# Academic Notes 

## ACADEMIC NOTES PUBLICATION SCHEDULE <br> FOR FALL 2010

Below is the circulation schedule for the electronic copy of Academic Notes through December 20, 2010. All submissions for inclusion in Academic Notes are due in the Office of Academic Affairs no later than 10:00 a.m. on the Wednesday prior to the distribution of Academic Notes on the following Monday. Submissions must be in hard copy along with an e-mail, disk, or CD with the same information. The electronic version must be formatted either in Word with pages with signatures scanned and inserted as a picture OR PDF saved as text and image. (Do NOT send PDF just saved as an image.) Information submitted to Academic Notes that is not accompanied by an electronic version or that is incomplete or unusable will be returned to the appropriate office. Academic Notes is available using Acrobat Reader at http://www.indstate.edu/academicaffairs/academic_notes.htm During the summer months, Academic Notes is published every other week.

## ACADEMIC NOTES PUBLICATION SCHEDULE FOR FALL 2010

| Deadline for Items | Issue Date |
| :---: | :---: |
| August 25 | August 30 |
| September 1 | September 7 |
| September 8 | September 13 |
| September 15 | September 20 |
| September 22 | September 27 |
| September 29 | October 4 |
| October 6 | October 11 |
| October 13 | October 18 |
| October 20 | October 25 |
| October 27 | November 1 |
| November 3 | November 8 |
| November 10 | November 15 |
| November 17 | November 22 |
| November 24 | November 29 |
| December 1 | December 6 |
| December 8 | December 13 |
| December 15 | December 20 |

## ACALOG NOTE

The format for curriculum proposals has changed to correspond with the structure of Acalog, the new version of the electronic catalogs. Some proposals will be published under the old structure and some under the new structure during this transition period.

## Improved Electronic Catalog

The new electronic version of the undergraduate catalog is posted at
http://www.indstate.edu/academics/catalogs.htm Some advantages of the new format are:

- It is easily searchable and searchable from the internet
- It is easier for students and advisors to find and choose the courses students need
- Students create a personal portfolio of courses in which they are interested
- Links to information such as department web sites, advising information, and video clips can easily be added
- Every page can easily be printed.

If you have questions, please contact Academic Affairs, extension 3662.

## CURRICULUM

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## UNDERGRADUATE PROPOSALS

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Biology

## BIO 380 - Genetics

3 credits
The study of hereditary mechanisms, including classical, biochemical, and population concepts using appropriate examples.
Prerequisites: 102; MATH 111 or equivalent; concurrent enrollment in 380L.
When Offered: fall.
Change prerequisites to:

## BIO 380 - Genetics

3 credits
The study of hereditary mechanisms, including classical, biochemical, and population concepts using appropriate examples.
Prerequisites: BIO 102; MATH 099 or appropriate placement examination (MAPLE T.A.) score; concurrent enrollment in 380L.
When Offered: fall.
A-F Grading
Preferred effective term: Spring 2011

## BIO 485 - Introduction to Biometry

3 credits
Principles of probability and statistics applied to biological data. Binomial, chi-square, and normal distributions, including analysis of variance, regression, and correlation.
Prerequisites: MATH 111 or equivalent or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
When Offered: fall.
Change prerequisites to:

## BIO 485 - Introduction to Biometry

3 credits
Principles of probability and statistics applied to biological data. Binomial, chi-square, and normal distributions, including analysis of variance, regression, and correlation.
Prerequisites: MATH 115 or a calculus course.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
When Offered: fall.
A-F Grading
Preferred effective term: Spring 2011

## CHEM 105 - General Chemistry I

3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
Topics include atomic structure, physical properties of gases, nomenclature, molecular bonding and geometry, mass relationships in chemical equations, and thermochemistry. Because the course assumes adequate knowledge of algebra, the following is strongly recommended: prior completion or current enrollment in Mathematics 111 or higher, or a mathematics SAT score of 510 or higher, or an ACT score of at least 21.
Co-requisite: concurrent enrollment in 105L, or consent of instructor or chairperson.
Note: unless otherwise stated, all chemistry courses require laboratory work.
Change description to:

