, fundamental group and covering spaces, smooth manifolds, smooth maps, partitions of unity, tangent and general vector bundles, (co)homology, tensors, differential forms, integration and Stokes' theorem, and de Rham cohomology.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Both Comments: None Status: Offered

MATH881001

Real Analysis

Mirollo, Renato

Fall 2024

Measure theory, Hilbert space, and Fourier theory. Possible topics from Lebesgue measure starting on R, convergence and Fubini theorems, and generalizations to locally compact spaces and groups.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None
Frequency: Every Fall
Student Level: Both

Comments: None

Status: Offered

MATH882001

Introduction to Representation Theory

Jin, Xin

Fall 2024

Introduction of a broad range of representation theory, including representations of finite and compact Lie groups, and finite dimensional representations of complex semisimple Lie groups and Lie algebras, and quantum groups.

Credits: 3

Room and Schedule: O'Neill Library 248 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None

Corequisites: None
Cross-listed with: None
Frequency: Every Fall
Student Level: Both
Comments: None

Status: Offered

MATH882101

Number Theory I

Howard, Benjamin V

Fall 2024

Along with MATH8822, possible topics include factorization of ideals, local fields, local versus global Galois theory, Brauer group, adèles and idèles, class field theory, Dirichlet L-functions, Chebotarev density theorem, class number formula, and Tate's thesis.

Credits: 3

Room and Schedule: Stokes Hall 111S MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Both Comments: None

MATH882601

Status: Offered

Algebraic Geometry I

Chen, Qile

Fall 2024

Topics may include affine and projective varieties, theory of schemes, sheaves and cohomology, theory of curves and surfaces and more advanced topics chosen by the instructor.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

MATH883101

Geometry/Topology III

Greene, Joshua E

Fall 2024

This course, along with MATH8832, will cover topics from differential geometry, hyperbolic geometry, three-dimensional manifolds, and knot theory.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH884501

Topics in Algebra and Number Theory

Frechette, Claire

Fall 2024

Selected topics in Algebra and Number Theory.

Credits: 3

Room and Schedule: Gasson Hall 304 MW 04:30PM-05:45PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Fall

Student Level: Both Comments: None Status: Offered

MATH885501

Topics in Geometry and Topology

Baldwin, John A

Fall 2024

Selected topics in Geometry and Topology.

Credits: 3

Room and Schedule: Devlin Hall 112 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH886501

Topics in Algebraic Geometry

Ionov, Andrei

Fall 2024

Selected topics in Algebraic Geometry

Credits: 3

Room and Schedule: Gasson Hall 209 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH887501

Topics in Deep Learning Theory

Grigsby, Julia E

Fall 2024

Topics course in mathematical aspects of machine learning. The course will begin with an introduction to statistical learning theory and some classical supervised and unsupervised learning algorithms, then survey some motivating modern questions in deep learning theory, with an emphasis on how geometry, topology, and combinatoricsenter the mathematical picture.

Credits: 3

Room and Schedule: 245 Beacon Street Room 104 WF 01:30PM-02:45PM; Wednesday October

30 through Friday December 6

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

MATH888001

Dissertation Research Madapusi Pera, Keerthi S

Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall
Student Level: Graduate

Comments: None **Status:** Offered

MATH888002

Dissertation Research Bridgeman, Martin Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None
Frequency: Every Fall
Student Level: Graduate

Student Level: Graduate

Comments: None **Status:** Offered

MATH888003

Dissertation Research Howard, Benjamin V

Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH888004

Dissertation Research Grigsby, Julia E, PHD

Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH888005

Dissertation Research Bridgeman, Martin

Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Graduate

Comments: None **Status:** Offered

MATH888006

Dissertation Research

Reeder, Mark

Fall 2024

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH889001

Graduate Teaching Seminar I

Belding, Juliana V

Fall 2024

This course is designed to assist graduate students in making the transition to the duties of a teaching assistant.

Credits: 1

Room and Schedule: Maloney Hall 560 M 03:00PM-03:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None

Status: Offered

MATH889101

Graduate Teaching Seminar II

Mirollo, Renato

Fall 2024

This course is intended to assist graduate students as they make the transition to teaching fellows.

Credits: 1

Room and Schedule: Maloney Hall 560 W 03:00PM-03:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH889901

Readings and Research

Madapusi, Keerthi S

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889902

Readings and Research

Bridgeman, Martin

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889903

Readings and Research

Lehmann, Brian T

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889904

Readings and Research Howard, Benjamin V

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889905

Readings and Research

Friedberg, Solomon

Fall 2024

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889906

Readings and Research

Greene, Joshua E

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH899101

Curricular Practical Training

Bridgeman, Martin

Fall 2024

This is a one credit course for graduate students seeking credit for off-campus internship work.

