
Undergraduate Courses of Instruction

Course of Instruction

Courses numbered 100-199 are intended primarily for freshmen; courses numbered 200-299, for sophomores; and courses 300-399, for juniors and seniors. Student experience may suggest exceptions are warranted. In those instances, students should consult with their advisors. Deans have authority to approve exceptions.

Some advanced courses are not taught every year but are scheduled in cycles. The University reserves the right to limit the number of students registered in any course and to cancel any course for which there is insufficient enrollment.

Accounting

ACCOUNTING 101

Principles of Accounting I

An introduction to the basic principles of Accounting, and how to account for business transactions. Emphasis on the understanding of how financial statements are prepared, and how they are used as a basis for decision making by business owners, investors, creditors, government and others interested in the financial condition of an economic entity and the results of its operations. Topics include Analyzing Transactions; the Matching Concept and the Adjusting Process; Completing the Accounting Cycle; Accounting for Merchandising Businesses; Accounting Systems, Internal Controls, and Cash; and Receivables.

3 semester hours

ACCOUNTING 102

Principles of Accounting II

A continuation of Accounting 101. Topics include Inventories; Fixed Assets and Intangible Assets; Current Liabilities; Corporations: Organization, Capital Stock Transactions, and Dividends; Income Taxes, Unusual Income Items, and Investments in Stocks; Bonds Payable and Investments in Bonds; Statement of Cash Flows; and Financial Statement Analysis. Prerequisite: Accounting 101.

3 Semester hours

ACCOUNTING 103

Managerial/Cost Accounting

Introduction to Managerial and Cost Accounting used by management in conducting daily operations, planning future operations, and developing overall business strategies. Topics include Process Cost Systems, Cost Behavior and Cost-Volume-Profit Analysis, Profit Reporting for Management Analysis, Budgeting, Performance Evaluation Using Variances from

Accounting • Art & Design

Standard Costs, and Cost Allocation and Activity-Based Costing. Prerequisite: Accounting 101 and 102.

3 semester hours

ACCOUNTING 210

Financial Accounting Systems

Accounting systems for internal control, cash management, accounts receivables, inventories, plant assets, payroll, taxes, and other liabilities. Study of manual and computerized systems.

3 semester hours

Offered: Fall

ACCOUNTING 300

Intermediate Accounting I

Study of generally accepted accounting principles underlying the preparation of basic financial statements; balance sheet, income statement, and cash flow statement. Emphasis on standards issued by the Financial Accounting Standards Board and reporting requirements of the Securities and Exchange Commission.

3 semester hours

Offered: Fall

ACCOUNTING 301

Intermediate Accounting II

Study of generally accepted accounting principles relating to accounting for leases, post-employment benefits, deferred taxes and other specialized topics. Emphasis on Financial Accounting Standards Board Statements.

3 semester hours

Offered: Spring

ACCOUNTING 302

Advanced Accounting

Coverage of selected advanced topics including accounting for investments, accounting for mergers and acquisitions, consolidation procedures, foreign currency transactions and currency translation, segment reporting, and accounting for government and not-for-profit organizations.

3 semester hours

Offered: Fall

ACCOUNTING 311

Taxation of Individuals

An introduction to the basic principles of federal taxation, with a concentration on taxation of individuals. It provides students with the knowledge to complete individual tax returns.

3 semester hours

ACCOUNTING 312

Taxation of Entities

An introduction to the basic principles of federal taxation, concentrating on the taxation of corporations, partnerships, S Corporations,

trusts and estates, and exempt organizations. It provides students with the competencies necessary to complete tax returns for each entity.

3 semester hours

Offered: Spring

ACCOUNTING 335

Auditing

Study of generally accepted auditing standards, practice and procedures in the audit of financial statements. Includes study of ethical issues and professional responsibilities of the Certified Public Accountant to investors, creditors and others who rely on the auditor's opinion when using audited financial statements to make decisions. Prerequisite: Accounting 308.

3 semester hours

Offered: Spring

Art & Design

The Art & Design Department reserves the right to retain selected samples of student work. A minimum of four hours of outside assignments per week is required in Studio Courses.

STUDIO FEES

Most studio courses have a fixed standard materials fee per course. Studio fees listed are subject to change. Consult course schedules for current rates.

ART & DESIGN C101

Art Appreciation

Introduction to theories of value in the arts. Principles of aesthetics as historically applied to plastic and performing arts. Theories of Beauty and their critique in Western and non-Western contexts. Pre-modern, modern and post-modern approaches to the analysis of the arts and architecture. This course may include a studio or performing component. A Core Heritage Course. Prerequisite: ENGL C101 or department permission.

3 semester hours

ART & DESIGN 103

2D Design

Problems in two-dimensional design and the interaction of color: the exploration of the elements of art and their interrelationships; visual and psychological factors involved in two-dimensional design and visualization. Introduces art and design presentation techniques including the portfolio. Emphasizes topics not covered in ADSN 104.

3 semester hours

Art & Design

ART & DESIGN 104

Visual Organization II

Problems in two-dimensional design and the interaction of color: the exploration of the elements of art and their interrelationships; visual and psychological factors involved in two-dimensional design and visualization. Introduces art and design presentation techniques including the portfolio. Emphasizes topics not covered in ADSN 103.

3 semester hours

ART & DESIGN 105

Drawing I

Fundamentals of drawing. Visualizing in two and three dimensions. An introduction to various media techniques and orthographic delineation methods including perspective drawing systems. Use of objects and figures in developing rapid visualization skills. Emphasizes topics not covered in ADSN 106.

3 semester hours

ART & DESIGN 106

Drawing II

Fundamentals of drawing. Visualizing in two and three dimensions. An introduction to various media techniques and orthographic delineation methods including perspective drawing systems. Use of objects and figures in developing rapid visualization skills. Emphasizes topics not covered in ADSN 105.

3 semester hours

ART & DESIGN 108

3-D Design

Fundamentals of three-dimensional design. The investigation of the interrelationships of spaces, planes, and volumes in three-dimensional structures. Materials such as paper, clay, plaster, plastic and wood will be introduced and explored for use in the construction of three-dimensional models. Students will be instructed in the use of model-making tools, equipment and processes appropriate to materials introduced.

3 semester hours

ART & DESIGN 110

Drafting

Introduces basic orthographic drafting techniques and technologies. Presentation and layout techniques used to enhance objects and environments. Introduces the representation of spatial designs including plans, views, elevations/sections, isometrics, axonometrics, perspectives, dimensioning and detail drawing. Provides basic introduction to computer-aided drafting.

3 semester hours

ART & DESIGN 117

Survey of Art History I

The development of visual art from prehistoric civilizations through the Medieval period. Multicultural developments and the changing role of the artist in society will be emphasized.

3 semester hours

ART & DESIGN 118

Survey of Art History II

The development of visual art from the Renaissance through the 20th Century, focusing on the modern role of art and artists in a global context.

3 semester hours

ART & DESIGN 119A, 119B

Introduction to Computer Applications

A survey of the primary image processing, layout, vector graphic and digital presentation software. Color correction, scanning and document set up for desktop publishing output is also covered.

ART & DESIGN 200

Co-op Work Experience

Through the co-op program, the student will be placed in full-time and part-time working positions in art, illustration, graphic design, industrial design and interior design. Prerequisite: ADSN 103, ADSN 104, ADSN 105 and ADSN 106.

1-6 semester hours

GRAPHIC 203

Typography I

The history, design and execution of letter forms in both analog and digital form are covered. Projects include the development of letter forms from pen and brush to digital font design. The emphasis is on the arrangement of type in design layout and the use of letter forms in an electronic presentation environment. Prerequisite: ADSN 219.

3 semester hours

GRAPHIC DESIGN 204

Calligraphy

This course addresses the origin of the roman alphabet(s), the development of historical letter style categories, manual methods of producing distinctive and beautiful letters and text, various parameters of legibility and readability, methods of utilizing calligraphic and lettering forms in both traditional and innovative ways.

2 semester hours

ART & DESIGN 205

Drawing III

Advanced drawing techniques utilizing a variety of media and subjects. Investigates structure, materials and scale by illustrating and

rendering figures, objects and environments. Emphasizes topics not covered in Art & Design 206 such as advanced orthographic drawing techniques. Prerequisite: ADSN 105 and ADSN 106.

3 semester hours

ART & DESIGN 206

Interiors Drawing IV

Advanced drawing techniques utilizing a variety of media and subjects. Investigates structure, materials and scale by illustrating and rendering figures, objects and environments. Emphasizes topics not covered in Art & Design 205 such as production and assembly drawings. Prerequisite: ADSN 105 and ADSN 106.

3 semester hours

ART & DESIGN 207

Illustration I

A basic hands on course for developing a strong technical rendering foundation. An emphasis is placed on creative problem solving and simultaneous technical development. Editorial illustration for books, magazines, and advertising, etc. is the purpose of the course. Prerequisite: ADSN 103, ADSN 104, ADSN 105 and ADSN 106.

3 semester hours

ART & DESIGN 208

Illustration II

Continuation and second level of Art & Design 208 Illustration I. An emphasis is placed on creative problem solving and simultaneous technical development in an electronic environment. Editorial illustration for books, magazines, and advertising, etc for an electronic prepress environment is accompanied with learning advanced paint, photo-manipulation and logo software. Prerequisite: ADSN 207 and ADSN 219.

3 semester hours

ART & DESIGN 209

Painting I

The principles of painting, through a series of visual problems, working from nature. The understanding of pictorial space through control of drawing, value and color. Emphasizes topics not covered in Art & Design 210.

3 semester hours

ART & DESIGN 210

Painting II

The principles of physical and digital painting through a series of problems uniquely structured for the combination of analog and digital media. The understanding of representation and appropriate presentation methods relative to

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analog and digital media is the emphasis of the course. Prerequisite ADSN 209, and ADSN 219.
3 semester hours

GRAPHIC DESIGN 212

Introduction to Visual Semiotics

Semiology (from the Greek semeion 'sign'). In semiotics, 'signs' and symbols may be words, images or anything from which meanings may be generated and used to communicate. The course is an introduction to the analysis, appreciation and reading of broad range of signs and symbols to empower the communication practitioner to expand their visual vocabulary. Myth, Metaphor, Religious Iconography, Advertising and more, will be investigated to establish a communication value. With this added knowledge the students can be a more sophisticated globally aware communicator in their field of practice. The course consists primarily of video and slide screenings, followed by written analysis, reading and discussion. Prerequisite: ADSN 219, and ADSN 249.

3 semester hours

ART & DESIGN 221

Ceramics I

A basic approach to functional and sculptural clay modeling and firing techniques. The course exposes students to a variety of techniques used by different cultures from around the globe, both past and present. The course is to develop an appreciation for 3-Dimensional form.
3 semester hours

ART & DESIGN 223

Sculpture I

Techniques of three dimensional design applied to a variety of materials and used for expressive purposes. Includes figure sculpting and armature construction.

3 semester hours

ART & DESIGN 230

Video I

History, theory, and practice of analog and digital capturing and editing. Use of cameras and software for digitizing and editing. An emphasis on a narrative film style (story telling) is utilized to prepare students for later work in Web and Multimedia design. Prerequisite: ADSN 219.

3 semester hours

ART & DESIGN 231

Photography I

This is a non-darkroom course for using professional studio equipment in and out of the studio to fulfill assignments in advertising, industrial, commercial and portrait photography by combining creativity and technical

knowledge. The fundamentals of picture taking, camera types, and history will be covered. Emphasis is on studio lighting with a final concern for documenting 2D and 3D work in a portfolio format.

3 semester hours

GRAPHIC DESIGN 255

Studio I

Print Design I – Fundamentals of page composition. Students will demonstrate an understanding of basic typographic and page composition principles through a variety of traditional and digital mediums. Prerequisites: ADSN 103 and ADSN 119.

3 semester hours

GRAPHIC DESIGN 256

Studio II

Print Design II – Intermediate print design. This course explores the combination of type and image on the printed page. The course focuses on using grids, along with the basic principles of typography as methods for organizing content in print. Prerequisites: GDSN 255 (DS I).

3 semester hours

GRAPHIC DESIGN 304

Business Practices & Ethics

Lecture course on business practices and professional ethics as applied to the Interior Design profession. Survey of business types, marketing and selling of services and products, and fee structures will be discussed. Current trends in safety, codes and licensing issues will be explored. Examination and preparation of business forms including contractual agreements, budget estimates, purchase orders and invoices will be covered in depth and applied to the thesis project. Prerequisite: ITDSN 356

GRAPHIC DESIGN 305

Studio III

Print Design III – Advance printing design: Students will create campaigns in a series of projects to cover all aspects of identity design, from business stationary to promotional brochures, packaging design and environmental signage. Techniques for reinforcing a corporate identity will be covered. Prerequisites: GDSN 256 (DS II).

3 semester hours

GRAPHIC DESIGN 306

Studio IV

Web Design: Producing and displaying design content for the Web branch of the Internet and adapting that content to the requirements and restrictions of that medium. Students will develop skills in using mark-up languages to

make functional and accessible documents for the World Wide Web, develop skills in structuring, linking, and maintaining multiple documents within a web site, and develop skills in incorporating visual elements to enhance information. Prerequisites: GDSN 305 (DS III).

3 semester hours

ART & DESIGN 309

Painting III

Investigation of a variety of media and techniques. Problems emphasizing composition formulation. Emphasizes topics not covered in ADSN 310. Prerequisite: 30 units of Art & Design courses or equivalent and ADSN 209, ADSN 210.

3 semester hours

ART & DESIGN 317

Photography II — Digital & Non Silver, Alternative Photography

This is a studio course for the photographer that is more concerned with the esthetic, process, materials and digital technology to support content. Various methods of photographic representation will be explored, both digital and non-silver for the purpose of presentation and exhibition. Methods will vary from polaroid transfer, cyanotype, gumbicromate and digital prints. Prerequisite: ADSN 231 and ADSN 219.