## CHEM 105 - General Chemistry I

3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
Topics include atomic structure, physical properties of gases, nomenclature, molecular bonding and geometry, mass relationships in chemical equations, and thermochemistry. Because the course assumes adequate knowledge of algebra, the following is strongly recommended: prior completion or current enrollment in Mathematics 115 or higher, or a mathematics SAT score of 510 or higher, or an ACT score of at least 21.
Co-requisite: concurrent enrollment in 105L, or consent of instructor or chairperson.
Note: unless otherwise stated, all chemistry courses require laboratory work.
A-F Grading
Preferred effective term: Spring 2011

## COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

## ENVI 454 - Introduction to Hydrology

3 credits
Study of surface water systems, hydrologic budgets, and hydro-climatology. Emphasis is on techniques and methods used in the collection of hydrologic data. A two-hour lecture and a twohour laboratory weekly.
Prerequisites: ENVI 170; MATH 111 and 112 or 115.
Note: field trip and term paper required. Open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## ENVI 454 - Introduction to Hydrology

3 credits
Study of surface water systems, hydrologic budgets, and hydro-climatology. Emphasis is on techniques and methods used in the collection of hydrologic data. A two-hour lecture and a twohour laboratory weekly.
Prerequisites: ENVI 170 and MATH 115 or a MAPLE score of 21 to 30.
Note: field trip and term paper required. Open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading

## COLLEGE OF ARTS AND SCIENCES: Mathematics and Computer Science

## CS 421 - Formal Methods

3 credits
Elements of formal logic; various approaches to automation including resolution; restrictions and search methods; inductive theorem-proving; Knuth-Bendix completion; Boyer-Moore theoremprover; applications.
Prerequisites: MATH 320.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 421 - Formal Methods

3 credits
Elements of formal logic; various approaches to automation including resolution; restrictions and search methods; inductive theorem-proving; Knuth-Bendix completion; Boyer-Moore theoremprover; applications.
Prerequisites: CS 303 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 451 - Computer Architecture

3 credits
Data representation, number systems and codes, gates and logic, combinational logic, sequential circuits, flip-flops, memory and storage, computer organization, microprogramming, architectures of supercomputers and micros.
Prerequisites: CS 258 and 365.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 451 - Computer Architecture

3 credits
Data representation, number systems and codes, gates and logic, combinational logic, sequential circuits, flip-flops, memory and storage, computer organization, microprogramming, architectures of supercomputers and micros.
Prerequisites: CS 303 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 452 - Software Engineering

3 credits
The software life cycle: specification, object-oriented programming and design, program
development, validation, testing, debugging, documentation, maintenance, revision control, CASE tools.
Prerequisites: CS 258.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change description and prerequisites to:

## CS 452 - Software Engineering

3 credits
This course studies the software life cycle: specification, object-oriented programming and design, program development, validation, testing, debugging, documentation, maintenance, revision control, CASE tools.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 456 - Systems Programming

3 credits
An introduction to both program translation and operating systems. There will be a survey of topics such as: top-down and bottom-up parsing, scanning, code generation, symbol table management, linkers and loaders, batch processing systems, interacting processes, multiprogramming systems, and memory management.
Prerequisites: CS 258 and 365.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 456 - Systems Programming

3 credits
An introduction to both program translation and operating systems. There will be a survey of topics such as: top-down and bottom-up parsing, scanning, code generation, symbol table management, linkers and loaders, batch processing systems, interacting processes, multiprogramming systems, and memory management.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 457 - Data Base Processing

