COMP112 Introduction to Programming

The course will provide an introduction to a modern, high-level programming language including a discussion of input/output, basic control structures, types, functions, and classes. The lectures will also discuss a variety of algorithms as well as program design issues.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Prereq: None

COMP113 Bioinformatics Programming

This course is an introduction to bioinformatics and programming for students with interest in the life sciences. It introduces problem areas and conceptual frameworks in bioinformatics. The course assumes little or no prior programming experience and will introduce the fundamental concepts and mechanisms of computer programs and examples (sequence matching and manipulation, database access, output parsing, dynamic programming, etc.) frequently encountered in the field of bioinformatics.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL
Prereq: [MB&B181 or BIOL181] OR [MB&B181 or BIOL181] OR [MB&B195 or BIOL195]

COMP114 How to Talk to Machines

In this course, students will learn how to program in a number of different styles. We start with programming state-transition machines, the kind of programming one might use to instruct a robot how to interact with the world around it. We will move on to programming von Neumann machines, which form the core of most computing systems today, and so along the way we will learn what is “in the box.” We will end with an introduction to high-level programming, learning the fundamentals of programming in a language such as Python or Java.

The goal of the course is to understand not just programming, but how computers are designed, and how those designs are reflected in the way we program them. Along the way, we will pay special attention to the commonalities of the various styles, ultimately learning that much of what a high-level language provides is a way to more easily express computational algorithms that are ultimately implemented on a state transition machine. After passing this course, students will have a working knowledge of basic programming, and COMP 114 satisfies the Mathematics major “elementary knowledge of algorithms and computer programming” requirement.

Offering: Host
Grading: OPT
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: None

COMP115 How to Design Programs

In this course, students will learn to systematically design programs, going from a problem statement to a well-organized solution in a step-by-step fashion. We will apply these program design skills to many applications within computer science and in other disciplines. Students will develop their mathematical skills, because we will use a symbolic view of computation that explains the process of running a program as simple manipulations of its text. Students will also develop their technical reading and writing skills, such as understanding complex problem descriptions and precisely articulating the design of solutions. No prior experience with programming or computer science is expected.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: None

COMP131 Can Machines Think? (Logic and Computation)

This First-Year Initiative course introduces some of the basic ideas in logic and computation and the connections between the two fields. The first part of the course discusses the formalization of mathematical reasoning. The second part presents the elements of computation motivated by the question: What is programming language? The final part of the course integrates the preceding two lines of thought.

Offering: Host
Grading: OPT
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: None

COMP132 Computing, Privacy, and Security

This course will discuss both technical and ethical issues related to computing. On the technical side, the material will cover topics such as networking and cryptography. The technical material will be learned in the service of discussing social and ethical issues such as privacy, security, and intellectual property. Neither list is exhaustive, and each list is likely to be modified according to the interests of the instructor, interests of the students, and current events.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: None

COMP133 Cryptography

This course will discuss historical, mathematical, programming, and public policy issues related to codemaking and codebreaking. Emphasis will vary according to the interests of the instructor.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: None

COMP134 Human and Machine Inference

This course will explore how people and computers perform inference, the process of reaching conclusions based on premises, with investigation of computational, philosophical, and psychological perspectives. Discussions of puzzles and brainteasers will help expose and illuminate intricacies of inference.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH
Prereq: None
COMP211 Computer Science I
This is the first course in a two-course sequence (COMP 211-212) that is the gateway to the computer science major. It is intended for Computer Science majors and others who want an in-depth understanding of programming and Computer Science. Topics to be covered in COMP 211-212 include an introduction to the fundamental ideas of programming in imperative and functional languages; correctness and cost specifications; and proof techniques for verifying specifications.