3 semester hours

ART & DESIGN 319

Printmaking I

Introduction to printmaking studio practices including intaglio, lithography, relief, paper making, etc. The course exposes students to a variety of techniques used by different cultures from around the globe, both past and present.

3 semester hours

GRAPHIC DESIGN 355

Portfolio Preparation

Students will prepare their portfolios for both print and web formats. Reworking of previous design to improve for portfolio presentation. Developing new pieces to enhance and broaden the current body of work. Prerequisite: GDSN 306 (DS IV)

3 semester hours

GRAPHIC DESIGN 356

Thesis/Portfolio II

This is an individual statement. The applied knowledge of five semesters of study will support future investigation. The body of work and research should reflect a concentration of study in a chosen area of practice as stated in the thesis proposal, e.g., design, advertising, publishing (www), etc. The student will work

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with an advisor in the chosen field and thesis teacher for 2 semesters. The focus of the class is to assist the student in developing a critical appreciation of their work through concentrated input from faculty, students and guest critics. The course requires a body of work accompanied by a written statement and slide documentation, as well as a complete portfolio.
3 semester hours

ART & DESIGN 357

Illustration III

Advanced illustration problems and techniques for magazines, advertising, fashion, children's books, newspapers and preparation of a professional portfolio. Media used by illustrators including specialized painting and drawing techniques will be studied with emphasis on the importance of style in contemporary illustration. Various markets will be studied to identify appropriate potential markets for student illustrations. Work with editors and art directors. Deadline development and portfolio preparation for each market type. Emphasizes topics not covered in ADSN 358. Prerequisite: ADSN 207, ADSN 208.
3 semester hours

ART & DESIGN 376

History of Modern Art

Global art of the 20th Century with the inclusion of electronic and computer art. Prerequisite: Art & Design 117 and 118.
3 semester hours

ART & DESIGN 377

History of Modern Design

Survey of major design movements of the 19th & 20th Centuries. Studies in the national and international relationship of art and design in such groups as De Stijl and the Bauhaus.
3 semester hours

ART & DESIGN 378

History of Photography

A survey of photographic history from its earliest beginning to the present day. Major photographers, styles, and trends in a social context are covered. The course will also include political, social, and scientific influences on photography, and the role of photography in everyday life. Through slide lectures and class work, students will learn to look at, talk, and write about photographs. Prerequisite: ADSN 117 and ADSN 118.
3 semester hours

ART & DESIGN 379

History of the Graphic Arts

Survey of the history of illustration and graphic design, with emphasis on their global applica-

tion in communications media.
3 semester hours

ART & DESIGN 380

History of Modern Architecture & Urbanism

Survey of the major movements in architecture and urban planning from the 19th Century to the present. Considers the problems of vernacular architecture, urban design, historicism, functionalism, post-modernism.
3 semester hours

ART & DESIGN 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

ART & DESIGN 399

Independent Study/Special Projects

For the student who desired to specialize in advance projects not covered by the regular course offerings. Individual or group conferences with designated faculty advisor. Prerequisite: Permission of School Director.
1-6 semester hours

ART & DESIGN 408

Selected Topics in Modern Art & Design History

Seminar examining specific topics in the global history of modern art and design such as Dada, Abstract Expressionism, furniture design, performance art, computer & media arts. Prerequisite: 12 semester hours of art history or permission of the instructor.
3 semester hours

ART & DESIGN 425

Advanced Topics I

Advanced undergraduate or graduate level topics with directed or independent study formats. Prerequisite: division approval; advanced standing; 30 semester hours of Art & Design courses or equivalent.
By arrangement; 2-10 semester hours.

Industrial Design

INDUSTRIAL DESIGN 107 (IDDSN 107/ITDSN 107)

Product Lab Orientations

This non credit course is required prior to student use of the lab equipment. It is an introduction to the proper operation of equipment and an understanding of the lab rules. Students will gain a respect for the equipment and an understanding and proper equipment practices. Eye protection and other safety protection will be worn at all times while in the lab.
0 semester hours

INDUSTRIAL DESIGN 200

Co-op

Summer co-op following the Sophomore and Junior years. The student is expected to locate a summer job with the assistance of the ID department. A mutually beneficial job description and expected output will be developed with the participating entity and conveyed to the student. Where confidentiality is required, care will be taken to protect the company, yet provide the student with adequate work examples, including a strong emphasis on CAD/CAM. Students will develop a project(s) portfolio and complete an intern project report.
0 semester hours

INDUSTRIAL DESIGN 215

Materials and Manufacturing I

Introduction to ferrous and nonferrous metals and their manufacturing methods, including liquid state, plastic state, and solid state forming; chip and non chip cutting; welding, chemical and mechanical joining; and the finishing process available. Students will develop an individual or group project and complete semester research/project report.
3 semester hours

INDUSTRIAL DESIGN 216

Materials and Manufacturing II

Introduction to thermoset and thermoplastic polymers and elastomers, rubber and other natural engineering materials and their manufacturing methods, including liquid state, plastic state, and solid state forming, chip and non-chip cutting, welding, chemical and mechanical joining, and the finishing processes available. Students will develop an individual or group project and complete a semester research/project report.
3 semester hours

INDUSTRIAL DESIGN 217 (IDDSN 217/ITDSN 217)

Computer Aided Drafting

In this course students will learn the basics of computer aided drafting. Students will be expected to complete a tutorial and several assigned projects. A semester report including all projects will be completed.
Three 1 semester hour modules

INDUSTRIAL DESIGN 218A (IDDSN 218A/ITDSN 218A)

Beginning CADD

This course is an introduction to computer aided 3D Modeling. Subjects covered will include Introduction and Interface, drawing 2D shapes, mixing straight lines and arcs, numerical input, generating, viewing and rendering objects, moving rotating, sizing and mirroring objects, and drawing derivative objects.

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Elementary projects may be assigned, and a semester report may be generated.

2 semester hours

INDUSTRIAL DESIGN 218B

Intermediate CADD

This is an intermediate class in computer aided 3D modeling. Subjects covered will include terrain models, curved lines and meshes, deformations, boolean, trim and stitch operations, and attaching extending and attaching objects. Intermediate projects will be assigned, and a semester report will be generated.

2 semester hours

INDUSTRIAL DESIGN 218C

Advanced CADD

This is an advanced class in computer aided 3D modeling. Subjects covered will include reference planes and their palettes; drafting tools, advanced rendering, export features and animation models. Advanced projects will be assigned and a semester report will be generated.

2 semester hours

INDUSTRIAL DESIGN 255

Industrial Design Studio I

A studio course where elementary product design projects are assigned. Projects will begin with advanced foundation studies, along with simple hand held products, and advance through simple mechanically activated products. Emphasis will be placed on aesthetic development, user requirements, and design for manufacturability. A beginning professional portfolio will be initiated. Prerequisite: Foundation courses and Drafting.

3 semester hours

INDUSTRIAL DESIGN 256

Industrial Design Studio II

Continuation of IDDSN 256

3 semester hours

INDUSTRIAL DESIGN 305

Industrial Design Studio III

A studio course where complex product design projects are assigned. These projects will begin with simple, electrically powered products, and advance through more sophisticated electromechanical products. Emphasis will be placed on aesthetic development, user requirements, and design for manufacturability. Students will be expected to produce a report for each project and for the semester. A professional portfolio will be further developed. Prerequisite: IDDSN 256, IDDSN 218A & B, and IDDSN 309.

3 semester hours

INDUSTRIAL DESIGN 306

Industrial Design Studio IV

Continuation of IDDSN 305.

3 semester hours

INDUSTRIAL DESIGN 309 (IDDSN 309/ITDSN 309)

Human Factors

Analysis of Human anatomy versus function. Recognition, investigation, exploitation of static/dynamic human movements. Relationships of products, systems and environments to the human scale. Ergonomics and motions that relate to the performance of tasks. Students will develop apparatus to provide significant quantitative data. Variety of advanced studies on dynamic interaction of the body and the environment, products, and systems. Study of the relationship of age, sex, and disabilities to human movements. Creative research projects and the development of mechanical/electric test prototypes to collect quantitative data.

3 semester hours

INDUSTRIAL DESIGN 311 (IDDSN 311/ITDSN 311)

Exhibit Design

A course exploring the fields of display and exhibit design including trade shows, fairs, theme exhibits, mobile exhibits, pavilion and museum design, point of purchase, window and showroom design. The student will be exposed to a variety of project experiences including rendered presentations, model making and construction details. Area included will cover special effects, dioramas, crowd flow management, lighting design, acoustics, graphics, signage, subcontract specifications and portfolio techniques unique to the field. Field trips. Prerequisite: ADSN 205, ADSN 206.

3 semester hours

INDUSTRIAL DESIGN 355

Industrial Design Studio V

A studio course where complex product system projects are assigned. Projects will include sophisticated electromechanical products. Emphasis will be placed on research, aesthetic development, user requirements, and design for manufacturability. Project reports will be generated which will include detailed analysis, synthesis, material specification, and complete design documentation. A professional portfolio will be completed. When possible, the student is encouraged to work with other professions like engineering and with corporate sponsorship. Prerequisite: IDDSN 306.

3 semester hours

INDUSTRIAL DESIGN 356

Industrial Design Thesis

A studio course where individual and interdisciplinary group projects of complex prod-

uct systems are initiated and executed by the student(s). Projects will include sophisticated computer controlled electromechanical products and systems. Emphasis will be placed on research, aesthetic development, user requirements, material specifications, and design for manufacturability. A thesis report will be generated, which will include detailed analysis and synthesis, material specification and complete design documentation, including a set of working drawings and a final model and rendering. A professional portfolio will be completed. Prerequisite: IDDSN 355.

3 semester hours

INDUSTRIAL DESIGN 398

Internship I & II

Summer internship following the Sophomore and Junior years. The student is expected to locate a summer job with the assistance of the ID department. A mutually beneficial job description and expected output will be developed with the participating entity and conveyed to the student. A portfolio of projects is required. Where confidentiality is required, care will be taken to protect the company, yet provide the student with adequate work examples, including a strong emphasis on CAD/CAM. Students will develop a project(s) portfolio and complete an intern project report.

1-6 semester hours each

INDUSTRIAL DESIGN 399

Special Projects

This is an advanced studio course for competitions, sponsored projects, and other design projects like furniture and lighting. Students will develop a semester research/project report.

1-9 semester hours

Interior Design

INTERIOR DESIGN 107 (ITDSN 107/IDDSN 107)

Product Lab Orientations

This non credit course is required prior to student use of the lab equipment. It is an introduction to the proper operation of equipment and an understanding of the lab rules. Students will gain a respect for the equipment and an understanding and proper equipment practices. Eye protection and other safety protection will be worn at all times while in the lab.

0 semester hour

INTERIOR DESIGN 200

Co-Op Work Experience

Through the co-op program, the student will be placed in full-time and part-time work working positions. Prerequisite: Completion of

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30 semester hours; Permission of advisor and School Director; by arrangement.

3 semester hours

INTERIOR DESIGN 215

Interior Construction Systems

Students study architectural systems, details, and building codes. Construction methods and materials of foundations, walls, partitions, floors, ceilings, and roofs are covered, as well as doors, windows, stairs, and fireplaces. Continued study of building components and energy systems. Plumbing, heating, ventilating, air conditioning, acoustics and solar energy will be examined. Students will be able to represent knowledge of systems and structure details.

3 semester hours

INTERIOR DESIGN 217

Color Studies for Interiors

This course is an extension of 2D principles/Color Theory. Students are introduced to further color studies and rendering techniques using various media. Additional studies will focus on composition of materials/color boards as visual presentation tools.

3 semester hour modules

INTERIOR DESIGN 218A (ITDSN 218A/IDDSN 218A)

Beginning CADD

This course is an introduction to computer aided 3D Modeling. Subjects covered will include Introduction and Interface, drawing 2D shapes, mixing straight lines and arcs, numerical input, generating, viewing and rendering objects, moving rotating, sizing and mirroring objects, and drawing derivative objects. Elementary projects may be assigned, and a semester report may be generated.

2 semester hours

INTERIOR DESIGN 218B (ITDSN 218B/IDDSN 218B)

Intermediate CADD

This is an intermediate class in computer aided 3D modeling. Subjects covered will include terrain models, curved lines and meshes, deformations, boolean, trim and stitch operations, and attaching extending and attaching objects. Intermediate projects will be assigned, and a semester report will be generated.

2 semester hours

INTERIOR DESIGN 218C (ITDSN 218C/IDDSN 218C)

Advanced CADD

This is an advanced class in computer aided 3D modeling. Subjects covered will include reference planes and their palettes; drafting tools, advanced rendering, export features and animation models. Advanced projects will be assigned and a semester report will be generated.

2 semester hours

INTERIOR DESIGN 255

Studio I

Introductory level course in Interior Design. Application of design theory to commercial and residential interiors. Introduction to human factors, programming, space planning, application of color, form, texture, pattern and aesthetic sensitivity to various interior problems with an emphasis on creativity and innovation. Students will communicate design ideas with a variety of two and three dimensional presentation techniques.

3 semester hours

INTERIOR DESIGN 256

Studio II

Exploration of more complicated problems in commercial and residential interiors with continued emphasis on human factors, space planning, creativity and innovation. Application of knowledge of architectural systems to design solutions. Introduction to multi level spaces, atypical users and barrier free design. Design solutions will be presented using a variety of two and three dimensional skills with continued development of media and presentation techniques.

3 semester hours

INTERIOR DESIGN 303

Materials, Products and Applications

Examination of background finishes and materials from construction and manufacturing processes through measurement and installation methods. Areas covered include floor, wall, and ceiling materials as well as woods, laminates, and glass.