3 credits
Data independence, relational model, relational algebra and calculus, query languages and SQL, conceptual modeling, database design, data dependencies and normalization, access methods, tables, queries, forms, macros and reports, database administration, introduction to transaction processing, concurrent transactions, and recovery. Case studies of commercial database systems, such as Oracle and Microsoft SQL Server.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Add prerequisites to:
CS 457 - Data Base Processing
3 credits
Data independence, relational model, relational algebra and calculus, query languages and SQL, conceptual modeling, database design, data dependencies and normalization, access methods, tables, queries, forms, macros and reports, database administration, introduction to transaction processing, concurrent transactions, and recovery. Case studies of commercial database systems, such as Oracle and Microsoft SQL Server.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 458 - Algorithms

3 credits
Among the topics covered will be: review of basic data structures and their implementations; graphs, both directed and undirected; analysis of algorithms; sorting, searching, and merging, both internal and external methods; memory management algorithms; mathematical algorithms; and advanced topics as time allows, such as NP-complete problems.
Prerequisites: CS 258 and MATH 320.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 458 - Algorithms

## 3 credits

Among the topics covered will be: review of basic data structures and their implementations; graphs, both directed and undirected; analysis of algorithms; sorting, searching, and merging, both internal and external methods; memory management algorithms; mathematical algorithms; and advanced topics as time allows, such as NP-complete problems.
Prerequisites: CS 303 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 469 - Unix/Linux Administration and Networking

3 credits
Includes installation and configuration of Unix/Linux operating system software; set-up of hardware and software for Unix/Linux networking including TCP/IP, FTP, Telnet, DNS, DHCP, and Apache; Unix/Linux administration tasks including directories, users, tuning, backup, security, and networking.
Prerequisites: CS 367 or Management Information Systems 430 or Electronics and Computer Technology 353.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 469 - Unix/Linux Administration and Networking

3 credits
Includes installation and configuration of Unix/Linux operating system software; set-up of hardware and software for Unix/Linux networking including TCP/IP, FTP, Telnet, DNS, DHCP, and Apache; Unix/Linux administration tasks including directories, users, tuning, backup, security, and networking.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 470 - Programming Languages

3 credits
The purpose of the course is to develop an understanding of the organization of programming languages and introduce the formal study of programming language specification and analysis. The topics covered will usually include: language definition structure, data types and structures, control structures and data flow, run-time consideration, interpretative languages, lexical analysis, and parsing.
Prerequisites: CS 258.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:
CS 470 - Programming Languages
3 credits
The purpose of the course is to develop an understanding of the organization of programming languages and introduce the formal study of programming language specification and analysis. The topics covered will usually include: language definition structure, data types and structures, control structures and data flow, run-time consideration, interpretative languages, lexical analysis, and parsing.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 471 - Operating Systems

3 credits
Major topics will include system structure, memory management, and process management. Hands-on experience using the department's minicomputer facilities will be an important part of the course.
Prerequisites: CS 258 and 365.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 471 - Operating Systems

3 credits
Major topics will include system structure, memory management, and process management.

Hands-on experience using the department's minicomputer facilities will be an important part of the course.
Prerequisites: CS 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## CS 479 - Web Programming II

3 credits
Advanced programming for the World Wide Web and the Internet. This course includes three approaches: the older CGI/PERL, Microsoft's Active Server Pages (ASP), and Sun's Java Server Pages (JSP). The course also includes the setup and configuration of World Wide Web servers including Apache and Microsoft's IIS.
Prerequisites: CS 170 and 320.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 479 - Web Programming II

3 credits
Advanced programming for the World Wide Web and the Internet. This course includes three approaches: the older CGI/PERL, Microsoft's Active Server Pages (ASP), and Sun’s Java Server Pages (JSP). The course also includes the setup and configuration of World Wide Web servers including Apache and Microsoft's IIS.
Prerequisites: CS 170 and 202 or consent of instructor.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.
A-F Grading
Preferred effective term: Spring 2011

## COURSE REVISIONS

FOUNDATIONAL STUDIES CREDIT

## COLLEGE OF ARTS AND SCIENCES: Chemistry and Physics

## PHYS 105 - General Physics I

3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
An algebra-based introduction to physics with applications to other scientific disciplines. Topics include vectors, Newton's laws of motion in one and two dimensions, work and energy, momentum and collisions, and wave motion. This course requires proficiency in intermediate algebra; prior completion of Mathematics 111 or higher is strongly recommended.