Specifics such as choice of programming language, which topics are covered in which semesters, etc., will vary according to the tastes of the faculty offering the two courses.
Offering: Host
Grading: A-F
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Prereq: COMP112 OR COMP113 OR COMP115

COMP212 Computer Science II
This is the second course in a two-course sequence (COMP 211-212) that is the gateway to the computer science major. It is intended for Computer Science majors and others who want an in-depth understanding of programming and Computer Science. Topics to be covered in COMP 211-212 include an introduction to the fundamental ideas of programming in imperative and functional languages; correctness and cost specifications; and proof techniques for verifying specifications.

Specifics such as choice of programming language, which topics are covered in which semesters, etc., will vary according to the tastes of the faculty offering the two courses.
Offering: Host
Grading: A-F
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: COMP211

COMP231 Computer Structure and Organization
The purpose of the course is to introduce and discuss the structure and operation of digital computers. Topics will include the logic of circuits, microarchitectures, microprogramming, conventional machine architectures, and an introduction to software/hardware interface issues. Assembly language programming will be used to demonstrate some of the basic concepts.
Offering: Host
Grading: A-F
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: COMP211

COMP250 Computational Media: Videogame Design and Development
This course examines the interplay of art and science in the development of contemporary video games using “game tool” applications to achieve a variety of purposes. It combines a detailed understanding of computational media, including legal and commercial aspects, with hands-on experience in the creative process. There will be discussions with invited industry leaders in various subject areas. Students will have the opportunity to work as part of development teams and create working prototypes to understand the challenges and rewards of producing video games in a professional context.
Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: IDEA250, FILM250, COMP350, CIS250, CIS250, FILM250, COMP350, CIS250, FILM250, COMP350, CIS250, FILM250, COMP350, CIS250, FILM250, COMP350, CIS250, FILM250
Prereq: None

COMP260 Special Topics in Computer Science
In this class, Computer Science students will team up with students in other disciplines to work on a research problem that requires significant computation-intensive data analysis. All students will learn the fundamental techniques of such analysis. The specific techniques to be learned will be determined by the research problems; some that we might cover are clustering, component analysis, Bayesian analysis, and time-series analysis. The Computer Science students will be responsible for developing a well-written software platform that can be used for the project-specific analysis. The students from other disciplines will fully develop their research proposal and produce an appropriate research paper describing the project and its results.
Offering: Host
Grading: A-F
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: QAC260, QAC260, QAC260, QAC260, QAC260, QAC260, QAC260
Prereq: COMP112

COMP261 Topics in Applicable Analysis
This course is aimed at students with no previous experience or with modest experience in programming. The course will be structured in two parts that will run parallel. One part will be dedicated to learning the basics of programming, such as data types, statements and syntax, data containers, control structures, functions, object oriented programming, and file input/output. Teaching will be based on the Python language, which is a free and widely adopted high level language with applications in scientific computing, finance industry, and the web. In parallel to this formal computer science introduction, the course will introduce students to the basics of scientific computing, teaching aspects such as data interpolation, data fitting, solution of linear systems, meaning of eigenvectors and eigenvalues in computing, filtering and convolution, least squares problems, and a brief introduction to Ordinary Differential Equations and Partial Differential Equations. Students will work on 2 projects, a midterm and a final project, which will be developed over the course of 5 weeks each. The projects will be modularized in weekly subprojects which will serve as weekly assignments. The midterm project will be oriented towards creating a computer vision application; the final project will be oriented to developing an application for simulating and visualizing heat transport.
Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: MATH227, MATH227, MATH227, MATH227, MATH277, MATH277, MATH277
Prereq: [MATH222 AND MATH221] OR [MATH222 AND MATH223] OR MATH122 OR MATH222 OR MATH125

COMP265 Bioinformatics Programming
This course is an introduction to bioinformatics and programming for students with interest in the life sciences. It introduces problem areas and conceptual frameworks in bioinformatics. The course assumes little or no prior programming experience and will introduce the fundamental concepts and mechanisms of computer programs and examples (sequence matching and manipulation,
database access, output parsing, dynamic programming, etc.) frequently encountered in the field of bioinformatics.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL

COMP266 Bioinformatics
This course is an introduction to bioinformatics for students with interest in the life sciences. The course is similar to BIOL265 but only meets in the second half of the semester (with BIOL265) and is designed for students with programming background, ideally in Python. The course introduces problem areas and conceptual frameworks in bioinformatics and discusses programming approaches used in bioinformatics such as sequence matching and manipulation algorithms using dynamic programming, clustering analysis of gene expression data, analysis of genetic nets using Object Oriented Programming, and sequence analysis using Hidden Markov Models, Regular Expressions, and information theory.