3 semester hours

INTERIOR DESIGN 304

Business Practices and Ethics

Lecture course on business practices and professional ethics as applied to the Interior Design profession. Survey of business types, marketing and selling of services and products, and fee structures will be discussed. Current trends in safety, codes and licensing issues will be explored. Examination and preparation of business forms including contractual agreements, budget estimates, purchase orders, and invoices will be covered in depth and applied to the thesis project. Prerequisite: ITDSN 356

3 semester hours

INTERIOR DESIGN 305

Studio III

Introduction to more difficult Interior problems in both commercial and residential design. Students will work more advanced programming, space planning, circulation problems and human factors. Continued emphasis on creativity

and innovative problem solving. Application of architectural and energy systems as well as safety and building codes to design solution. Sensitivity to atypical users and their needs will be expanded. Architectural and design details, materials and finishes will be incorporated in the final design proposal. Prerequisite: ITDSN 265, ITDSN 266.

3 semester hours

INTERIOR DESIGN 306

Studio IV

Continued development of knowledge and skills learned in Interior Design 305 to effectively solve interior design problems in residential and commercial design solutions. Design proposals will be presented Prerequisite: ITDSN 355.

3 semester hours

INTERIOR DESIGN 355

Studio V (Thesis)

Students will develop a thesis project in Interior Design which will highlight their ability to solve complicated design problems creatively while being sensitive to human factors, structure and energy systems, programming, circulation, materials and finishes, design details, custom cabinetry and furniture. The design solution will be presented using a variety of advanced two level and three dimensional techniques. Rationale for solution will be validated by research data. Prerequisite: ITDSN 356.

3 semester hours

INTERIOR DESIGN 356

Studio VI

Course involving extensive work in large of office space planning and residential design. Knowledge of interior products and specifications will be incorporated into design solutions. Students will assemble a final portfolio representative of their design education experiences. Prerequisite: ITDSN 365.

3 semester hours

INTERIOR DESIGN 307

Lighting

An introductory course in Lighting for Interior Spaces. What light is, how it can be produced and how the eye perceives it will be examined. Students will learn basic lighting terminology as well as what equipment is available for commercial and residential use and their appropriate applications. The effect of light to create a mood or atmosphere will be explored. Lighting plans for interior spaces will be generated with an emphasis on technical as well as aesthetic concerns.

3 semester hours

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INTERIOR DESIGN 309 (ITDSN 309/IDDSN 309)

Human Factors

Analysis of Human anatomy versus function. Recognition, investigation, exploitation of static/dynamic human movements. Relationships of products, systems and environments to the human scale. Ergonomics and motions that relate to the performance of tasks. Students will develop apparatus to provide significant quantitative data. Variety of advanced studies on dynamic interaction of the body and the environment, products, and systems. Study of the relationship of age, sex, and disabilities to human movements. Creative research projects and the development of mechanical/electric test prototypes to collect quantitative data.

3 semester hours

INTERIOR DESIGN 311 (ITDSN 311/IDDSN 311)

Exhibit Design

A course exploring the fields of display and exhibit design including trade shows, fairs, theme exhibits, mobile exhibits, pavilion and museum design, point of purchase, window and showroom design. The student will be exposed to a variety of project experiences including rendered presentations, model making and construction details. Area included will cover special effects, dioramas, crowd flow management, lighting design, acoustics, graphics, signage, subcontract specifications and portfolio techniques unique to the field. Field trips. Prerequisite: ADSN 205, ADSN 206.

3 semester

INTERIOR DESIGN 312

Furniture Design

Students will have an opportunity to do specialized design work in furniture. Exploration of materials, colors, textures, forms, human factors and manufacturing techniques to create uniquely aesthetic and functional solutions to furniture design problems. Students will be required to do free hand and orthographic drawings as well as a variety of three dimensional models from sketch to final prototype. Prerequisite: ITDSN 309.

3 semester hours

INTERIOR DESIGN 362

Construction Documents

Preparation of Construction Documents for Interiors will be covered in depth and applied to the Thesis project. Drawings to be prepared include construction/demolition, electric/telephone, reflected ceiling, floor finishes, applied finishes, panel and post, and furniture plans as well as detail drawing for special construction, custom cabinetry, furniture and millwork. Prerequisite: ITDSN 365.

3 semester hours

INTERIOR DESIGN 398

Internship

Professional, supervised, paid or unpaid work in an organization related to career goals. Students will be required to develop a project portfolio and complete an intern project report. Prerequisite: Permission of advisor and School Director.

3 semester hours

Biology

BIOLOGY 100

Biology Study Skills

A course to expose students with limited science backgrounds to basic biochemistry, cell theory, physiology theory, and ecological theory and assist in the development of appropriate learning and study skills. Students will develop writing and presentation skills that will support them as they move into the more detailed basic science coursework required of science majors.

3 semester hours

BIOLOGY 101

General Organism Biology

The course examines the diversity of life in terms of their taxonomy, anatomy, physiology and ecology. Emphasis is placed on variation, adaptation, and evolutionary mechanisms. Required of all biology majors. Prerequisites: Biology major or instructor's permission.

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 102

Cell-Molecular Biology

Students are exposed to the general biological principles that govern all living organisms. Concepts dealt with include origin of life, structure and function of cells at the cellular and molecular level, biochemistry, genetics and evolution. Required of all biology majors. Prerequisites: 1 semester each of Biology Chemistry and Math, C or better in all, or instructors permission.

3 class periods; 1three-hour laboratory; 4semester hours

BIOLOGY 106

Elementary Microbiology

This course is designed to provide students with an introduction to and overview of the key areas of microbiology for the healthcare professional. The course will cover the structure, growth, metabolism and genetics of microorganisms associated with human diseases.

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 113

Anatomy and Physiology I

Anatomy and physiology combined to yield a fundamental knowledge of the human body. Structure and function taught concurrently, each in terms of the other, to engender appreciation of interlocking relationships.

3 class periods; 1 two hour laboratory; 8 semester hours

BIOLOGY 114

Anatomy and Physiology II

Anatomy and physiology combined to yield a fundamental knowledge of the human body. Structure and function taught concurrently, each in terms of the other, to engender appreciation of interlocking relationships.

3 class periods; 1 two hour laboratory; 8 semester hours

BIOLOGY 201

Biosurvival

Learn to recognize local plants and animals and learn how they can be used to survive in the wilderness, pitch a weather resistant camp, make fires, purify water, and navigate on and off trail. A 3-day final survival hike is required. Prerequisite: A basic biology course and signature of the department chairman.

3 class periods; field trip required; 3 semester hours

BIOLOGY 202

Human Evolution

A three hour studio-type course, integrating the lecture and lab experience. Students will cover the basic principles and mechanisms of micro- and macroevolution and its impacts on the distribution of human populations, human health and human behavior. The class will combine lecture, reading, discussion, independent projects, and hands-on exercises from the biological literature and other disciplines involved in the study of human migration and the evolution of human sociality. Prerequisite: Bio 101 and Bio 102.

3 class periods; 3 semester hours

BIOLOGY 203

Human Sexual Biology

Human sexual biology is examined within the context of male and female reproductive system structure, function and dysfunction. Modern biomedical and biotechnological issues and methodologies as they might relate to the present and future course of human sex and reproduction are explored.

3 class periods; 3 semester hours

BIOLOGY 210

Comparative Anatomy

An integrated study of vertebrate structure

Biology

from a phylogenetic approach. Laboratory studies will include dissection of representative forms. Prerequisite: Bio 101.

2 class periods, 2 three-hour laboratory; 4 semester hours

BIOLOGY 211

General Physiology

Topics include physiological and biochemical control and functioning in systems. Laboratory work will acquaint the student with basic physiologic experimentation, and the interpretation and presentation of data. Required of all biology majors. Prerequisite: Biology 101, 102.

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 213

General Anatomy and Physiology I

An in-depth survey of human anatomical structure and function, including dissection and histology.

3 class periods; 1 two-hour laboratory; 8 semester hours

BIOLOGY 214

General Anatomy and Physiology II

An in-depth survey of human anatomical structure and function, including dissection and histology.

3 class periods; 1 two-hour laboratory; 8 semester hours

BIOLOGY 217

Field Biology

Students will design and implement a small research project requiring field work in a New England ecosystem as specified by the instructor. Prerequisite: Biology 101

1 class period, field trip required; 1 semester hour

BIOLOGY 223

Ecology

The course explores the relationship of organisms to their environment; distribution, climatic factors, ecological succession; homeostasis and adaptability of organisms are considered. Field trips designed to emphasize and illustrate major habitats, life zones, and ecological principles. Required of all biology majors. Prerequisite: Biology 101, 102.

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 307

Genetics

The laws of biological inheritance and their practical application to life; fundamental observations and concepts of classical and molecular genetics from Mendel to modern molecular biology. Topics include basic principles

of heredity, chemical nature of the genetic material, genomics, cytogenetics, mutation, gene expression and regulation. Brief consideration of population genetics. Required of all biology majors. Prerequisite: Biology 101 and 102, or instructor's permission.

3 class periods; 3 semester hours

BIOLOGY 320

Microbiology

Presentation of fundamentals of Bacteria, fungi and viruses; their relationships to man, industry, and agriculture. Laboratory study of cultural, morphological, physiological, and genetic properties of representative types. Emphasis on development of technique. Prerequisite: Biology 211

2 class periods; 2 two-hour laboratory periods; and some nonscheduled laboratory work; 4 semester hours

BIOLOGY 321

Cell Physiology

A lecture course exploring the homeostatic mechanisms of the cell. Chemical composition, metabolism, permeability, synthesis and growth. Required of all biology majors. Prerequisite: Biology 211, B or better or instructor's permission.

3 class periods; 3 semester hours

BIOLOGY 317

Parasitology, Mycology, and Virology

The course examines the medical relevant fungi, protists, invertebrates, and virus, with an emphasis on laboratory diagnoses. Prerequisite: Biology 101; Biology 320 recommended.

2 class periods; 2 two-hour laboratory periods; and some nonscheduled laboratory work; 4 semester hours

BIOLOGY 324

Endocrine and Reproductive Biology

A review of endocrine tissues, the hormones they produce, and their mechanisms and interactions with special emphasis on human reproductive endocrinology and physiology. Prerequisite: Biology 211, B or better or instructor's permission

3 class periods; 3 semester hours

BIOLOGY 330

Marine Biology and Ecology

Examination of the ecology of the oceans; relation of distribution to physical and chemical environments; productivity of marine communities; and the interaction of man with marine communities. Prerequisite: Biology 101 & 102 or permission of the instructor.

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 332

Medical Microbiology

The study of infectious disease processes; the biology of pathogenic microorganisms; the etiology, pathology, diagnosis, and epidemiology of viral, bacterial, fungal, and protozoal diseases. Prerequisite: Biology 320

3 class periods; 1 three-hour laboratory; 4 semester hours

BIOLOGY 341

Immunology

Consideration of the basic principles and concepts of the mechanics of immunity and the relation of immunological phenomena to biological problems. Prerequisite: BIOL 211 or instructor's permission.

3 class periods; 1 three-hour laboratory periods; 4 semester hours

BIOLOGY 343

Medical Genomics

This course covers the basic biochemistry of proteins and nucleic acids and the techniques used to isolate, quantify, and characterize them. The class focuses heavily on the genomics of disease processes and the techniques used to diagnose and manage them. The course includes both laboratory exercises and review of case studies. Prerequisite: Bio 102.

2 class periods; 1 two-hour laboratory; 3 semester hours

BIOLOGY 344

Toxicology

Pharmacological studies of the effects of drugs on living organisms and the adverse effects induced by physical and chemical agents, including therapeutic agents. Prerequisite: CHEM 206 and BIOL 211 or instructor's permission.

3 class periods; 1 three-hour laboratory periods; 4 semester hours

BIOLOGY 345

Molecular Biology

The study of genes and their activity at the molecular level, DNA replication and repair, transcription, translation, recombination, translocation, and mutations. Techniques and experiments leading to important discoveries on DNA will be covered. Required of all biology majors. Prerequisite: BIOL 102, 211, CHEM 206.

3 lecture hours; 1 three-hour laboratory period; 4 semester hours

BIOLOGY 380

Selected Topics

Modern concepts in the area of the instructor's specialty. To be announced each semester.

*1-4 semester hours**

Biology • Business Administration • Capstone Seminar • Chemistry

BIOLOGY 381

Virology

This course is aimed to advance undergraduate understanding of the fundamental aspects of prokaryotic and eukaryotic viruses. The course will cover viral morphology, taxonomy, molecular biology, disease, and control. Prerequisite: BIOL 211 or instructors permission.

3 class periods; 3 semester hours

BIOLOGY 398

Readings

Individual library studies under faculty direction in an area of student interest. An acceptable paper must be presented. Prerequisite: Permission of the instructor and Department Chair.

*1-6 semester hours**

BIOLOGY 399

Directed Research

Opportunity for the student to pursue laboratory research under the direction of a faculty specialist. Prerequisite: Permission of the instructor and Department Chair.

*1-6 semester hours**

**A student may not take more than 6 semester hours of total combined credit in 398 & 399.*

BIOLOGY 403

Histology

Detailed analysis of the microscopic structure of animal cells and tissues. Laboratory work limited to study of prepared microscopic material. Prerequisite: Biology 102, 211.

3 class periods; 1 three-hour laboratory periods; 4 semester hours

BIOLOGY 418

Environmental Health

This course is designed to explore current environmental and public health concerns and issues. Students will gain an understanding of the interaction of individual and communities with the environment, the potential impact on health of environmental agents. The sequence of major topics begins with environmental epidemiology and toxicology, policy and regulation. The course then covers specific agents of environmental diseases. Domains of environmental health are addressed. Prerequisites: Biology 101 and 102

3 class periods; field trips by arrangement, 3 semester hours

Business Administration

BUSINESS ADMINISTRATION 200

Co-op Work Experience

A paid work experience related to the student's major. Faculty approval required.