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991101

Doctoral Continuation Bridgeman, Martin

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991102

Doctoral Continuation

Greene, Joshua E

Fall 2024

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

Doctoral Continuation

Kelmer, Dubi

Fall 2024

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991104

Doctoral Continuation

Friedberg, Solomon

Fall 2024

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991105

Doctoral Continuation

Treumann, David L

Fall 2024

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991106

Doctoral Continuation

Baldwin, John A

Fall 2024

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

Mathematics Courses: Spring 2025

MATH100301

Functions and Differential Calculus II

Goldstein, Ellen J

Spring 2025

This course is a continuation of MATH1002

Credits: 3

Room and Schedule: O'Neill Library 246 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH100302

Functions and Differential Calculus II

Goldstein, Ellen J

Spring 2025

This course is a continuation of MATH1002

Credits: 3

Room and Schedule: O'Neill Library 246 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH100401

Finite Probability and Applications

Feng, Enhao

Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100402
Finite Probability and Applications
Doherty, Amy L
Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100403

Finite Probability and Applications

Hameister, Thomas

Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Gasson Hall 205 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100404

Finite Probability and Applications

Fang, Tingting

Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Stokes Hall 113S MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100405

Finite Probability and Applications Mahendraker, Siddharth Spring 2025 Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Stokes Hall 107S MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100406

Finite Probability and Applications Zevenbergen, Matthew Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson (except for Psychology majors completing their second mathematics corequisite).. This course, for students in the humanities, the social sciences, School of Education, and School of Nursing, is an introduction to finite combinatorics and probability, emphasizing applications. Topics include finite sets and partitions, enumeration, probability, expectation, and random variables.

Credits: 3

Room and Schedule: Stokes Hall 217N MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics **Prerequisites:** Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100701

Ideas in Mathematics

Ward, Erika

Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson. This course is designed to introduce the student to the spirit, beauty, and vitality of mathematics. The emphasis is on development of ideas rather than problem solving skills. Topics vary, but are typically chosen from diverse areas such as geometry, number theory, computation, and graph theory.

Credits: 3

Room and Schedule: Campion Hall 231 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH100702

Ideas in Mathematics

Ward, Erika

Spring 2025

Not open to students who have completed their Mathematics Core Curriculum Requirement without permission of the Department Chairperson. This course is designed to introduce the student to the spirit, beauty, and vitality of mathematics. The emphasis is on development of ideas rather than problem solving skills. Topics vary, but are typically chosen from diverse areas such as geometry, number theory, computation, and graph theory.

Credits: 3

Room and Schedule: Stokes Hall 295S MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110001

Calculus I

Yavuz, Cemre

Spring 2025

MATH1100 is not open to students who have completed a calculus course at the college level. Students contemplating majors in Chemistry, Computer Science/B.S., Environmental Geosciences, Geological Sciences, Mathematics, or Physics should enroll in MATH1102.For further information about selecting your Math courses given your background, please see this link to the BC Math Department. MATH1100 is a first course in the calculus of one variable intended for biology, computer science, economics, management, and premedical students. It is open to others who are qualified and desire a more rigorous mathematics course at the core level. Topics include a brief review of polynomials and trigonometric, exponential, and logarithmic functions, followed by discussion of limits, derivatives, and applications of differential calculus to real-world problem areas. The course concludes with an introduction to integration.

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110002

Calculus I

Yavuz, Cemre

Spring 2025

MATH1100 is not open to students who have completed a calculus course at the college level. Students contemplating majors in Chemistry, Computer Science/B.S., Environmental Geosciences, Geological Sciences, Mathematics, or Physics should enroll in MATH1102.For further information about selecting your Math courses given your background, please see this link to the BC Math Department. MATH1100 is a first course in the calculus of one variable intended for biology, computer science, economics, management, and premedical students. It is open to others who are qualified and desire a more rigorous mathematics course at the core level. Topics include a brief review of polynomials and trigonometric, exponential, and logarithmic functions, followed by discussion of limits, derivatives, and applications of differential calculus to real-world problem areas. The course concludes with an introduction to integration.