Offering: Crosslisting
Grading: A-F
Credits: 0.50
Gen Ed Area: NSM-BIOL
Identical With: BIOL266, MB&B266, CIS266
Prereq: [MB&B181 or BIOL181] OR [MB&B181 or BIOL181] OR [MBB195 or BIOL195]

COMP301 Automata Theory and Formal Languages
This course is an introduction to formalisms studied in computer science and mathematical models of computing machines. The language formalisms discussed will include regular, context-free, recursive, and recursively enumerable languages. The machine models discussed include finite-state automata, pushdown automata, and Turing machines.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500, COMP500
Prereq: COMP211 AND COMP212 AND MATH228 OR COMP211 AND MATH228

COMP312 Algorithms and Complexity
The course will cover the design and analysis of efficient algorithms. Basic topics will include greedy algorithms, divide-and-conquer algorithms, dynamic programming, and graph algorithms. Some advanced topics in algorithms may be selected from other areas of computer science.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH
Identical With: COMP510, COMP510, COMP510, COMP510

Prereq: COMP212 AND MATH228

COMP321 Design of Programming Languages
This course is an introduction to concepts in programming languages. Topics include parameter passing, type checking and inference, control mechanisms, data abstraction, module systems, and concurrency. Basic ideas in functional, object-oriented, and logic programming languages will be discussed.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP521, COMP521, COMP521, COMP521, COMP521, COMP521, COMP521, COMP521, COMP521, COMP521...

COMP327 Evolutionary and Ecological Bioinformatics
Bioinformatic analysis of gene sequences and gene expression patterns has added enormously to our understanding of ecology and evolution. For example, through bioinformatic analysis of gene sequences, we can now reconstruct the evolutionary history of physiology, even though no traces of physiology exist in the fossil record. We can determine the adaptive history of one gene and all the gene’s descendants. We can now construct the evolutionary tree of all of life. Bioinformatics is particularly promising for analysis of the ecology and biodiversity of microbial communities, since well over 99 percent of microorganisms cannot be cultured; our only knowledge of these organisms is through analysis of their gene sequences and gene expression patterns. For example, even when we cannot culture most of a microbial community, we can determine which metabolic pathways are of greatest significance through analysis of community-level gene expression. All these research programs are made accessible not only by breakthroughs in molecular technology, but also by innovation in the design of computer algorithms. This course, team-taught by an evolutionary biologist and a computer scientist, will present how bioinformatics is revolutionizing evolutionary and ecological investigation and will present the design and construction of bioinformatic computer algorithms underlying the revolution in biology. Students will learn algorithms for reconstructing phylogeny, for sequence alignment, and for analysis of genomes, and students will have an opportunity to create their own algorithms.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL
Identical With: BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527, CIS327, BIOL327, BIOL527, COMP527...

Prereq: [BIOL182 or MB&B182] OR [BIOL196 or MBB196] OR COMP112 OR COMP211

COMP331 Computer Structure and Organization
The purpose of the course is to introduce and discuss the structure and operation of digital computers. Topics will include the logic of circuits, microarchitectures, microprogramming, conventional machine architectures, and an introduction to software/hardware interface issues. Assembly language programming will be used to demonstrate some of the basic concepts.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP31, COMP31, COMP231, COMP31, COMP31, COMP31, COMP31, COMP31, COMP231, COMP31, COMP31, COMP31, COMP31...
COMP351 Cryptography and Network Security