0-1 semester hours

BUSINESS ADMINISTRATION 210

Fundamentals of Entrepreneurship

This course will begin by addressing the concept of development of a new venture. The course will then address the fundamentals such as the financing important to the new venture and its creator, competitive positioning, branding and imaging, stationery, marketing, protecting intellectual property, the legal entity structure, the website development components and cost. The class will teach how to source capital and then further how to pitch to capital providers. Each student will develop a minimum viable product by producing a business model canvas to further in a business plan in a later class.

3 Semester hours

BUSINESS ADMINISTRATION 300

Philanthropy

An introduction to Philanthropy, its origins, functions, and purposes in society. Topics include Reasons to Give, Planned Giving, Charities, Required Elements for a Charitable Gift, Federal Charitable Income Tax Deductions, Federal Estate and Gift Tax Deductions, Valuing and Substantiating Contributions, Charitable Remainder Trusts (CRT) and Alternatives, Charitable Lead Trusts, Issues Common to All Charitable Trusts, Financial Planning, Charitable Estate Planning, Business Succession Planning, Retirement Planning, Planning for Real Estate, Private Foundations, Supporting Organizations, Endowment Funds and Donor-Advised Funds, and Investing Charitable Donations.

3 Semester hours

BUSINESS ADMINISTRATION 382

Internship

Field study of an organization in action. Students can fulfill the course requirements in one of three ways: a) to do an internship in an outside organization or one of the learning institutes within the College, and submit a paper with an analysis of their experiential learning; b) to write a case study with critical evaluation of an organization in action; or c) to develop a new business venture and submit a comprehensive business plan.

3-6 semester hours

BUSINESS ADMINISTRATION 395

Honors Thesis

Students are expected to write and present a paper to the faculty which demonstrates evidence of research in a field of business studies. The paper should contain the following elements: a) the review of literature of business studies in the field; b) description of new trends of thought, practice and application in the field;

the writer's own assessment of current research.
3 semester hours

BUSINESS ADMINISTRATION 399

Independent Study

An opportunity to specialize in advanced projects not covered by regular course offerings. Students have individual conferences with assigned faculty members and meet several times as a group to discuss findings and common problems.

1-3 semester hours

Capstone Seminar

CAPSTONE 390

Capstone Seminar

The Capstone Seminar is the culmination of learning in the Core Curriculum. As such, it reflectively builds upon learning from the various liberal arts. The course is conducted as a seminar and thus requires substantial reading and informed participation. All students write an original essay that integrates themes raised in course readings and discussions. Prerequisite: Completion of at least 75 semester credit hours and fulfillment of all other Core requirements.

Chemistry

CHEMISTRY 103

General Chemistry I

A study of basic chemical principles and their application. This course is designed for the science and engineering majors and includes theoretical and experimental studies of such topics as composition and structure of matter, stoichiometry, chemical reactions, chemical bonding, gases, atomic and molecular structure, and periodic trends. Prerequisites: 2 years high school mathematics or MATH 105.

3 lecture hours; 1 discussion period; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 104

General Chemistry II

This course completes the sequence in general chemistry for science and engineering majors. Equilibrium, acids and bases, thermodynamics, nuclear chemistry, introductory organic chemistry. Prerequisites: CHEM 103, MATH 109 or MATH 110 (or 111) or equivalent.

3 lecture hours; 1 discussion period; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 113

Introductory Chemistry

An introductory course in chemistry for liberal arts and pre-professional students who wish to broaden their general education or feel that

their previous preparation was inadequate. Pre-med and science majors are strongly advised to take CHEM 103, although credits may be given for the CHEM 113, CHEM 103, and CHEM 104 sequence.

3 lecture hours; 1 two-hour laboratory or discussion period per week; 4 semester hours

CHEMISTRY 114

Introduction to Biochemistry

After a brief review of general chemistry and an introduction to organic chemistry, the chemistry and biochemistry of carbohydrates, fats, proteins, nucleic acids, vitamins, enzymes, and hormones are studied. Included is an introduction to diseases caused by metabolic disturbances and in-born errors of metabolism. Prerequisite: CHEM 113.

3 lecture periods; 1 two-hour laboratory period per week; 4 semester hours

CHEMISTRY 200

Chem./Co-op

Students who enter the Chem./Co-op Program take this course each semester they are on a paid work assignment with an employer. All work assignments must be approved by the Chemistry Co-op director. A report is required. Prerequisite: At least sophomore standing.

1 semester hour per work-semester to a maximum of 6 semester hours

CHEMISTRY 202

Principles of Chemical Analysis

An introduction to the physicochemical behavior of electrolytic solutions, and its application to chemical separations and analyses. Prerequisites: CHEM 103, CHEM 104.

3 lecture hours; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 205

Organic Chemistry I

Study of aliphatic and aromatic compounds, synthesis, properties, and reaction mechanisms. Laboratory work in techniques, synthesis, properties and typical reactions. Prerequisites: CHEM 103, CHEM 104.

3 lecture hours; 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 206

Organic Chemistry II

Study of aliphatic and aromatic compounds, synthesis, properties and reaction mechanisms. Laboratory work in techniques, synthesis, properties and typical reactions. Prerequisites: CHEM 103, 104, CHEM 205.

3 lecture hours; 1 three-hour laboratory period; 4 semester hours; every semester 1 three-hour laboratory period; 4 semester hours

CHEMISTRY 399

Independent Study

Opportunity for the student to pursue advanced individual study in his field of interest under the supervision of a specialist. Prerequisite: Permission of the instructor and the Department Chair.

Semester hours (1-6) arranged

Computer Applications and Information Systems (CAIS)

COMPUTER APPLICATIONS AND INFORMATION SYSTEMS 101

Statistics

This course covers basic statistics, including descriptive statistics, probability, discrete distributions, continuous distributions, sampling, and hypothesis testing. This course is required of all Business students. Prerequisite: Math 105 or Math placement exam at Math 109, or higher. *3 semester hours*

COMPUTER APPLICATIONS AND INFORMATION SYSTEMS 102

Applied Statistics

This is a continuation of CAIS 101 and involves searching the Internet, downloading, and analysis of economic data. "Analysis of data" may also include problems from the former MS 110 (Linear Programming). This course is required of all Business students. Prerequisite: CAIS 101. *3 semester hours*

COMPUTER APPLICATIONS AND INFORMATION SYSTEMS 191

Computer Concepts

This course provides elementary instruction in basic productivity packages, like Microsoft's Office 97. It is for those students with no prior exposure to computer applications. *3 semester hours*

COMPUTER APPLICATIONS AND INFORMATION SYSTEMS 201

Intro to CAIS

This course covers computer and systems hardware, operating systems, application development, the value of information, databases, networks, and their integration and management within the modern firm. This course is required of all Business students. Prerequisite: CAIS 102. *3 semester hours*

Computer Engineering

COMPUTER ENGINEERING 200

Undergraduate Co-op/Internship in Computer Engineering

By arrangement. *1-3 semester hours*

COMPUTER ENGINEERING 210

Digital Design I

Basic digital design principles. Boolean alge-

bra. Combinational logic design with gates, MSI, LSI. Sequential logic design; register, counters, memory and programmable logic.

Prerequisite: Mathematical sophistication.

3 semester hours

COMPUTER ENGINEERING 286

Introduction to Microprocessors

Theory and application of microprocessors, and associated peripheral devices such as memory, ports, clocks, system design and debugging techniques, including specific design problems using existing devices. Programming aids, including assemblers and simulators. Programming problems including peripheral device service routines and arithmetic operations. Information structures for real-time data acquisition systems. Prerequisite: Computer Engineering 210 and Computer Science 102.

3 lecture hours; 1 three-hour laboratory; 3 semester hours

COMPUTER ENGINEERING 308

Operating Systems

Structure and design issues in modern operating systems. Topics may include OS structure; Threads, CPU scheduling and synchronization of processes; deadlock management; main and virtual memory management; file management; file system interface; I/O structure. Prerequisite: Computer Science 102, Computer Engineering 312. *3 semester hours*

COMPUTER ENGINEERING 312

Computer Organization

Organization of computer systems. Central processing unit; micro programmed control; input/output organization; interrupts; traps; direct memory access; arithmetic operations; main memory. Prerequisite: Computer Engineering 315. *3 semester hours*

COMPUTER ENGINEERING 315

Digital Design II with Laboratory

Design of complex digital systems; top-down design and modularization. Implementation of controllers. Use of hardware design languages (VHDL) to implement systems. Rapid prototyping. Fault tolerant design. Prerequisite: Computer Engineering 210. Laboratory includes implementation of digital systems using FPGAs.

3 lecture hours; 4 semester hours; 1 three hour laboratory

COMPUTER ENGINEERING 347

Logic Synthesis Using FPGAs

Logic design using textual design entry, VHDL. Behavioral, structural and data flow descriptions. Technology-dependent vs. technology-independent design. CPLD, SEAM and antifuse technologies. Rapid prototyping and retargeting designs. A major design project. Prerequisite:

Computer Engineering • Computer Science

site: Computer Engineering 315.
3 lecture hours, 3 semester hours

COMPUTER ENGINEERING 348

Introduction to VLSI Design

Design and implementation of a very large scale integrated circuits. CMOS and BiCMOS technologies, basic topological structure of ICs, clocking characteristics, resistance, capacitance and power estimation, system-level design and implementation issues. Custom layout and verification using CAD tools. Synthesis of designs from VHDL descriptions. Term project will include the design and testing of an integrated circuit. Prerequisites: Computer Engineering 315 and Electrical Engineering 348.

3 lecture hours, 3 semester hours

COMPUTER ENGINEERING 349 A

Senior Project

Major open-ended design project to integrate student's knowledge of hardware and software. Formulation of design specifications, use of design tools, feasibility considerations. Prerequisites: Computer Engineering 312, 387, Engineering 300, English 204, Integrated Studies C101 and senior status.

1 semester hours

COMPUTER ENGINEERING 349 B

Senior Project

Major open-ended design project to integrate student's knowledge of hardware and software. Formulation of design specifications, use of design tools, feasibility considerations. Prerequisites: Computer Engineering 312, 387, Engineering 300, English 204, Integrated Studies C101 and senior status.

3 semester hours

COMPUTER ENGINEERING 371

Data and Computer Communications

Introduction to data communication. Frequency response, bandwidth, filtering and noise. Fourier series and Fourier transform. Information theory concepts: Nyquist's theorem, Shannon's and Sampling theorems. Analog and digital modulation techniques. Pulse Code Modulation (PCM). Communication systems circuits and devices. Data encoding. Physical layer protocols. Data link control (point to point communication, design issues, link management, error control, flow control). Multiplexing and switching. Prerequisites: Computer Science 102; Computer Engineering 210.

3 lecture hours, 3 semester hours

COMPUTER ENGINEERING 387

Embedded System Design

Design of systems having major hardware and software components. Software implementations are used to control specific hardware

such as micro controllers. Major laboratory emphasis to realize embedded systems. Prerequisite: Computer Engineering 286.

3 semester hours

COMPUTER ENGINEERING 389

Software Engineering

Structural development and methodology for large software systems. Planning requirements, design, test and validation. Advanced topics in software development. Prerequisites: Computer Science 102 and senior status.

3 semester hours

COMPUTER ENGINEERING 399

Independent Study in Computer Engineering

Independent study of advanced topics in Computer Engineering and submission of project report as required. Problem assignment to be arranged with and approved by the Department Chair.

Open only to qualified seniors

3 semester hour

Computer Science

COMPUTER SCIENCE 101

Introduction to Computing I

Introduction to high level languages, data types, subprograms; arrays and records. Top-down programming. Algorithmic development and flow charting.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 102

Introduction to Computing II

Introduction to data structures. Top-down design and structured programming, debugging. String processing, stacks, queues, lists, linked lists, trees, hash tables. Searching and sorting. Prerequisite: CPSC 101.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 200

Undergraduate Co-op/Internship in Computer Science

By arrangement.

1-3 semester hours

COMPUTER SCIENCE 201

Data and File Structures.

Advanced treatment of data structures and file structures including manipulating data stored in the file systems. Topics include fundamentals of file processing operations, secondary storage characteristics, and managing files of records. Additional topics will include performance file organization, sorting large files, multi-level indexing, 2-3 Trees, B-Trees, and Hashing and Extendable Hashing. Prerequisites: CPSC102 and CPSC 102a.

3 lecture hours, 3 semester hours

COMPUTER SCIENCE 203

Second Language Course

A class for computer science majors to broaden the programming background. Students will take a course in a language other than the current teaching language. This class is not an actual course, but a number of departmental course offerings may satisfy this requirement. Courses which may be taken will include computer science offerings which assume programming competency (CPSC 101 and CPSC 102 equivalent) in the instructional language. The department will announce courses which qualify for satisfaction of CPSC 203 requirement. Pre-requisites: CPSC 102 and CPSC 102a.

3 lecture hours, 3 semester hours

COMPUTER SCIENCE 227

Discrete Structures

This course is an introduction to some of the discrete mathematical structures relevant to computer science, including set theory, propositional calculus, predicate calculus, algebraic operations and relations, counting techniques, and graph theory. Prerequisite: MATH 109.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 300

Economics and Management of Computing Projects

The design process, engineering economics, project planning and ethics in engineering practice. A required course for all Computer Science majors, normally taken in the junior year, offered both semesters. Prerequisites: CPSC 102, 102a, MATH 215, PHYS112 and junior standing.

3 lecture hours, 3 semester hours.