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None
Status: Offered

MATH110003

Calculus I

Brown, Sarah V

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110004

Calculus I

Brown, Sarah V

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110005

Calculus I

Brown, Sarah V

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110016

Calculus I

Moss, Eric

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110017

Calculus I

Moss, Eric

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110018

Calculus I

Ramakrishnan, Pranavkrishnan

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110019

Calculus I

Ramakrishnan, Pranavkrishnan

Credits: 0

Room and Schedule: Gasson Hall 302 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110020

Calculus I

Ramakrishnan, Pranavkrishnan

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110103

Calculus II

Ionov, Andrei

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110104

Calculus II

Ionov, Andrei

Credits: 4

Room and Schedule: Gasson Hall 210 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110105

Calculus II Schmidt, August

Credits: 0

Room and Schedule: Gasson Hall 309 Th 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110106

Calculus II Schmidt, August

Credits: 0

Room and Schedule: Gasson Hall 309 Th 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110107

Calculus II Schmidt, August

Credits: 0

Room and Schedule: Gasson Hall 203 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH110301

Calculus II (Mathematics/Science Majors)

Wolf, Jamison B

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: 245 Beacon Street Room 230 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None

Frequency: Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110302

Calculus II (Mathematics/Science Majors)

Wolf, Jamison B

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: 245 Beacon Street Room 230 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110303

Calculus II (Mathematics/Science Majors)

Teplitskiy, Mayah

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 04:00PM-04:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110304

Calculus II (Mathematics/Science Majors)

Teplitskiy, Mayah

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 0

Room and Schedule: Gasson Hall 301 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110305

Calculus II (Mathematics/Science Majors)

Teplitskiy, Mayah

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 0

Room and Schedule: Gasson Hall 301 Th 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None
Cross-listed with: None

Frequency: Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110306

Calculus II (Mathematics/Science Majors)

Slyman, Katherine

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110307

Calculus II (Mathematics/Science Majors)

Slyman, Katherine

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Fulton Hall 230 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110308

Calculus II (Mathematics/Science Majors)

Isayev, Edward

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 309 Th 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110309

Calculus II (Mathematics/Science Majors)

Isayev, Edward

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 4

Room and Schedule: Gasson Hall 309 Th 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH110310

Calculus II (Mathematics/Science Majors)

Isayev, Edward

Spring 2025

Not open to students who have completed MATH1105. MATH1103 is a continuation of MATH1102. Topics covered in the course include several algebraic techniques of integration, many applications of integration, and infinite sequences and series.

Credits: 0

Room and Schedule: Gasson Hall 309 Th 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1102

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH118001

Principles of Statistics for the Health Sciences

Zhang, Liyang Spring 2025 This course introduces statistics as a liberal arts discipline and applies the principles of statistics to problems of interest for health sciences professionals. Students will gain an understanding of statistical ideas and methods, acquire the ability to deal critically with numerical arguments and gain an understanding of the impact of statistical ideas on the health sciences, public policy, and other areas of application.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Open to Connell School of Nursing students only.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH118002

Principles of Statistics for the Health Sciences

Zhang, Liyang

Spring 2025

This course introduces statistics as a liberal arts discipline and applies the principles of statistics to problems of interest for health sciences professionals. Students will gain an understanding of statistical ideas and methods, acquire the ability to deal critically with numerical arguments and gain an understanding of the impact of statistical ideas on the health sciences, public policy, and other areas of application.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 03:00PM-03:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Open to Connell School of Nursing students only.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH118003

Principles of Statistics for the Health Sciences

Lema Perez, Joaquin Ignacio

Spring 2025

This course introduces statistics as a liberal arts discipline and applies the principles of statistics to problems of interest for health sciences professionals. Students will gain an understanding of statistical ideas and methods, acquire the ability to deal critically with numerical arguments and gain an understanding of the impact of statistical ideas on the health sciences, public policy, and other areas of application.

Credits: 3

Room and Schedule: Gasson Hall 302 MWF 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Open to Connell School of Nursing students only.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH118004

Principles of Statistics for the Health Sciences

Lyu, Qingfeng

Spring 2025

This course introduces statistics as a liberal arts discipline and applies the principles of statistics to problems of interest for health sciences professionals. Students will gain an understanding of statistical ideas and methods, acquire the ability to deal critically with numerical arguments and gain an understanding of the impact of statistical ideas on the health sciences, public policy, and other areas of application.