Soon after the development of written communication came the need for secret writing, i.e., cryptography. With the advent of electronic communication came the need for network security. This course examines the many ways in which people have tried to hide information and secure communication in the past and how security is achieved in today's networks. The emphasis will be on the technical means of achieving secrecy.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: None

COMP352 Topics in Artificial Intelligence

This upper-level course in artificial intelligence for computer science majors will focus on multiagent systems.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP552, COMP552, COMP552, COMP552, COMP552, COMP552, COMP552, COMP552, COMP552
Prereq: MATH228 AND COMP212

COMP354 Principles of Databases

This course provides an introduction to the design and implementation of relational databases. Topics will include an introduction to relational algebra and SQL, relational database design, database management systems, and transaction processing.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH
Identical With: COMP554, COMP554
Prereq: COMP212 AND MATH228

COMP356 Computer Graphics

This course covers fundamental algorithms in two- and three-dimensional graphics. The theory and application of the algorithms will be studied, and implementation of the algorithms or applications of them will be an integral part of the course. According to the tastes of the instructor, additional topics such as elementary animation or more advanced techniques may be covered.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH

COMP360 Special Topics in Computer Science

Topics vary by offering; recent topics have included information theory, advanced algorithms, and logic programming.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP554, COMP554
Prereq: COMP212

COMP360A Special Topics in Computer Science

This course covers special topics in computer science. Topics will vary according to the instructor.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: COMP212 AND MATH228

COMP360B Special Topics in Computer Science

This course covers special topics in computer science. Topics will vary according to the instructor.

Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: COMP212 AND MATH228

COMP360C Special Topics in Computer Science
This course covers special topics in computer science. Topics will vary according to the instructor.
Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: COMP212 AND MATH228

COMP361 Advanced Topics in Computer Science
This course covers advanced topics in Computer Science. The precise topics will vary with the offering, but will typically have prerequisites beyond COMP 211-212. This course may be repeated for credit.
Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH
Prereq: COMP212 AND MATH228

COMP401 Individual Tutorial, Undergraduate
Offering: Host
Grading: OPT

COMP402 Individual Tutorial, Undergraduate
Offering: Host
Grading: OPT

COMP403 Department/Program Project or Essay
Project to be arranged in consultation with the tutor.
Offering: Host
Grading: A-F

COMP404 Department/Program Project or Essay
Project to be arranged in consultation with the tutor.
Offering: Host
Grading: A-F

COMP407 Senior Tutorial
Downgraded Senior Thesis Tutorial - Project to be arranged in consultation with the tutor.
Offering: Host
Grading: A-F

COMP408 Senior Tutorial
Downgraded Senior Thesis Tutorial - Project to be arranged in consultation with the tutor.
Offering: Host
Grading: A-F

COMP409 Senior Thesis Tutorial
Offering: Host
Grading: OPT

COMP410 Senior Thesis Tutorial
Offering: Host
Grading: OPT

COMP411 Group Tutorial, Undergraduate
Offering: Host
Grading: OPT

COMP412 Group Tutorial, Undergraduate
Offering: Host
Grading: OPT

COMP419 Student Forum
Offering: Host
Grading: Cr/U

COMP420 Student Forum
Offering: Host
Grading: Cr/U

COMP421 Undergraduate Research, Sciences
Offering: Host
Grading: A-F

COMP422 Undergraduate Research, Sciences
Offering: Host
Grading: OPT

COMP423 Advanced Research Seminar, Undergraduate
Offering: Host
Grading: OPT

COMP424 Advanced Research Seminar, Undergraduate
Offering: Host
Grading: OPT

COMP469 Education in the Field, Undergraduate
Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: None
Prereq: None

COMP491 Teaching Apprentice Tutorial
Offering: Host
Grading: OPT

COMP492 Teaching Apprentice Tutorial
Offering: Host
Grading: OPT

COMP500 Automata Theory and Formal Languages
This course is an introduction to formalisms studied in computer science and mathematical models of computing machines. The language formalisms discussed will include regular, context-free, recursive, and recursively enumerable languages. The machine models discussed include finite-state automata, pushdown automata, and Turing machines.
Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301, COMP301
Prereq: COMP211 AND COMP212 AND MATH228 OR COMP211 AND MATH228