COMPUTER SCIENCE 301

Programming Languages

This is a second computer language course organized around the concepts of data objects, data types, abstraction mechanisms, sequence and data control, storage management, syntax, and operating environments. Several widely used programming languages are analyzed to illustrate these concepts. Pre-requisite: CPSC 201.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 302

Object-Oriented Programming Using C++

This course introduces the modern object-oriented programming philosophy using C++ to the beginning graduate students. The emphasis is on developing the programming thought process in terms of objects and their interactions to each other. Concepts covered include data hiding, code reuse through inheritance, polymorphism, templates, exception handling, developing appropriate class hierarchy and code maintenance for large software projects. Pre-

Computer Science • Criminal Justice and Human Security

requisites: CPSC 102 or equivalent background.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 311

Computer Architecture

Introduction, Processing Unit Design, Memory System Design, Input-Output Design and Organization, Pipelining, reduced Instruction Set Computers (RISCs), Introduction to Multiprocessors, Shared Memory Architectures, Parallel Algorithms and Programming, Other Computational Paradigms. Pre-requisites: CPEG 210, CPEG 286.
3 lecture hours; 3 semester hours.

COMPUTER SCIENCE 320

Theory of Computation

Elements of the theory of formal languages, grammars, finite state machines, computability, primitive recursive functions, Turing machines and computation. Prerequisite: CPSC 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 325

Structure and Interpretation of Computer Programs

Procedures and data both primitive and compound. Iteration and recursion. Abstraction of data and procedures. Sequences and trees. Manipulation of lists. Data-directed programming, dispatch on type, message passing. Object-oriented programming. Local state and environment diagrams. Streams. Prerequisite: CPSC 201.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 329

Fundamentals of Algorithms

This course aims to develop an understanding of the process by which an algorithm is developed to solve a problem and how it is translated into a working computer program. Emphasis is placed on problem-solving approaches and efficient programming techniques. Topics covered are: data structures, stacks, lists, trees, search algorithms, introduction to parsing and sorting techniques; structures programming; interactive and recursive programming, analysis of algorithms and special purpose algorithms. Prerequisite: CPSC 201, 227.
3 lecture hours; 3 semester hours

COMPUTER SCIENCE 340

Windows Programming

This course covers Graphical User Interface (GUD), design and Windows programming using Visual C++ and Microsoft Foundation Class (MFC) library. Topics covered include windows architecture, message/event driven programming, designing Dialog based, SDI and MDI applications, Document/View architecture, Device Contexts, Database access using the MFC ODBC classes and ADO. A comprehensive project is assigned towards the end of the course, which covers important windows

programming concepts. Prerequisite: CPSC 400
3 lecture hours, 3 semester hours

COMPUTER SCIENCE 349 A

Senior Design Project

Student will initiate and complete a project that meets career interests and objectives. One or more faculty will be available to each student in a consulting capacity. The department chair must approve an outline of the project in the semester prior to registration for this course.

1 semester hour

COMPUTER SCIENCE 349 B

Senior Design Project

Student will initiate and complete a project that meets career interests and objectives. One or more faculty will be available to each student in a consulting capacity. The department chair must approve an outline of the project in the semester prior to registration for this course.
3 semester hours

COMPUTER SCIENCE 350

Data Base Design

Survey of data structures used in data bases; relations; hierarchical and network data models; theoretical issues in data base processing; practical issues in data base design, programming, and implementation. Prerequisite: CPSC 329.

3 lecture hours; 3 semester hours

COMPUTER SCIENCE 399

Independent Study in Computer Science

Independent study of advanced topics in Computer Science and submission of project report as required. Problem assignment to be arranged with and approved by the Department Chair.

Open only to qualified seniors

3 semester hours

Criminal Justice and Human Security

CRIMINAL JUSTICE AND HUMAN SECURITY 118

Intro Criminal Justice

This course is intended to introduce you to the field of criminal justice and criminology. More specifically, we will explore how the American criminal justice system interacts with society and reacts to societal issues. In turn this will help us understand how society functions in response to the criminal justice system.

3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 205

Law and Economics

This course introduces basic principles of economics and how those principles impact the formulation and operation of legal rules. Spe-

cial emphasis is placed on the U.S. Constitutional system and key cases involving legal issues.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 215

Intl Human Rights

This course discusses the recognition and protection of human rights in the international context, with a focus is on contemporary controversies. A genuine interest in global affairs and international issues, an open mind, and an inquisitive learning attitude are the best qualities for getting the most out of this class.

3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 218

Human Security

Human Security involves looking at world security issues from the perspective of individual people. This course introduces students to the concept of Human Security, its importance in meeting the basic needs of people and preventing state collapse, and its usefulness, in forging greater transnational accountability.

3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 233

Intro US Legal System

This course will offer a comprehensive overview of the U.S. legal system, including an overview of legal practice sources and techniques with emphasis on the major substantive areas of the law. Students will begin by examining issues in constitutional law, with an overview of how government functions and how laws are made. A legal writing segment of the course will allow students to use legal analysis while refining their writing skills. 3 semester credits

3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 265

Intro to Corrections

A multidisciplinary study of corrections from the 1800's to the present. Focus on the function of corrections from the perspective of society and the offender.

3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 271

Law Enforcement & Society

This course focuses on the role of the police and law enforcement in American society. Key topics include the police profession, organization of law enforcement systems, the police role, police discretion, ethics, and police-community interaction. Law enforcement is examined in terms of political, social, cultural, legal, psychological, and organizational relevance in society. Prerequisite: CJHS 118 or SOC 118

3 credits

Criminal Justice and Human Security • Dental Hygiene

CRIMINAL JUSTICE AND HUMAN SECURITY 299

Selected Topics

Prerequisite: Permission of Advisor and Dean
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 312

Victimology

This course examines the role of the crime victim. Topics include the identification of victims, victim assistance programs, victim compensation and repayment, and the treatment of the victim by law enforcement and the courts. The course also considers the victim-related role of major social institutions, including the family, schools, religious organizations, the medical profession, and financial and political organizations. Prerequisite: CJHS 118 or SOC 118
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 315

Criminology

Criminology is the social scientific study of crime and criminal behavior. This class first examines the nature and extent of crime, including the categories of crime, the people who engage in criminal activity, and how crime is measured. It examines theoretical explanations of crime, and the role of the criminal justice system in controlling crime.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 343

Constitutional Law

This course examines the operation of the U.S. Constitution, as well as its origins, philosophical underpinnings, and current issues. Course work includes reading, discussing, and writing about constitutional issues.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 345

Comparative Criminal Law

This course examines the criminal law of the United States, with comparative reference to other legal systems of the world. Emphasis is placed on the application of law to facts, and specific knowledge required by law enforcement personnel. Prerequisite: CJHS 118 or SOC 118
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 350

Legal Advocacy

This course introduces legal reasoning and the legal method, and requires the student to conduct legal research, to produce written materials (such as a letter, a memorandum, a complaint, a motion, and an appeal), and to make oral arguments. Prerequisite: PSCI 233, Junior status or Instructor approval.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 371

Terrorism

This course introduces terrorism as a subject of sociological, legal, military, political, and strategic study. The course considers the objectives of the terrorist and terrorist organizations, and recent counter-terrorism strategies. The course also encourages students to think about long-term strategies to combat terrorism, both within a nation-state and across international borders.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 372

Transnational Crime

This course examines the scope, magnitude, and impact of transnational crime and discusses possible solutions, including widening surveillance and crime control measures, and the impact those solutions may have on civil liberties.
3 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 395

Senior Thesis

Each senior student majoring in Criminal Justice and Human Security participates in a seminar requiring preparation of a research paper reflecting original thinking and research in a specific area of the field.
1-6 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and Dean.
1-6 credits

CRIMINAL JUSTICE AND HUMAN SECURITY 399

Independent Study

Subject to approval by the Department Chair, students may pursue advanced studies in the field of Criminal Justice and Human Security.
1-6 credits

Dental Hygiene

DENTAL HYGIENE 100

Introduction to Dental Hygiene

This course provides the opportunity to develop basic knowledge of the dental hygiene profession and the responsibility of licensure. Students will learn the role of the dental hygienist in total patient care.

DENTAL HYGIENE 123

Oral Anatomy and Embryology

This course is an introduction to the study of the oral cavity and its associated structures. Included in the curriculum are lectures covering anatomy, embryology and histology of oral

structures and the head and neck, emphasizing teeth and their supporting tissues. Knowledge of content is emphasized during clinical practice.
4 lecture hours; 4 semester hours

DENTAL HYGIENE 124

Dental Radiology

This course provides the fundamental scientific principles upon which clinical dental radiology is based. Content includes radiation history, radiation physics, radiographic anatomy, application to radiation safety for patient and operator, quality assurance, infection control practice, standard intra and extra oral radiographic techniques, quality film production and film evaluation.

2 lecture hours; two-hour laboratory periods; 3 semester hours

DENTAL HYGIENE 127

Pharmacology for the Dental Hygienist

General principles of pharmacology and use of pharmaceuticals; derivation and effect of drugs, especially those used in dentistry. Values and uses of chemical sterilizing agents, pre-and post-operative medications, anesthetics, antibiotics, and other pharmaceutical adjuncts to oral hygiene and dental care.

2 lecture hours; 2 semester hours

DENTAL HYGIENE 129

Clinical Practice I

Introduction to the role and function of the Dental Hygienist in preventive dentistry; history and ethics of the Dental Hygiene profession; relationship of general and oral health to the disease process. Clinical hours are devoted to development of: infection control procedures, oral self care, basic clinical skills of patient assessment/data collection, basic instrumentation, patient education and dental emergencies.
3 lecture hours; 7 clinical hours; 4 semester hours

DENTAL HYGIENE 130

Clinical Practice II

This course is a continuation of Clinical Practice I and focuses on the role of the Dental Hygienist as a preventive oral health specialist. Didactic and clinical experience is devoted to patient assessment, treatment planning, patient management, fluoride therapy, emergency response protocols, and continuing development of clinical skills to facilitate ethical and total patient care. Prerequisite: Successful completion of DHYG123, DHYG124 and DHYG 129.

2 lecture hours; 8 clinical hours; 4 semester hours

Dental Hygiene

DENTAL HYGIENE 140

Introduction to Periodontology

This course provides the basic principles of periodontology, which covers the recognition of clinical characteristics of the periodontium, classification of periodontal diseases, role of microorganisms and local factors in the etiology of periodontal diseases.

1 semester hours

DENTAL HYGIENE NUTRITION 204

Nutritional Biochemistry

This course will teach the basic principles of the science of human nutrition and nutritional biochemistry with an emphasis on the effects of nutrition on dental health. The focus will be on the roles of micro- and macronutrients and the importance of proper energy balance, digestion, absorption and metabolism of these nutrients. Correlations to dental hygiene are discussed at each class as it obtains to the weekly subject matter. Strategies of counseling patients to improve optimum oral health are taught throughout the course.

3 credits

DENTAL HYGIENE 227

Clinical Practice III

This course provides students the opportunity to expand on the basic dental hygiene skills learned in Clinical Practice I and II (DHYG 129 and 130) providing students with a practical and treatment oriented study of the oral manifestations of systemic diseases. Students will learn advanced instrumentation techniques and deliver comprehensive dental hygiene services in the Fones Dental Hygiene Health Center as well as in the community setting. The community setting will provide the students the opportunity to interact with a variety of patient populations. Evidenced-based decision making will be a common theme throughout the semester. The student will utilize the dental hygiene process of care by assessing clinical information and external research to implement and evaluate the dental hygiene treatment care plan; applying the ADHA Standards of Clinical Dental Hygiene Practice. Prerequisite: Successful completion of all first-year required courses.

2 lecture hours, 14-21 clinical hours per week; 5 semester hours

DENTAL HYGIENE 228

Clinical Practice IV

Continuation of advanced didactic and clinical practices of Dental Hygiene 227. This course will assist the student in refining competence in all clinical procedures, developing variety of experiences of oral health and disease, and assimilate knowledge in order to use re-

sponsible decision-making and critical analysis that assures the health of the patient. The student will be introduced to professional ethics and dental jurisprudence, professional organizations, professional goals, state dental practice acts, and issues facing the dental hygiene profession. The student will expand self-assessment skills and evaluation of scientific literature as the basis for lifetime learning. Prerequisite: Successful completion of DHYG 227, 230, 233, 241, 250.

2 lecture hours, 14-21 clinical hours per week; 5 semester hours

DENTAL HYGIENE 230

Local Anesthesia

DHYG 230 Local Anesthesia for the Fones Dental Hygiene Students. This course is designed to prepare the student dental hygienist to qualify to administer local anesthesia and receive a certificate in local anesthesia acceptable in the State of Connecticut. The student will be introduced to safe, effective administration of local anesthesia through lecture, laboratory and clinical settings. The comprehensive content areas will include rational for pain management, client management, medical emergencies and review of essential anatomy, physiology, and pharmacology of pain control agents. In addition, the student will perform efficient techniques of pain management through local anesthesia on clinical partners under the direct supervision of clinical faculty.

1 semester hour

DENTAL HYGIENE 232

Dental Public Health

Dental Public Health consists of didactic and field work components in community services. It is designed to enable Dental Hygiene students to identify Dental Hygiene career opportunities within the public health setting; describe the structure and function of public health; explain federal, state and local legislation, policies and procedures pertaining to public health; assess the dental needs and demands of the public including special populations; and plan and evaluate dental health care programming. Prerequisite: Successful completion of all first year required courses.

2 lecture hours; 72 hours of field experience per rotation; 4 semester hours

DENTAL HYGIENE 233

Oral and General Histo-Pathology

This course will provide the dental hygienist with an in-depth discussion of various types of oral diseases of the hard and soft tissues. Emphasis will be placed on the etiology, clinical picture, radiographic picture, histologic/micro-

scopic findings, pathogenesis, treatment and prognosis for each condition discussed. Some systemic conditions with specific oral findings will also be covered. Prerequisite: Successful completion of all first year required courses.