Co-requisites: concurrent enrollment in PHYS 105L.
General Education Credit: [GE 2000: Scientific and Mathematical Studies-Elective]
Change description and remove General Education Credit to:

## PHYS 105 - General Physics I

3 credits
Link: (This course is part of the "Transfer Indiana" [TransferIN] initiative. For additional information, link to www.transferin.net/ctl.)
An algebra-based introduction to physics with applications to other scientific disciplines. Topics include vectors, Newton's laws of motion in one and two dimensions, work and energy, momentum and collisions, and wave motion. This course requires proficiency in intermediate algebra; prior completion of Mathematics 115 or higher is strongly recommended.
Co-requisites: concurrent enrollment in PHYS 105L.
A-F Grading
Preferred effective term: Spring 2011

## COLLEGE OF ARTS AND SCIENCES: Mathematics and Computer Science

## MATH 115 - College Algebra and Trigonometry

3 credits
Polynomial equations, systems of linear equations, translations, reflections, symmetry, functions, graphs, lines and conic sections, mathematical induction, and trigonometric functions.
Prerequisites: appropriate placement examination (MAPLE T.A.) score or MATH 111. Students without an appropriate trigonometry background are advised to take MATH 112.
Note: does not count toward the mathematics major or minor.
Foundational Studies Credit: [FS 2010: Quantitative Literacy or Mathematics]
Change prerequisites to:

## MATH 115 - College Algebra and Trigonometry

3 credits
Polynomial equations, systems of linear equations, translations, reflections, symmetry, functions, graphs, lines and conic sections, mathematical induction, and trigonometric functions.
Prerequisites: appropriate placement examination (MAPLE T.A.) score or MATH 099. Students without an appropriate trigonometry background are advised to take MATH 112.
Note: does not count toward the mathematics major or minor.
Foundational Studies Credit: [FS 2010: Quantitative Literacy or Mathematics]
A-F Grading
Preferred effective term: Spring 2011

## SCOTT COLLEGE OF BUSINESS

## BUS 401 - Senior Business Experience

3 credits
The senior business experience is a capstone course in both business and in General Education. While focusing on the theory and practice of strategic management, students integrate the foundation and functional areas of business and synthesize their business education with their liberal studies experience.
Prerequisites: BUS 263, 311, 321, 351, 361, 371, and a minimum of at least 78 credits, including all Basic Studies and seven of nine required Liberal Studies courses.

Note: See the General Education section of the Catalog for a complete description of the capstone requirement.
General Education Credit: [GE2000: Capstone Course (for credit in the major)]

## Capstone Course

Change description, General Studies Credit to Foundational Studies Credit, and remove note to:

## BUS 401 - Senior Business Experience

3 credits
The senior business experience is a capstone course in both the College of Business and an upper division integrative elective course in Foundational Studies. While focusing on the theory and practice of strategic management, students integrate the foundation and functional areas of business and synthesize their business education with their liberal studies experience.
Prerequisites: BUS 263, 311, 321, 351, 361, 371, and a minimum of at least 78 credits, including all Basic Studies and seven of nine required Liberal Studies courses.
Foundational Studies Credit: [FS 2010: Integrative Upper-Division Elective]
Preferred effective term: Spring 2011

## GRADUATE PROPOSALS

## COURSE REVISIONS

## COLLEGE OF ARTS AND SCIENCES: Biology

## BIO 585 - Introduction to Biometry

3 credits
Principles of probability and statistics applied to biological data. Binomial, chi-square, and normal distributions, including analysis of variance, regression, and correlation.
Prerequisites: MATH 111 or equivalent or consent of instructor.
When Offered: fall.
Change prerequisites to:

## BIO 585 - Introduction to Biometry

3 credits
Principles of probability and statistics applied to biological data. Binomial, chi-square, and normal distributions, including analysis of variance, regression, and correlation.
Prerequisites: MATH 115 or a calculus course.
When Offered: fall.
A-F Grading
Preferred effective term: Spring 2011

## COLLEGE OF ARTS AND SCIENCES: Earth and Environmental Systems

## ENVI 554 - Introduction to Hydrology

3 credits
Study of surface water systems, hydrologic budgets, and hydro-climatology. Emphasis is on techniques and methods used in the collection of hydrologic data. A two-hour lecture and a twohour laboratory weekly.
Prerequisites: ENVI 170; MATH 111 and 112 or 115.
Note: field trip and term paper required.
Change prerequisites to:

## COLLEGE OF ARTS AND SCIENCES: Mathematics and Computer Science

## CS 521 - Formal Methods

3 credits
Elements of formal logic; various approaches to automation including resolution; restrictions and search methods; inductive theorem-proving; Knuth-Bendix completion; Boyer-Moore theoremprover; applications.
Prerequisites: MATH 320.
Note: open to graduate students. Graduate students are required to do additional work of a research nature.

Change prerequisites to:

## CS 521 - Formal Methods

3 credits
Elements of formal logic; various approaches to automation including resolution; restrictions and search methods; inductive theorem-proving; Knuth-Bendix completion; Boyer-Moore theoremprover; applications.
Prerequisites: CS 303 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 551 - Computer Architecture

3 credits
Data representation, number systems and codes, gates and logic, combinational logic, sequential circuits, flip-flops, memory and storage, computer organization, microprogramming, architectures of supercomputers and micros.
Prerequisites: CS 258 and 365.
Change prerequisites to:

## CS 551 - Computer Architecture

3 credits
Data representation, number systems and codes, gates and logic, combinational logic, sequential circuits, flip-flops, memory and storage, computer organization, microprogramming, architectures of supercomputers and micros.
Prerequisites: CS 303 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 552 - Software Engineering

3 credits
The software life cycle: specification, object-oriented programming and design, program development, validation, testing, debugging, documentation, maintenance, revision control,

CASE tools.
Prerequisites: CS 258.
Change description and prerequisites to:
CS 552 - Software Engineering
3 credits
This course studies the software life cycle: specification, object-oriented programming and design, program development, validation, testing, debugging, documentation, maintenance, revision control, CASE tools.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 556 - Systems Programming

3 credits
An introduction to both program translation and operating systems. There will be a survey of topics such as: top-down and bottom-up parsing, scanning, code generation, symbol table management, linkers and loaders, batch processing systems, interacting processes, multiprogramming systems, and memory management.
Prerequisites: CS 258 and 365.
Change prerequisites to:
CS 556 - Systems Programming
3 credits
An introduction to both program translation and operating systems. There will be a survey of topics such as: top-down and bottom-up parsing, scanning, code generation, symbol table management, linkers and loaders, batch processing systems, interacting processes, multiprogramming systems, and memory management.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 557 - Data Base Processing

3 credits
Data independence, relational model, relational algebra and calculus, query languages and SQL, conceptual modeling, database design, data dependencies and normalization, access methods, tables, queries, forms, macros and reports, database administration, introduction to transaction processing, concurrent transactions, and recovery. Case studies of commercial database systems, such as Oracle and Microsoft SQL Server.