Credits: 3

Room and Schedule: Fulton Hall 310 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Open to Connell School of Nursing students only.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH118005

Principles of Statistics for the Health Sciences

Ganapathy, Gomathy

Spring 2025

This course introduces statistics as a liberal arts discipline and applies the principles of statistics to problems of interest for health sciences professionals. Students will gain an understanding of statistical ideas and methods, acquire the ability to deal critically with numerical arguments and gain an understanding of the impact of statistical ideas on the health sciences, public policy, and other areas of application.

Credits: 3

Room and Schedule: 245 Beacon Street Room 230 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Open to Connell School of Nursing students only.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH119101

Fundamentals of Mathematics II

Ward, Erika

Spring 2025

Restricted to Lynch School of Education students.. As in MATH1190, this course emphasizes building conceptual understanding of the mathematics present in the emerging K-8 curriculum and on deepening the content knowledge. Topics drawn from geometry and measurement, data analysis, statistics, and probability will be developed. Problem solving and reasoning, applications, and making connections will be featured.

Credits: 3

Room and Schedule: Stokes Hall 295S MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: MATH1190

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220201

Multivariable Calculus

Li, Tao

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 205 MWF 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220202

Multivariable Calculus

Li, Tao

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 205 MWF 09:00AM-09:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220203

Multivariable Calculus

Khanna, Harshul

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Higgins Hall 263 Tu 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220204

Multivariable Calculus Khanna, Harshul Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Higgins Hall 263 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220205 Multivariable Calculus Khanna, Harshul Spring 2025 This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 309 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220206

Multivariable Calculus

Jin, Xin

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 205 MWF 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220207

Multivariable Calculus

Jin, Xin

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 4

Room and Schedule: Gasson Hall 205 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH220208
Multivariable Calculus
Winters, Ethan
Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 10:00AM-10:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220209

Multivariable Calculus

Winters, Ethan

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 11:00AM-11:50AM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH220210

Multivariable Calculus

Winters, Ethan

Spring 2025

This course is for students majoring in Chemistry, Computer Science/B.S., Geology, Geophysics, Mathematics and Physics, as well as other students who have completed Calculus II.. Topics in this course include vectors in two and three dimensions, analytic geometry of three dimensions, parametric curves, partial derivatives, the gradient, optimization in several variables, multiple integration with change of variables across different coordinate systems, line integrals, and Green's Theorem.

Credits: 0

Room and Schedule: Gasson Hall 301 Tu 01:00PM-01:50PM

Satisifies Core Requirement: Mathematics

Prerequisites: Calculus II

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None
Status: Offered

MATH221001

Linear Algebra

Roy, Agniva

Spring 2025

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 204 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221002

Linear Algebra

Belding, Juliana V

Spring 2025

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Campion Hall 200 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221003

Linear Algebra

Roy, Agniva

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Gasson Hall 204 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221004

Linear Algebra

Belding, Juliana V

Spring 2025

This course is an introduction to the techniques of linear algebra in Euclidean space. Topics covered include matrices, determinants, systems of linear equations, vectors in n-dimensional space, complex numbers, and eigenvalues. The course is required of mathematics majors and is also suitable for students in the social sciences, natural sciences, and management.

Credits: 3

Room and Schedule: Campion Hall 200 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

Linear Algebra (Honors)

Howard, Benjamin V

Spring 2025

This honors course in Linear Algebra is intended for students with strong preparation and high motivation. Topics covered include matrices, linear equations, determinants, eigenvectors and eigenvalues, vector spaces and linear transformations, inner products, and canonical forms. The course will include significant work with proofs.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2203

Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH221601

Introduction to Abstract Mathematics

Grigsby, Julia E

Spring 2025

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Stokes Hall 215N MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221602

Introduction to Abstract Mathematics

Grigsby, Julia E

Spring 2025

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Stokes Hall 215N MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH221603

Introduction to Abstract Mathematics

Baldwin, John A

Spring 2025

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: Gasson Hall 209 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH221604

Introduction to Abstract Mathematics

Baldwin, John A

Spring 2025

This course is designed to develop the student's ability to do abstract mathematics through the presentation and development of the basic notions of logic and proof. Topics include elementary set theory, mappings, integers, rings, complex numbers, and polynomials.

Credits: 3

Room and Schedule: O'Neill Library 253 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH225001

Mathematical Foundations of Data Science

Zhang, Liyang

Spring 2025

Introduction to the mathematical foundations of data science, including calculus, linear algebra and probability. The first part of the course covers linear algebra, including matrices, systems of linear equations, vector spaces, and eigenvalues and eigenvectors. The second part of the course introduces random variables and provides an introduction to calculus based probability. The third part of the course introduces optimization techniques used in data science. Prerequisite:Math 1101 or Math 1103 or equivalent Calculus 2 background.