3 semester hours

DENTAL HYGIENE 241

Periodontology

This course expands on the basic principles of periodontology introduced during the first year Dental Hygiene curriculum. Students receive a sound foundation in the history and management of periodontal diseases including the etiology and pathogenesis of periodontal diseases, the systemic disease connection with periodontal disease, the role of the immune system in the disease process and the various periodontal treatment modalities available with emphasis on the Dental Hygiene treatment plan. Prerequisite: Successful completion of DHYG 140.

2 semester hours

DENTAL HYGIENE 250

Dental Materials

This course provides didactic and clinical information relating to dental materials utilized in the dental office. Content includes: terminology, basic principles, properties of materials, techniques and procedures, recognition of restorations and indications for their use. Students will also gain exposure to expanded auxiliary utilization, and the role of the Dental Hygienist in specialty practice. Prerequisite: Successful completion of all required first year Dental Hygiene courses.

2 lecture hours; 1 two-hour laboratory period; 3 semester hours

DENTAL HYGIENE 299

Dental Hygiene Independent Study

Selected independent projects conducted under the supervision of a Dental Hygiene faculty member.

1-6 semester hours

DENTAL HYGIENE 301

Dental Hygiene Practice Management

Through discussion of legal, regulatory, and ethical issues governing dental healthcare, the student will develop strategies to provide optimum client care and understand the Dental Hygienist role within an interdisciplinary healthcare team. Appreciation for the role of administrator / manager is obtained through lecture content and group activities focused on the development of communication, teamwork, personnel, business, and patient management skills. These skills are necessary to prepare for emerging practice models in dental healthcare.

3 Semester hours

Dental Hygiene • Economics • Electrical Engineering

DENTAL HYGIENE 302

Instructional Strategies for the Health Professional

Assessment, planning, implementation and evaluation of various instructional methodologies/strategies to facilitate presentations. Fundamentals of instructional theory with practical skill applications.

2 lecture hours; two-hour observation/presentation; 3 semester hours

DENTAL HYGIENE 303

Advanced Clinical Concepts

Advanced Clinical Concepts expands upon the basic knowledge and skills utilized in the dental hygiene process of care. Students are introduced to advanced clinical concepts through evidence based practice methods. Oral medicine, advanced periodontology, pain management, and current research and technologies are emphasized.

DENTAL HYGIENE 304

Dental Hygiene Internship

This course will provide the Dental Hygiene student with the opportunity to apply the knowledge and skills acquired throughout the dental hygiene curriculum in an internship experience. Under the guidance of the course instructor the dental hygiene student intern will select a field site in an alternative practice setting (not private practice). With the help of the site's primary mentor the intern will set goals and objectives that will allow them to become an integral member of the organization. The internship will consist of direct observation, participation and supervised teaching or fieldwork. Prerequisite: DHYG 302.

By arrangement; 3-6 semester hours

DENTAL HYGIENE 305

Dental Hygiene Research I

This course will introduce the student to the fundamentals of research design and process. It will enable Dental Hygiene students to develop skills in the analysis of dental research findings and the evaluation of dental issues through critical analysis. Students will also gain exposure to the development of research protocols and develop an original research proposal. Prerequisite: DHYG 302

3 semester hours

DENTAL HYGIENE 306

Dental Hygiene Research II

This course is designed to familiarize Dental Hygiene students with evolving professional trends related to private or public practice. Students, working in groups of two or three, will utilize and reinforce acquired Dental Hygiene research concepts while developing ad-

vanced assessment, planning implementation and evaluation skills, original research will be implemented. Required of all candidates for a Bachelor of Science degree in Dental Hygiene. Prerequisite: DHYG 302, DHYG 305 and senior status.

4 semester hours

DENTAL HYGIENE 315

Statistical Reasoning

This course will provide a basic overview of statistical analysis and how certain tests can be performed to determine if there is a statistically significant relationship between variables. The student will receive an introduction to the use of statistical software for data analysis.

Economics

ECONOMICS 201

Principles of Economics I — Macro

Analysis of basic concepts; national income, employment, monetary and fiscal policy and economic growth.

3 semester hours

ECONOMICS 202

Principles of Economics II — Micro

An analysis of price, output, income distribution, market structures and international trade.

3 semester hours

ECONOMICS 311

Managerial Economics

The theoretical analysis of the behavior of the consumer and the firm. Problems of income distribution, welfare economics, and general equilibrium analysis. Prerequisites: ECON 201 and ECON 202; junior or senior status.

3 semester hours

ECONOMICS 375

International Business Economics

A basic model of the international economy. International macroeconomic theory is examined using a set of economic flow diagrams. Examination of issues including interest rates, exchange rates and asset prices in the global economy; causes and consequences of trade deficits; effects of monetary policy; debate on IMF and World Bank reform; globalization of financial markets; Intensive use of the Web and Internet resources to retrieve and analyze data. Prerequisites: ECON 201 and ECON 202; junior or senior status.

3 semester hours

ECONOMICS 376

Business Forecasting

Macroeconomic forecasting to improve asset allocation and investment performance over

the business cycle. Examining and forecasting the behavior of stock, bond, commodity and currency prices. Forecasting tools to analyze the economy and forecast price movements in the financial markets. Prerequisites: ECON 201 and ECON 202; junior or senior status.

3 semester hours

Electrical Engineering

Undergraduate seniors may take graduate courses (400 level) with permission of their advisor.

ELECTRICAL ENGINEERING 200

Undergraduate Co-op/Internship in Electrical Engineering

By arrangement. 1-3 semester hours

ELECTRICAL ENGINEERING 210

Digital Design I

This course introduces students to the basics of digital logic and digital systems design. It covers basic digital design principles; Boolean algebra, combinational logic design with gates, MSI, LSI, Sequential logic design; register, counters, memory and programmable logic. Students are also exposed to Verilog HDL throughout this course for fundamental simulation concepts. Verilog simulation projects are performed using commercial and/or academic CAD tools. Pre-requisite: MATH 109

3 semester hours

ELECTRICAL ENGINEERING 233

Network Analysis I

DC circuits, mesh, node voltages, superposition. Steady-state AC, real/imaginary power. Bode plots, Ideal op-amp circuit analysis. Prerequisite: MATH 110.

3 semester hours

ELECTRICAL ENGINEERING 234

Network Analysis II

Transient analysis of 1-pole and 2-pole circuits using differential equations and Laplace transforms. Fourier series derivation and application to electric circuits. Comparison of Fourier transform to Laplace transform. Pre-requisite: ELEG 233.

2 semester hours

ELECTRICAL ENGINEERING 235

Network Analysis I Lab

Use of resistor networks and DC voltage sources in various configurations; measurements of current flow and voltage difference. Introduction to RLC circuits in steady AC conditions. Familiarization with standard laboratory instruments. Co-requisite: ELEG 233.

1 three-hour laboratory, 1 semester hour

Electrical Engineering

ELECTRICAL ENGINEERING 236

Network Analysis II Lab

Steady state and transient analysis of RLC circuits. Typical series and parallel resonance circuits are examined and their parameters experimentally determined; two pole network analysis; transformers; frequency response plots. Extensive use of the oscilloscope. Pre-requisite: ELEG 235, Co-requisite: ELEG 234.

1 three-hour laboratory, 1 semester hour

ELECTRICAL ENGINEERING 315

Optical Communications

This course will provide a practical introduction to the basic principles of optical fiber systems and networks. The course will emphasize the physical properties and operation of components that comprise optical system (fiber, semiconductor lasers, photodectors, etc.). The basic elements of optical network operation will also be described. The material will cover a broad number of topics to allow the student to understand the underlying principles of the field and to be prepared for more detailed study in the form of advanced courses and/or research. Pre-requisite: PHYS 112, ELEG 233

3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 316

Fiber Optics Lab

Hands-on experience with fiber optic hardware: Fiber properties, sources, detectors, splices, connectors. Design and test fiber optic transmitter and receiver circuits for both analog and digital transmission. The experiments are related to optical fiber properties, losses, sources, detectors, splices, connectors, measuring the speed of the opto-electronic devices, design and test of fiber optic transmitter and receiver circuits for both analog and digital transmission, and design of a complete system. Pre-requisite: PHYS 112, ELEG 235

3 semester hours

ELECTRICAL ENGINEERING 317

Introduction to Control Systems

At the end of this course, students will be able to: Derive the models for basic physical systems. Analyze the steady-state and transient behavior of basic feedback systems. Determine stability and performance of feedback systems using time-domain and frequency domain analysis methods. Design PID and lead-lag controllers to achieve design specifications. Perform basic simulation to verify system stability and performance. Pre-requisite: MATH 112, ELEG 234

3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 333

Signal and Systems

Students learn to analyze theoretically and by computer both continuous and discrete signals and the application of each to real-world problems. Applications involve the definition of a system, defined either by a laplace or z-transform and the output of same to the application of any input signal. Pre-requisite: MATH 112, ELEG 234

3 lecture hours; 3 semester hours

ELECTRICAL ENGINEERING 337

Analog Electronics Lab I

This is a hands-on analog circuit design lab. You will combine integrated circuits and discrete electronic components to design practical analog circuits for day-to-day industry use. Pre-requisite: ELEG 348

3 semester hours

ELECTRICAL ENGINEERING 342

Modern Communications

ELEG 342 is a 3-credit first course on communications within the Electrical Engineering program. The objective of the course is to familiarize undergraduate students to the fundamentals of modern digital and analog communications systems. Pre-requisite: ELEG 234; Co-requisite: MATH 323

3 semester hours

ELECTRICAL ENGINEERING 344

Power Electronics

Application of power diodes and power transistors in rectifier arrangements and voltage regulators. Properties and application in power converters, inverters and motor drives. Pre-requisite: ELEG 348.

3 semester hours

ELECTRICAL ENGINEERING 346

Fundamentals of MEMS (Microelectromechanical Systems)

MEMS (Microelectromechanical Systems) refers to devices and system with extremely small size in the range of microns. It is one of the most important high technologies developed in 20th century. MEMS and nanotechnology are believed to trigger the next wave of technology revolution. This course covers the fundamentals of MEMS technology. The topics include MEMS materials, MEMS fabrication techniques, MEMS structure analysis, MEMS sensing and actuation techniques, MEMS applications (inertial MEMS, MOEMS, BioMEMS, RFMEMS), signal sensing techniques for MEMS, MEMS packaging and reliability, etc. Pre-requisite: Senior status (90+ credits)

3 semester hours

ELECTRICAL ENGINEERING 348

Electronics

Application of diodes, bipolar transistors (BJT) and field effect transistors (FET) to signal amplification and switching. Computer Simulation. Pre-requisite: ELEG 233, Pre-requisite: ELEG 235.

3 semester hours; 3 semester hours

ELECTRICAL ENGINEERING 349

Senior Project

Student work for approximately 150 hours performing research work within the department of Electrical Engineering. Emphasis is on good technical writing and imaginative design of solutions to a given problem. Pre-requisite: Senior status (90+ credits)

4 semester hours

ELECTRICAL ENGINEERING 350

Communications Lab

Hands-on experience with digital and analog communication equipment, AM, FM and digital modulation techniques. Design and test of optimal configuration. Measurement of performance parameters in the presence of thermal noise. Co-requisite: ELEG 342

3 Semester hours

ELECTRICAL ENGINEERING 361

Controls Lab

Laboratory study of feedback control systems with experiments analyzing different types of plants, transducers and control techniques; emphasis on real-time computer control. Pre-requisite: MATH 112, ELEG 234

3 semester hours

ELECTRICAL ENGINEERING 364

PLC

This course will start with the basics of Boolean Algebra; it will cite the differences between PLC control and relay control and full automation of major machines and appliances; the differences in these controls will show how hard relay control is to implement and how flexible PLC control actually is; many different math functions will be analyzed and implemented in the theoretical construction of fully functioning PLC. Pre-requisite: ELEG 234, ELEG 348

3 semester hours

ELECTRICAL ENGINEERING 399

Independent Study in Electrical Engineering

Independent study of advanced topics in Electrical Engineering. Problem assignment to be arranged with and approved by the department.

3 semester hours

English

English

Unless specifically stated in the course description, the only prerequisite for any undergraduate English department course is the fulfillment of the freshman composition requirement.

Composition

ENGLISH 010A

English Communication

The goal of this course is to improve your English communication skills. The emphasis will be on improving pronunciation, listening comprehension, and conversation. There will be listening exercises, group discussions, and class presentations, as well as some writing assignments. This course depends to a great extent on the effort you bring to it. This means that a real commitment must be made to the work and to your fellow students. The university estimates that students should spend a minimum of two hours outside of class for every hour in class. Everyone is expected to participate in all class discussions and exercises.

Offered: Every Semester

3 semester hours

ENGLISH 100

Basic Composition

Techniques of composition, including sentence structure, paragraph development, organization of the whole theme, with regular written assignments. Additional emphasis on fundamentals to assist students with weak backgrounds. A grade of C- or better admits students to ENGL 101. Students who receive a grade of D+ or below must repeat ENGL 100. Students who have a grade of A or B at the end of the semester may take the essay final for ENGL 101. If they score an A or B on that examination and have the recommendation of their ENGL 100 instructor, they may waive ENGL 101.

Offered: Every Semester

3 semester hours

ENGLISH 101

Composition and Rhetoric

An introduction to the elements of effective writing, concentrating on structure, logic, specificity, focus, grammar, sentence structure, and mechanics. Frequent writing in and out of class. By the end of the semester, students should be able to compose and organize a grammatically correct and adequately developed expository essay.

Offered: Every Semester

3 semester hours

ENGLISH 100I

Developmental English

For those who need academic preparation before studying in English, this course provides focused, individualized work on special problems in using English fundamentals, oral/aural problems, reading and oral comprehension, English patterning and structures, leading to the production of short written works. Students receiving a grade of D+ or below must take ENGL 100.