Add prerequisites to:

## CS 557 - Data Base Processing

3 credits
Data independence, relational model, relational algebra and calculus, query languages and SQL, conceptual modeling, database design, data dependencies and normalization, access methods, tables, queries, forms, macros and reports, database administration, introduction to transaction processing, concurrent transactions, and recovery. Case studies of commercial database systems, such as Oracle and Microsoft SQL Server.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 558 - Algorithms

3 credits
Among the topics covered will be: review of basic data structures and their implementations; graphs, both directed and undirected; analysis of algorithms; sorting, searching, and merging, both internal and external methods; memory management algorithms; mathematical algorithms; and advanced topics as time allows, such as NP-complete problems.
Prerequisites: CS 258 and MATH 320.
Change prerequisites to:
CS 558 - Algorithms
3 credits
Among the topics covered will be: review of basic data structures and their implementations; graphs, both directed and undirected; analysis of algorithms; sorting, searching, and merging, both internal and external methods; memory management algorithms; mathematical algorithms; and advanced topics as time allows, such as NP-complete problems.
Prerequisites: CS 303 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 569 - Unix/Linux Administration and Networking

3 credits
Includes installation and configuration of Unix/Linux operating system software; set-up of hardware and software for Unix/Linux networking including TCP/IP, FTP, Telnet, DNS, DHCP, and Apache; Unix/Linux administration tasks including directories, users, tuning, backup, security, and networking.
Prerequisites: CS 367 or Management Information Systems 430 or Electronics and Computer Technology 353.

Change prerequisites to:
CS 569 - Unix/Linux Administration and Networking
3 credits
Includes installation and configuration of Unix/Linux operating system software; set-up of hardware and software for Unix/Linux networking including TCP/IP, FTP, Telnet, DNS, DHCP, and Apache; Unix/Linux administration tasks including directories, users, tuning, backup, security, and networking.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 570-Programming Languages

3 credits
The purpose of the course is to develop an understanding of the organization of programming languages and introduce the formal study of programming language specification and analysis. The topics covered will usually include: language definition structure, data types and structures, control structures and data flow, run-time consideration, interpretative languages, lexical analysis, and parsing.
Prerequisites: CS 258.
Change prerequisites to:

## CS 570-Programming Languages

3 credits
The purpose of the course is to develop an understanding of the organization of programming languages and introduce the formal study of programming language specification and analysis. The topics covered will usually include: language definition structure, data types and structures, control structures and data flow, run-time consideration, interpretative languages, lexical analysis, and parsing.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 571 - Operating Systems

3 credits
Major topics will include system structure, memory management, and process management. Hands-on experience using the department's minicomputer facilities will be an important part of the course.
Prerequisites: CS 258 and 365.
Change prerequisites to:

## CS 571 - Operating Systems

3 credits
Major topics will include system structure, memory management, and process management.
Hands-on experience using the department's minicomputer facilities will be an important part of the course.
Prerequisites: CS 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## CS 579 - Web Programming II

3 credits
Advanced programming for the World Wide Web and the Internet. This course includes three approaches: the older CGI/PERL, Microsoft's Active Server Pages (ASP), and Sun's Java Server Pages (JSP). The course also includes the setup and configuration of World Wide Web servers including Apache and Microsoft's IIS.
Prerequisites: CS 170 and 320.
Change prerequisites to:

## CS 579 - Web Programming II

3 credits
Advanced programming for the World Wide Web and the Internet. This course includes three approaches: the older CGI/PERL, Microsoft's Active Server Pages (ASP), and Sun’s Java Server Pages (JSP). The course also includes the setup and configuration of World Wide Web servers including Apache and Microsoft’s IIS.
Prerequisites: CS 170 and 202 or consent of instructor.
A-F Grading
Preferred effective term: Spring 2011

## UNDERGRADUATE APPROVALS

## NEW COURSES

COLLEGE OF NURSING, HEALTH, AND HUMAN SERVICES: Applied Medicine and Rehabilitation

## ATTR 457 - Applied Medicine Practicum

3 credits
Students complete structured practical experience rotations in selected community healthcare facilities.
A-F Grading
Preferred effective term: Fall 2010