Credits: 3

Room and Schedule: Fulton Hall 230 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH229101

Geometry for Teachers

Belding, Juliana V

Spring 2025

This course is intended for teachers of grades K-9. Geometry now occupies a significant role in the elementary mathematics curriculum. The course will develop ideas for presenting geometry as an activity-based program. Topics include the geoboard and other key manipulatives, elements of motion and Euclidean geometry and suggestions for using Logo as a tool to enhance teaching geometry.

Credits: 3

Room and Schedule: Gasson Hall 201 MWF 02:00PM-02:50PM

Satisifies Core Requirement: Mathematics **Prerequisites:** MATH1191 and MATH1190

Corequisites: None

Cross-listed with: None

Frequency: Biannually in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH331001

Introduction to Abstract Algebra

Meyerhoff, G R

Spring 2025

Students may not take both MATH3310 and MATH3311.. This course studies four fundamental algebraic structures: groups, including subgroups, cyclic groups, permutation groups, symmetry groups, and Lagrange's Theorem; rings, including sub-rings, integral domains, and unique factorization domains; polynomials, including a discussion of unique factorization and methods for finding roots; and fields, introducing the basic ideas of field extensions and ruler and compass constructions.

Credits: 3

Room and Schedule: Campion Hall 231 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2210/ADMT2210 or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH331201

Algebra II

Fedorchuk, Maksym

Spring 2025

This course, with MATH3311, studies the basic structures of abstract algebra. Topics include groups, subgroups, factor groups, Lagrange's Theorem, the Sylow Theorems, rings, ideal theory, integral domains, field extensions, and Galois theory.

Credits: 3

Room and Schedule: Stokes Hall 295S MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: MATH3311. With the permission of the Assistant Chair for Undergraduates, students who have taken MATH3310 may be allowed to take MATH3312. However, they may need to do additional work on their own in order to make that transition.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH332001 Introduction to Analysis Lehmann, Brian T Spring 2025 Students may not take both MATH3320 and MATH3321.. This course gives students the theoretical foundations for the topics taught in Calculus. It covers algebraic and order properties of the real numbers, the least upper bound axiom, limits, continuity, differentiation, the Riemann integral, sequences, and series. Definitions and proofs will be stressed throughout the course.

Credits: 3

Room and Schedule: Gasson Hall 302 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2216 and MATH2202 or Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH332201

Analysis II

Reeder, Mark

Spring 2025

This course, with MATH3321, studies the basic structure of the real numbers. Topics include the least upper bound principle, compactness of closed intervals (the Heine-Borel theorem), sequences, convergence, the Bolzano-Weierstrass theorem, continuous functions, boundedness and intermediate value theorems, uniform continuity, differentiable functions, the mean value theorem, construction of the Riemann integral, the fundamental theorem of calculus, sequences and series of functions, uniform convergence, the Weierstrass approximation theorem, special functions (exponential and trig), and Fourier series.

Credits: 3

Room and Schedule: Gasson Hall 204 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: MATH3321. With the permission of the Assistant Chair for Undergraduate Programs, students who have taken MATH3320 may be allowed to take MATH3322. However, they may need to do additional work on their own in order to make that transition.

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH431101

Formal Methods McTague, Carl S Spring 2025

Complex programs often have bugs, sometimes with serious consequences. Although testing can help root them out, it is impossible to test all possible behaviors of complex programs. To complement testing, one can construct mathematical proofs that programs are correct. This technique, called formal verification, can be done using a tool for writing and automatically checking such proofs. This course introduces formal verification with one such proof checking system called Coq. Students will write precise specifications of how programs should behave, and then carry out proofs in Coq showing that those specifications are met.

Credits: 3

Room and Schedule: 245 Beacon Street Room 229 MW 04:30PM-05:45PM

Satisifies Core Requirement: None **Prerequisites:** CSCI1102 and CSCI2243

Corequisites: None

Cross-listed with: CSCI3393

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH441001
Differential Equations
Treumann, David L
Spring 2025

This course is a junior-senior elective intended primarily for students interested in applications of mathematics. Topics include first order linear equations, higher order linear equations with constant coefficients, linear systems, qualitative analysis of non-linear systems, and an introduction to stability and bifurcations.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

MATH441002

Differential Equations

Treumann, David L

Spring 2025

This course is a junior-senior elective intended primarily for students interested in applications of mathematics. Topics include first order linear equations, higher order linear equations with constant coefficients, linear systems, qualitative analysis of non-linear systems, and an introduction to stability and bifurcations.