Offered: Every Semester

3 semester hours

ENGLISH 200

English Cooperative Education Program.

An opportunity for English majors to work off-campus and put into practice those skills acquired within departmental programs. The co-op course requires a written report to be evaluated by the School Director. In addition, the department will require an evaluation from the employer.

By arrangement with the Chair

1-6 semester hours

ENGLISH 202

Advanced Exposition

Essay writing, with a stylistic approach and a concern for accuracy in presenting or explaining ideas in an orderly, logical manner. Emphasis on improved clarity and effectiveness, through careful revision in written reports and assigned papers, especially those pertaining to the student's major field. This course is required for Business majors and emphasizes business forms. Prerequisite: Completion, with passing grades, of ENGL C101.

Offered: Every Semester

3 semester hours

ENGLISH 204

Technical Writing for Computer Engineers

A workshop course that covers the following topics: lab reports, engineering memos, technical business plans, scientific/engineering grant proposals, patent applications, technical papers, user manuals of product/software, and final engineering project reports. Prerequisite: ENGL C101.

Offered: Every two years

1 semester hour

Creative Writing

ENGLISH 201

Fiction Writing

Extensive writing in short fiction. Progression from simple narrative, basic character description, dialogue and scene writing to vignette,

short-short and short story. Marketing advice. Specific emphasis varies with instructor. Designed for the undergraduate who writes well but needs practice, direction, motivation.

Offered: Every two years

3 semester hours

ENGLISH 205

Poetry Writing

For students with a demonstrated basic ability in the writing of poetry. Introduction to the techniques of poetry, covering such elements as meter, rhyme, image patterns, stanza forms, lyric, dramatic, narrative modes, blank verse, and free verse. Some history of poetic movements. Study of contemporary poetry. Work in the course is mainly writing and discussing of student poems.

Offered: Every two years

3 semester hours

ENGLISH 218

Autobiographical Writing

This course focuses on the use of personal experience and history as the basis for literary pieces such as travel, memoir, and epistolary writing. Students learn how to process their experiences through writing.

Offered: Every two years

3 semester hours

ENGLISH 220

Literature for Travel and Adventure

This course focuses on fiction and non-fiction works of travel and adventure in literature from the ancient Greeks to today. The course explores the various styles, themes, and purposes of travel and adventure writing; how locations, encounters, and beliefs influence individual works; and how travel literature affects and shapes its audience.

Offered: Every two years

3 semester hours

ENGLISH 228

Ethnic American Literature

Ethnic American Literature examines the literature of America's ethnic groups, with particular focus on the 20th Century. The course inquires into the origin of ethnic self-identification as well as the issue of race in America; drawing upon significant literature written by representatives of such groups as Native Americans, Hispanics, Jews, Asians, Blacks and Italians.

Offered: Every two years

3 semester hours

ENGLISH 308

Advanced Creative Writing

Seminar workshop: Considerable attention to the creative desires of individual students. Stu-

English

dent may choose to write poetry, short stories, sections of novels, drama. Emphasis on completed manuscripts, potential publication, individual explorations of form and content. Prerequisite: English 201, 205, 218 or the permission of the instructor which is given only upon presentation of an acceptable piece of creative writing done by the student.

Offered: Every two years

3 semester hours

Language and Literature

ENGLISH 102

Introduction to Literature

A writing intensive course that uses representative examples of poetry, drama, and fiction to develop one's ability to analyze and appreciate literature. Co-requisite: ENGL 101

3 semester hours

ENGLISH 110

Major Figures in Literature

This course is offered in three one-credit sections, each section dealing with representative works of a major writer, and lasting one-third of a semester. Students may register for one or more sections. Usually the writers are related by either period or genre, as in the case of Henrik Ibsen, George Bernard Shaw, and Anton Chekhov, or Jack Kerouac, Henry Miller, and Sylvia Plath. Co-requisite: ENGL 101

1 semester hour

ENGLISH 105A

Introduction to Drama

Introductory study of drama. Readings are drawn from a variety of genres and literary periods. Co-requisite: ENGL 101

3 semester hours

ENGLISH 105B

Introduction to Fiction

Introductory study of fiction. Readings include short stories and several novels. Co-requisite: ENGL 101

ENGL 101

3 semester hours

ENGLISH 180

Science Fiction

Study of the science fiction and speculative fiction genre, covering such aspects as the history of science fiction; treatment of character, plot, heroes, style, theme; impact on society; role of science and space flight; ecological and mystical concerns. Authors read and discussed range from Hawthorne and Poe, Wells and Verne to Asimov, Heinlein, Bradbury, Clark, and Vonnegut. Co-requisite: ENGL 101

3 semester hours

ENGLISH 197

Masterpieces of English Literature

An attempt to get some feeling for and pleasure from the development and continuity of English literature. Readings and discussions of selected major works by major authors such as Chaucer, Shakespeare, Milton, Swift, Blake, Wordsworth, Dickens, Tennyson, and Lawrence. Co-requisite: ENGL 101

3 semester hours

ENGLISH 207

American Literature I

A survey of the major literary movements and their cultural contexts from the writings of the first settlers to the establishment of a uniquely American literature in the mid-nineteenth century. Prerequisite: ENGL 101

3 semester hours

ENGLISH 208

American Literature II

A survey of the literature of transition from an era of traditional and idealized values to one of realist and relativist perceptions, covering the period from the Civil War to World War II. Prerequisite: ENGL 101

3 semester hours

ENGLISH 209

British Literature I

A survey of British literature from the beginnings to the eighteenth century. Prerequisite: ENGL 101

3 semester hours

ENGLISH 210

British Literature II

A survey of British literature from the eighteenth century through the twentieth century. Prerequisite: ENGL 101

3 semester hours

ENGLISH 212

Masterpieces of World Literature

An introduction to some of the core texts from the East and West, reflecting ancient, classical, and medieval traditions of great world cultures, ending with one or two masterpieces from the Early Modern period. Selections are drawn from the Bhagavad Gita, Gilgamesh, the Bible, Homer, Greek tragedy and comedy, Plato, Virgil, Dante, Cervantes, and others. Prerequisite: ENGL 101

3 semester hours

ENGLISH 213

Contemporary Drama

Dramatic works by British and American authors as well as works in translation primarily since World War II. Emphasis will be upon how to read a play, the difference between

technical appeal and meaning, and similar fundamentals for reading drama for maximum understanding. The work of playwrights such as Williams, Albee, Pinter, Behan, Ionesco, Handke, Beckett and Shepard will typically be included. Co-requisite: ENGL 101

3 semester hours

ENGLISH 215

Thematic Studies in Literature

Introductory studies of literature in relation to major areas of concern in contemporary life. Courses will vary from semester to semester. Topics included are Travel and Adventure, Murder, Madness, Ethnic American Literature, and Law and Justice. Co-requisite: ENGL 101

3 semester hours

ENGLISH 216

Introduction to Poetry

By reading, discussing, and writing about a variety of English and American poems, students will develop their ability to read, understand, and enjoy poetry. Prerequisite: ENGL 101

3 semester hours

ENGLISH 223

Modern African-American Literature

Study of the fiction, drama, poetry, and essays of such significant black writers as Richard Wright, James Baldwin, Ralph Ellison, Lorraine Hansberry, Arna Bontemps, Malcolm X, and Toni Morrison. Co-requisite: ENGL 101

3 semester hours

ENGLISH 233

The Roots of Modern Culture

Topics and themes important to the understanding of the origin and development of modern Western society and culture. Subjects such as industrialism, the growth of the city, class conflict, the emergence of new values and expectations, the importance of war, and the role of minorities are explored in a variety of literary and historical texts. Prerequisite: ENGL 101

(Cross-listed as History 233)

3 semester hours

ENGLISH 252

Women in Literature

The course explores literary and gender studies, including stereotypes, myths and realities in the way women are viewed in literature. Authors include: D.H. Kate Chopin, Henrik Ibsen, Virginia Woolf, Edith Wharton, and Margaret Atwood. Co-requisite: ENGL 101

3 semester hours

ENGLISH 305

Shakespeare

Selected examples of the comedies, tragedies,

English • Fashion Merchandising

and history plays. While the main emphasis is the dramatic structure of the plays, some consideration is given to the Renaissance, political, religious, and social backgrounds of the plays. Prerequisite: ENGL 101
3 semester hours

ENGLISH 322

Understanding English Grammar

This course is intended for anyone who is interested in understanding English, but particularly for those intending to teach English at the secondary level. It takes a structural approach to English grammar, focusing on ten descriptive sentence patterns and classifying works based on English usage. Prerequisite: ENGL 101
3 semester hours

ENGLISH 325

Contemporary Poetry

Lectures and discussion concerning such movements as Modernism, Imagism, and Feminism in 20th century poetry. Can involve examination of non-Western poetry. Topics vary from year to year as the English faculty may direct. Prerequisite: ENGL 101
3 semester hours

ENGLISH 330

Studies in 19th Century American Literature

A variable content course covering the close study of individual authors (Hawthorne, Melville, Poe, Twain, Emerson) and major literary movements of the century (Romanticism, Naturalism, Realism). Prerequisite: ENGL 101
3 semester hours

ENGLISH 332

Studies in 20th Century American Literature

A variable content course covering such major novelists and poets as Fitzgerald, Hemingway, Faulkner, Dos Passos, Wright, Updike, Morrison, Eliot, Frost, and Stevens, as well as contemporary fiction and poetry. Prerequisite: ENGL 101
3 semester hours

ENGLISH 357

Studies in the Novel

A variable content course covering major figures and movements in the development of the novel from the 18th Century to the present. The authors studied are primarily, but not exclusively, North American and British. Prerequisite: ENGL 101
3 semester hours

ENGLISH 395

Topics in Literature

Taught in seminar fashion, this course concentrates on one or two major writers or a general theme. Recent topics have been Jane Austen,

Charles Dickens, Yeats, the novel in transition. The Spirit of '76: Literature of Early American Republic; Literature and Psychology; the Quest; Literature of Revolt. Prerequisite: ENGL 101
3 semester hours

ENGLISH 397

Thesis

The undergraduate English thesis course is an independent study designed for majors with Literature concentrations. Under the guidance of a faculty member, the student will develop a research plan leading to a thesis in his or her area of interest. Requires prior approval of the department head. Prerequisite: ENGL 101
3 semester hours

ENGLISH 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and dean.
3 semester hours

ENGLISH 399

Independent Studies

For the student who wishes to specialize in advanced projects not covered by the regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of dean.
1-6 semester hours

Fashion Merchandising

FASHION MERCHANDISING 101

Fashion Fundamentals

The course includes an overview of the fashion industry; the changing world of fashion, history of retailing, the producers of fashion, global fashion markets, influential designers, and the auxiliary levels of fashion. This course also explores careers in fashion, and the most up-to-date computer technology. Students learn to use the basic technology to perform merchandising activities for manufacturers, contractors, and retailers. This course uses PDM (Product Data Management) and Micrografx designer applications. PDM is the standard for the industry and Micrografx is a CAD system used to create silhouettes, color, fabrics, and manipulate images that interface with PDM. Prerequisites: A trip to the NYC Fashion Markets is required.
3 semester hours

Offered: Alternating semesters annually

FASHION MERCHANDISING 107

HOME FURNISHINGS

The importance of home furnishing in the

marketplace has expanded as new stores dedicated to home goods have opened and department stores have enlarged their home good departments. This course presents a comprehensive coverage of the materials and products used in home furnishings in the global market, and gives our students an opportunity to focus on the merchandising and marketing of these products in retail stores today.

3 semester hours

Offered: Alternating year

FASHION MERCHANDISING 108

Product Knowledge—Fashion Accessories

In-depth studies of fashion accessories and non-woven consumer products designed to give students a realistic appreciation of quality choices in merchandise selection, in performance standards, and consumer care. Specifically, the course emphasizes raw materials: leather, plastic, rubber, fur, precious metals, precious and semi-precious stones and products: shoes, hand-bags, luggage, gloves, furs, fine jewelry, cosmetics, and fashion accessories. Course requires that students research and prepare portfolios of fashion accessories from historic and current fashion periods. Students design and create some accessory items for the current marketplace.

3 semester hours

Offered: Alternating semesters annually

FASHION MERCHANDISING 270

Fashion Show

A practical study of the techniques for Fashion Show production. The ultimate result is a fashion show presentation showing current styles from the New York and local fashion markets. Course includes planning, budgeting, organizing, writing commentaries, promoting, choosing fashions, staging and reviewing for the final show.

3 semester hour

Offered: Alternating semesters annually

FASHION MERCHANDISING OR RETAILING 299

Independent Study in Fashion Merchandising or Retailing Techniques

Prerequisite: Permission of the Director and Advisor. Senior's only.

1-3 semester hours

Offered: Alternating semesters annually

FASHION MERCHANDISING 303

History of Costume

An introduction to the development of clothing and period dress. Includes clothing designs and fabrications from Mesopotamia, Greek, Roman, Byzantine, the 12th, 13th, 14th, 15th and 16th Century, Renaissance, 17th Century Baroque, 18th, 19th Century through modern

dress. A portfolio of historical and modern day adaptations of clothing is required. Prerequisite: FM101

3 semester hours

Offered: Alternating semesters annually

FASHION MERCHANDISING 398

Internship Experience

Field study of an organization in action. Students participate in an internship experience at an outside organization in the Fashion or Retail Industries. Students receive a performance evaluation from their supervisor in that organization and from an FM faculty evaluator who will visit the internship site periodically during the term. Students submit a paper with an analysis of their experiential learning.

3 semester hours

Offered: Every Semesters

Finance

FINANCE 309

Financial Management

Fundamental tools of analysis for the financial management of the firm. Sources and uses of funds analysis for capital budgeting and working capital management. Prerequisites: ECON 201 and 202, CAIS 102; junior or senior status.