COMP501 Individual Tutorial, Graduate
Offering: Host
Grading: OPT

COMP502 Individual Tutorial, Graduate
Offering: Host
Grading: OPT

COMP503 Selected Topics, Graduate Sciences
Offering: Host
Grading: A-F

COMP504 Selected Topics, Graduate Sciences
Offering: Host
Grading: A-F

COMP510 Algorithms and Complexity
The course will cover the design and analysis of efficient algorithms. Basic topics will include greedy algorithms, divide-and-conquer algorithms, dynamic
programming, and graph algorithms. Some advanced topics in algorithms may be selected from other areas of computer science.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH
Identical With: COMP312, COMP312, COMP312, COMP312
Prereq: COMP212 AND MATH228

COMP511 Group Tutorial, Graduate
Offering: Host
Grading: OPT

COMP512 Group Tutorial, Graduate
Offering: Host
Grading: OPT

COMP521 Design of Programming Languages
This course is an introduction to concepts in programming languages. Topics include parameter passing, type checking and inference, control mechanisms, data abstraction, module systems, and concurrency. Basic ideas in functional, object-oriented, and logic programming languages will be discussed.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH
Prereq: COMP212 AND MATH228 OR COMP212

COMP527 Evolutionary and Ecological Bioinformatics
Bioinformatic analysis of gene sequences and gene expression patterns has added enormously to our understanding of evolution and ecology. For example, through bioinformatic analysis of gene sequences, we can now reconstruct the evolutionary history of physiology, even though no traces of physiology exist in the fossil record. We can determine the adaptive history of one gene and all the gene's descendants. We can now construct the evolutionary tree of all of life. Bioinformatics is particularly promising for analysis of the ecology and biodiversity of microbial communities, since well over 99 percent of microorganisms cannot be cultured; our only knowledge of these organisms is through analysis of their gene sequences and gene expression patterns. For example, even when we cannot culture most of a microbial community, we can determine which metabolic pathways are of greatest significance through analysis of community-level gene expression. All these research programs are made accessible not only by breakthroughs in molecular biology, but also by innovation in the design of computer algorithms. This course, taught by an evolutionary biologist and a computer scientist, will present how bioinformatics is revolutionizing evolutionary and ecological investigation and will present the design and construction of bioinformatic computer algorithms underlying the revolution in biology. Students will learn algorithms for reconstructing phylogeny, for sequence alignment, and for analysis of genomes, and students will have an opportunity to create their own algorithms.

Offering: Crosslisting
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-BIOL, NSM-BIOL, NSM-BIOL, NSM-BIOL
Identical With: BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527, CIS327, BIOL327, COMP327, BIOL527
Grading: A-F
Credits: 1.00
Gen Ed Area: NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH, NSM-MATH
Identical With: COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360, COMP360
Prereq: COMP212 AND MATH228 OR COMP212 OR COMP112 OR COMP212

COMP571 Special Topics in Computer Science
Supervised reading course of varying length. This course may be repeated for credit.
Offering: Host
Grading: A-F
Credits: 1.00
Gen Ed Area: None
Prereq: None

COMP572 Special Topics in Computer Science
Supervised reading course of varying length. This course may be repeated for credit.
Offering: Host
Grading: OPT
Credits: 1.00
Gen Ed Area: None
Prereq: None

COMP589 Advanced Research, BA/MA
Offering: Host
Grading: A-F

COMP590 Advanced Research, BA/MA
Intensive investigation of special research problems leading to a BA/MA thesis.
Offering: Host
Grading: OPT

COMP591 Advanced Research, Graduate
Offering: Host
Grading: OPT

COMP592 Advanced Research, Graduate
Offering: Host
Grading: OPT