Credits: 3

Room and Schedule: Gasson Hall 210 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2210/ADMT2210 and MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Both Comments: None Status: Offered

Probability

Gross, Robert

Spring 2025

This course provides a general introduction to modern probability theory. Topics include probability spaces, discrete and continuous random variables, joint and conditional distributions, mathematical expectation, the central limit theorem, and the weak law of large numbers. Applications to real data will be stressed, and we will use the computer to explore many concepts.

Credits: 3

Room and Schedule: Gasson Hall 303 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH442602

Probability

Gross, Robert

Spring 2025

This course provides a general introduction to modern probability theory. Topics include probability spaces, discrete and continuous random variables, joint and conditional distributions, mathematical expectation, the central limit theorem, and the weak law of large numbers. Applications to real data will be stressed, and we will use the computer to explore many concepts.

Credits: 3

Room and Schedule: Gasson Hall 201 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2202

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH442701

Mathematical Statistics

Wolf, Jamison B

Spring 2025

Topics studied include the following: sampling distributions, parametric point and interval estimation, hypothesis testing, goodness-of-fit, and parametric and nonparametric two-sample analysis. Applications to real data will be stressed, and the computer will be used to explore concepts and analyze data.

Credits: 3

Room and Schedule: Gasson Hall 302 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: MATH4426

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH443001

Introduction to Number Theory

Ash, Avner D

Spring 2025

Topics include divisibility, unique factorization, congruences, number-theoretic functions, primitive roots, diophantine equations, continued fractions, quadratic residues and the distribution of primes. Historical background for various problems and examples useful in the secondary school curriculum will be presented.

Credits: 3

Room and Schedule: Higgins Hall 225 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: MATH2216

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH444001

Dynamical Systems Slyman, Katherine Spring 2025

This course is an introduction to nonlinear dynamics and their applications, emphasizing qualitative methods for differential equations. Topics include fixed and periodic points, stability, linearization, parameterized families and bifurcations, and existence and nonexistence theorems for closed orbits in the plane. The final part of the course is an introduction to chaotic systems and fractals, including the Lorenz system and the quadratic map.

Credits: 3

Room and Schedule: Campion Hall 200 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: MATH2202 and MATH2210/ADMT2210

Corequisites: None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Both
Comments: None
Status: Offered

MATH445301 Euclid's *Elements* Goldstein, Ellen J

Spring 2025

This course is a close reading of Euclid's *Elements* in seminar style, with careful attention to axiomatic reasoning and mathematical constructions that build on one another in a sequence of logical arguments. We will also emphasize clear and creative communication on mathematical ideas, with some attention to the cultural background of the *Elements* and its place in a modern education.

Credits: 3

Room and Schedule: Campion Hall 200 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH446001

Complex Variables Friedberg, Solomon

Spring 2025

This course gives an introduction to the theory of functions of a complex variable, a fundamental and central area of mathematics. It is intended for mathematics majors and well-prepared science majors. Topics covered include complex numbers and their properties, analytic functions and the Cauchy-Riemann equations, the logarithm and other elementary functions of a complex variable, integration of complex functions, the Cauchy integral theorem and its consequences, power series representation of analytic functions, and the residue theorem and applications to definite integrals.

Credits: 3

Room and Schedule: Campion Hall 302 MW 03:00PM-04:15PM

Satisifies Core Requirement: None

Prerequisites: MATH2202 and MATH2210/ADMT2210

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH446201

Topology

Boninger, Joseph

Spring 2025

This course is an introduction to point-set topology. Topics include topological spaces, continuous functions, connectedness, compactness, metric spaces, the Urysohn Metrization Theorem, manifolds, the fundamental group and the classification of surfaces. We will also discuss applications of these concepts to problems in science and engineering.

Credits: 3

Room and Schedule: 245 Beacon Street Room 214 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: MATH2216

Corequisites: MATH3320 or MATH3321 is recommended as a pre/corequisite.

Cross-listed with: None **Frequency:** Every Fall

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH446501

Advanced Data Analysis

Cheung, Chi-Keung

Spring 2025

In this course, we will explore various popular statistical methods used in data science. The course will be both theoretical (mathematical) and applied (data- analytic). The mathematical theorems and proofs are an essential part of the course. Part I: Standard Advanced Statistics topicsBayesian Analysis, Analysis of Variance, Bootstrap (Parametric and Non-Parametric), Generalized Linear Regressions, Generalized additive model etc.Part II: Statistical Methods for the 21st century data analysis Principal Component Analysis, Large Scale Hypothesis Testing, Ridge and Lasso Regressions, Random Forest, Support Vector Machines etc.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None **Prerequisites:** Prerequisite MATH4427

Corequisites: None

Cross-listed with: None

Frequency: null

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH448001

Topics in Mathematics

Sonthalia, Rishi

Spring 2025

Topics for this one-semester course vary from year to year according to the interests of faculty and students. With department permission it may be repeated.

Credits: 3

Room and Schedule: Gasson Hall 203 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: Varies according to course topics.

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH448002

Topics in Mathematics

Frechette, Claire

Spring 2025

Topics for this one-semester course vary from year to year according to the interests of faculty and students. With department permission it may be repeated.

Credits: 3

Room and Schedule: Gasson Hall 201 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: Varies according to course topics.

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH448003

Topics in Mathematics

Sonthalia, Rishi

Spring 2025

Topics for this one-semester course vary from year to year according to the interests of faculty and students. With department permission it may be repeated.

Credits: 3

Room and Schedule: Gasson Hall 204 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: Varies according to course topics.

Corequisites: None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490101

Readings and Research

Chen, Qile

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None
Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490102

Readings and Research

Zhang, Liyang Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490103

Readings and Research

Kelmer, Dubi Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490104

Readings and Research

Chen, Dawei

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490105

Readings and Research

Madapusi Pera, Keerthi S

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490106

Readings and Research

Grigsby, Julia E

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490107

Readings and Research

Cheung, Chi-Keung

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH490108

Readings and Research

Cheung, Chi-Keung

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490201

Readings and Research

Cheung, Chi-Keung

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490202

Readings and Research

Chen, Dawei

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH490203

Readings and Research

Chen, Dawei

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496101

Honors Thesis

Wolf, Jamison B

Spring 2025

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH496102

Honors Thesis

Greene, Joshua E

Spring 2025

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None Status: Offered

MATH496103

Honors Thesis

Mirollo, Renato

Spring 2025

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring Student Level: Undergraduate

Comments: None Status: Offered

MATH496104

Honors Thesis

Lindsey, Kathryn A

Spring 2025

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH496105

Honors Thesis

Reeder, Mark

Spring 2025

This course may be taken to complete the requirements for Departmental Honors in Mathematics. Students must make arrangements with an individual faculty member, and receive permission from the Assistant Chair for Undergraduates.

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Every Fall, Every Spring **Student Level:** Undergraduate

Comments: None **Status:** Offered

MATH550101

Advanced Independent Research II Lindsey, Kathryn A;Mirollo, Renato;Tristan, Jean-Baptiste

Spring 2025

TBD

Credits: 6

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH550102

Advanced Independent Research II Madapusi Pera, Keerthi S Spring 2025

TBD

Credits: 6

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH550103

Advanced Independent Research II Madapusi Pera, Keerthi S Spring 2025

TRD

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH550104

Advanced Independent Research II

Mirollo, Renato

Spring 2025

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Undergraduate

Comments: None **Status:** Offered

MATH810201

INTERIM STUDY

Mirollo, Renato

Spring 2025

INTERIM STUDY

Credits: 0

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Annually

Student Level: Graduate

Comments: None **Status:** Offered

MATH880701

Algebra II

Fedorchuk, Maksym

Spring 2025

This course, with MATH8806, will cover the following topics: group theory (group actions, Sylow, nilpotent/solvable, simple groups, Jordan-Holder series, presentations); commutative algebra (uniqueness of factorization, Jordan decomposition, Dedekind rings, class groups, local rings, Spec); finite fields; algebraic numbers; Galois theory; homological algebra; semisimple algebra.

Credits: 3

Room and Schedule: Gasson Hall 207 MWF 03:00PM-03:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Spring Student Level: Both

Comments: None
Status: Offered

MATH880901

Geometry/Topology II

Meyerhoff, GR

Spring 2025

This course, with MATH8808, will cover the following topics: Point-set topology, fundamental group and covering spaces, smooth manifolds, smooth maps, partitions of unity, tangent and general vector bundles, (co)homology, tensors, differential forms, integration and Stokes' theorem, and de Rham cohomology.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 09:00AM-09:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Both Comments: None Status: Offered

MATH881101

Complex Analysis

Bridgeman, Martin

Spring 2025

Local and global theory of analytic functions of one variable.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 10:00AM-10:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring **Student Level:** Both

Status: Offered

Comments: None

MATH882201

Number Theory II

Howard, Benjamin V

Spring 2025

Along with MATH8821, possible topics include factorization of ideals, local fields, local-versus-global Galois theory, Brauer group, adles and idles, class field theory, Dirichlet L-functions, Chebotarev density theorem, class number formula and Tate's thesis.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Spring

Student Level: Both Comments: None Status: Offered

Algebraic Geometry II

Lehmann, Brian T

Spring 2025

A continuation of topics in MATH 8826 Algebraic Geometry I

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 11:00AM-11:50AM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

MATH884501

Topics in Algebra and Number Theory

Kelmer, Dubi Spring 2025

Selected topics in Algebra and Number Theory.

Credits: 3

Room and Schedule: Gasson Hall 309 MWF 02:00PM-02:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Fall

Student Level: Both Comments: None Status: Offered

MATH885501

Topics in Geometry and Topology

Biringer, Ian P

Spring 2025

Selected topics in Geometry and Topology.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 12:00 Noon-12:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: Periodically in the Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH888001

Dissertation Research Biringer, Ian P;Bridgeman, Martin

Spring 2025

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None

Cross-listed with: None **Frequency:** Every Fall

Student Level: Graduate

Comments: None **Status:** Offered

MATH888002

Dissertation Research Bridgeman, Martin

Spring 2025

TBD

Credits: 3

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall **Student Level:** Graduate

Comments: None **Status:** Offered

MATH888003

Dissertation Research Friedberg, Solomon Spring 2025

TBD

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None Frequency: Every Fall Student Level: Graduate

Comments: None **Status:** Offered

MATH888004

Dissertation Research Madapusi Pera, Keerthi S Spring 2025

TBD

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None **Frequency:** Every Fall **Student Level:** Graduate

Comments: None **Status:** Offered

MATH888501

Topics in Representation theory

Leslie, Winston S

Spring 2025

This is a graduate topics course in representation theory. Sample topics include the following: Algebraic groups, representations of real and p-adic groups, geometric/categorical representation theory, modular representation theory.

Credits: 3

Room and Schedule: Maloney Hall 560 MWF 01:00PM-01:50PM

Satisifies Core Requirement: None

Prerequisites: None **Corequisites:** None

Cross-listed with: None

Frequency: null

Student Level: Graduate

Comments: None **Status:** Offered

MATH889201

Graduate Research Seminar

Leslie, Winston S

Spring 2025

The research seminar is an opportunity for students to present their own research or give lectures on advanced topics. Participation in the research seminar is encouraged by the department. Students may be required by their advisors to participate and/or speak in the research seminar.

Credits: 1

Room and Schedule: BY ARRANGEMENT

Satisifies Core Requirement: None

Prerequisites: None
Corequisites: None
Cross-listed with: None

Frequency: Every Spring
Student Level: Graduate

Comments: None **Status:** Offered

MATH889901

Readings and Research

Lindsey, Kathryn A

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889902

Readings and Research

Chen, Dawei

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None
Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889903

Readings and Research

Grigsby, Julia E

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889904

Readings and Research

Howard, Benjamin V

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889905

Readings and Research

Baldwin, John A

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889906

Readings and Research

Bridgeman, Martin

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH889907

Readings and Research

Mirollo, Renato

Spring 2025

This is an independent study course, taken under the supervision of a Mathematics Department faculty member. Interested students should see the Director of the Graduate Program.

Credits: 3

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring

Student Level: Graduate

Comments: None **Status:** Offered

MATH899101

Curricular Practical Training

Bridgeman, Martin

Spring 2025

This is a one credit course for graduate students seeking credit for off-campus internship work.

Credits: 1

Room and Schedule: By Arrangement **Satisifies Core Requirement:** None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered

MATH991101

Doctoral Continuation

Mirollo, Renato

Spring 2025

All students who have been admitted to candidacy for the Ph.D. degree are required to register and pay the fee (tuition credits can be used for this) for doctoral continuation during each semester of their candidacy when they are taking no other courses. Doctoral Continuation requires a commitment of at least 20 hours per week working on the dissertation

Credits: 1

Room and Schedule: By Arrangement Satisifies Core Requirement: None

Prerequisites: Permission of Department

Corequisites: None

Cross-listed with: None

Frequency: Every Fall, Every Spring, Every Summer

Student Level: Graduate

Comments: None **Status:** Offered