3 semester hours

FINANCE 321

Investment Principles

Provides the student with the tools necessary for evaluating investments, including stocks, bonds, options and commodities. Additionally, it presents a systematic methodology for constructing efficient portfolios and evaluating portfolio performance. Prerequisite: FIN 309; junior or senior status.

3 semester hours

FINANCE 345

Management of Financial Institutions

Financial management concepts and techniques for the managerial problems of depository institutions. Includes traditional bank management concerns and those resulting from the changing economic environment. Prerequisites: ECON 301; FIN 309; junior or senior status.

3 semester hours

FINANCE 365

Advanced Financial Management

General survey of financial theories, from the viewpoint of both the financial officer or manager and creditor or stockholder. Prerequisites: FIN 309 and FIN 321; junior or senior status.

3 semester hours

FINANCE 366

Cases in Finance

Application of financial theories to solve real world problems in Finance. Case studies involving financing and investment decisions, mergers and acquisitions, financial restructuring, dividend policies, and risk management; how these issues relate to the overall strategic objectives of the firm. Prerequisites: FIN 309; junior or senior status.

3 semester hours

FINANCE 380

Multinational Finance

The course concerns the international dimensions of corporate finance. The goal of the course is to equip students with the tools to deal with some of the major environmental and decision-making problems relating to corporate overseas finance and investments. Prerequisites: FIN 309; junior or senior status.

3 semester hours

First Year Seminar

FIRST YEAR SEMINAR 101

First Year Seminar

First Year Seminar helps first-year students get the most out of their college experience. Specifically, the purposes and learning outcomes of the course are (A) to develop a love of learning, (B) to examine and practice the norms of UB's academic culture, and (C) to acquire and hone the thinking skills that lead to success in college. As a seminar, the course emphasizes guided discussion of challenging texts.

3 semester hours

FIRST YEAR SEMINAR 102

First Year Seminar

The purpose of the First Year Seminar 102 course is to awaken intellectual curiosity and foster a strong commitment to academic culture. As an adult student in an accelerated program, the Seminar course is designed to encourage students to be active participants and to acquaint (or re-acquaint) students with the performance skills, thinking skills, and personal qualities necessary to succeed as an adult learner.

3 semester hours

French

FRENCH 101

Elementary French I

This course is for students who have little or no knowledge of French. Emphasis on listen-

ing, speaking, reading and writing skills. Instruction based on in-class use of videocassettes and regular laboratory attendance.

3 semester hours

FRENCH 102

Elementary French II

Continuation of French 101. Further development of listening, speaking, reading and writing skills. Introduction to contemporary French customs through use of videocassettes and reading of selected passages of literature. Emphasis on basic structural linguistics. Laboratory attendance essential. Prerequisite: FREN 101.

3 semester hours

FRENCH 103

Intermediate French I

Provides a systematic review of grammatical structures. Dictées. Introduction to various short literary texts by Francophone authors. Use of videocassette program and attendance at laboratory as needed. Prerequisite: FREN 102, or four years of high school French.

3 semester hours

FRENCH 104

Intermediate French II

This course is conducted entirely in French, with emphasis on reading, writing, and oral presentations by students. Study of texts by Gide, Proust, Claudel, Romain, Pragnol, Saint-Exupéry, Sartre, Camus, Senghor, Césaire, and others, including selections from the Surrealists and authors of the nouveau roman.

3 semester hours

FRENCH 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.

3 semester hours

FRENCH 399

Individual Study

Special projects on topics not studied in detail in regular courses, or projects on topics included in regular courses when those courses are not available. Prerequisite: Permission required of School Director.

1-6 semester hours

Geology

GEOLOGY 205

Environmental Geology

The application of geology to problems arising out of the interaction of man and the planet. Topics include natural resources and conservation, geothermal energy; geological hazards

such as earthquakes, volcano, floods, mass movement and subsidence; and geology and regional planning; field trips. Recommended: a course in laboratory science

2 lecture periods; 1 two-hour laboratory period; 3 semester hours

Health Sciences

HEALTH SCIENCES 101

Seminar in Healthcare Professions

This seminar course provides the health sciences student with an overview of a variety of healthcare professions and professionals. Daily activities and responsibilities, scope of practice, training, credentialing and philosophy of practice are explored for various health professionals (i.e., medical, osteopathic, naturopathic, chiropractic, dental and veterinary physicians, acupuncture, physician assistant, nurse practitioner, physical therapy, medical technologist, dental hygiene, health education, etc.)

3 semester hours

HEALTH SCIENCES 102

Current Topics in Health Sciences

This required health science seminar course is designed to engage students in open discussions and debate of current topics impacting the health professions

1 semester hour

HEALTH SCIENCES 201

Medical Terminology

This course introduces concepts and terms that are used within the health sciences and related fields.

1 semester hour

HEALTH SCIENCE 240

Theory and Practice of Community Health Education

An introductory course that will provide students with the historical, philosophical and theoretical principles that govern the development of health education. Health promotion, the role of the health educator in clinical, community and school systems will be emphasized, Ethical issues, careers, organizations and future trends in the profession will also be examined.

3 semester hours

HEALTH SCIENCES 250

Intro to Community Health Education

This is an introductory course on public health principles and the current delivery systems in the US. It introduces the major areas of public health, epidemiology, health care management, environmental and social behavioral

health, health informatics. Current problems and alternative solutions will also be examined.

3 semester hours

HEALTH SCIENCES 255

Community Health Planning and Evaluation

Students will be provided with an overall process of planning and evaluating community health education programs as they relate to defined populations in a variety of setting. Emphasis is placed on impact assessment, program design, and efficiency measurement.

3 semester hours

HEALTH SCIENCES 260

Intro to Exercise Science

This course presents an overview of the field of Exercise Science, including its development, professional activities and sub-disciplines.

3 semester hours

HEALTH SCIENCES 280

Community Health Promotion

This course is designed to provide students with an overall understanding of principles and theories of health promotion as it relates to defined populations in a variety of settings.

3 semester hours

HEALTH SCIENCES 301

Biomechanics

This course provides an introduction to concepts of mechanics as they apply to human movement, particularly those pertaining to occupational work, exercise, sport, and general physical activity. The student will gain an understanding of mechanical and anatomical principles governing human motion and develop the ability to link the structure of the human body with its function from the perspective of rigid body and deformational mechanics as they apply to biological tissues including bone, muscle, and connective tissue. Students will be expected to develop an understanding of the important issues regarding the application of engineering tools in the study of biological mechanics. Pre-requisite PHYS 201, BIO 113, HSCI 321 or BIO 114

4 semester hours

HEALTH SCIENCES 320

Food Sanitation

The course introduces concepts related to the production, storage, preparation of food for human consumption. Attention is given to disease processes and their relationship to food preparation and consumption. Topics covered also include the commercial, social, and legal environments of food production and recall of contaminated food

3 semester hour

HEALTH SCIENCES 321

Exercise Science Anatomy & Physiology

This course focuses on anatomy and physiology from the perspective of an exercise scientist. Nervous, skeletal and muscular systems are studied as primary functional systems in the context of exercise and performance. Cardiovascular, respiratory and urinary systems are studied as primary support systems in the context of exercise and performance. Other systems are studied as secondary support systems. This course is intended to replace general anatomy and physiology for students on the Exercise and Fitness track. A one credit laboratory component is also included.

4 semester hours

HEALTH SCIENCES 325

Exercise Physiology

This course examines how muscles make energy under exercise stress and how fitness behaviors and strategies affect performance, health and wellness. Emphasis is placed upon the muscular performance at the cellular/molecular level, as well as cardiovascular, respiratory, and other physiological processes that occur as a result of exercise and training. A one credit laboratory component is also included. Pre-requisite BIOL 113, HSCI 321 or BIOL 114, CHEM 113, CHEM 114, MATH 105

4 semester hours

HEALTH SCIENCES 326

Health Policy and Management

The influence of policy and management of community health education will be examined. Societal and professional influences emerging threats on health and health policy will be discussed.

3 semester hours

HEALTH SCIENCES 330

Health Care Administration

This course is designed to familiarize the student with the administrative concepts necessary to effectively administer health facilities and departments. Emphasis is placed on leadership, decision making and problem solving skills.

3 semester hour

HEALTH SCIENCES 331

Kinesiology

The gross anatomy of the skeletal and muscular systems and the analysis and study of human movement and biomechanics are the focus of this course. Emphasis is placed on anatomical and mechanical analysis of motion as it pertains to movement in sport and exercise. Prerequisite PHYS 201

3 semester hours

Health Sciences • History

HEALTH SCIENCE 335

Health Issues for Special Needs Populations

This course introduces students to special needs populations, including those who are recovering from recent illness or accidents. Attention is given to resources (medical, social, and legal) in the support of these populations.
3 semester hours

HEALTH SCIENCES 341

Strength & Conditioning

This course covers the anatomy and physiology, training sequences, available equipment, and safety factors, including contra indications, in the optimal development of strength and conditioning. Prerequisites: BIOL 113, BIOL 114, HSCI 321
3 semester hours

HEALTH SCIENCE 345

Comparative Diet Strategies

This course explores and compares various dietary strategies, including low-fat, high-carbohydrate, high-protein, macronutrient-balanced, macrobiotic, high-fiber, vegetarian, vegan, Paleolithic, and Mediterranean. The pros and cons of these various approaches are discussed, along with the evidence-base that exists, or does not exist, to support their use. Prerequisite: NUTR 205
3 semester hours

HEALTH SCIENCES 350

Community Nutrition

A basic knowledge and understanding of the applied science of community nutrition for the purpose of enhancing health of populations is provided. The course presupposes a fundamentals course in nutrition science and does not teach this. Rather, the process of conceiving, planning, funding, creating, implementing and managing of nutrition education, feeding and/or other intervention programs for various constituencies (elderly populations, handicapped, children, college students, etc.) is covered. Governmental feeding programs and policies as well as critiques of these and alternatives to these are discussed. The course emphasizes assessment of and critical thinking about problems and opportunities within communities as they relate to nutritional health. Problem solving and identification of resources towards better health is stressed. Prerequisite: NUTR 205
3 semester hour

HEALTH SCIENCES 351

Fitness and Wellness Program Development

The course examines features of fitness and wellness program design and development. Disease prevention as a feature of fitness and wellness is studied in detail, with attention to

social systems and infrastructure. Prerequisites: BIOL 113, BIOL 114, HSCI 321
3 semester hours

HEALTH SCIENCES 361

Fitness Assessment

Examination of topics such as body composition, cardio respiratory fitness, nutritional analysis, pulmonary function, flexibility, muscular strength with respect to the development of individual fitness assessment programs. Prerequisites BIOL 113, BIOL 114, HSCI 321
3 semester hours

HEALTH SCIENCE 365

Epidemiology for Health Science Professionals

The course introduces the study of disease process, with special attention to transmission, containment, and treatment. Topics covered include urban environments, travel, socioeconomic conditions affecting the spread of disease, and the like. Prerequisite: Biostatistics.
3 semester hours

HEALTH SCIENCES 380

Internship in Nutrition

A senior-year supervised field experience, conducted in a University approved setting, which is designed to provide the student with career related experience in the field of health and nutrition science.
3 semester hours

HEALTH SCIENCES 381

Internship in Exercise & Fitness

A structured off-campus learning experience designed to provide senior students with a practical professional experience in Fitness and Exercise Science.
3 semester hours

HEALTH SCIENCE 385

Community Health Education Internship

Professional field experience will provide students an opportunity to apply previously acquired knowledge and skills in the assessment, planning, implementation, and evaluation phases of community health education.
3 semester hours

HEALTH SCIENCES 401

Health Sciences Information Literacy

This course introduces topics in information literacy, including information analysis and evaluation, the most important databases in health care and health sciences fields, and the like. Prerequisites: BIOL 113, BIOL 114, CHEM 113, CHEM 114, HSCI 321, MATH 203, MATH 203B
3 semester hours

HEALTH SCIENCE 420

Food Service Management

The basic principles of managing a food ser-

vice operation are explored. Topics covered include human resource development; marketing and branding; environmental control and community responsibility; microbiology, sanitation, food-borne illness prevention and first-aid; general safety regulations and procedures including fire prevention; facility set-up as to equipment, cleanliness and maintenance; and production of meals from sourcing of raw materials through to client consumption. Practical field experiences are included. Prerequisite: NUTR 205
3 semester hours

HEALTH SCIENCE 460

Vitamins & Minerals

Basic and clinical aspects of macronutrients will be discussed with emphasis on vitamin and mineral metabolism at the cellular and tissue level. Lectures will include specific functions, requirements, sources, and effects of deficiencies and excesses of vitamins and minerals. Prerequisite: NUTR 205
3 semester hours

HEALTH SCIENCES 470

Clinical Herbolgy and Botany

This course presents a study of the use of herbs in nutritional practice. Lectures will include the plant sources, mechanism of action, pharmacological/toxicological properties, and clinical applications of individual medicinal herbs commonly used for the promotion of health.
3 semester hours

HEALTH SCIENCES 471

Exercise Nutrition

The course examines aspects of sports nutrition detailing proper dietary and nutritional supplement protocols for enhancing endurance and performance during exercise and sports. Prerequisites: BIOL 113, BIOL 114, CHEM 113, CHEM 114, HSCI 321, NUTR 205
3 semester hours

History

HISTORY 100

Major Figures in World History

This course is offered in three one-semester hour sections, each section dealing with one person of historical significance, and lasting 12 class periods. Students may register for one or more sections. Usually the three persons are related chronologically or thematically, as in the case of Hitler, Mussolini and Stalin, or Washington, Jefferson and Adams, or Florence Nightingale, Emmeline Pankhurst, and Emma Goldman.

History

Offered: Every two years
1 semester hour

HISTORY 101

World Civilization I to the 17th Century

The first semester of a historical survey of world cultures. The development of social, political, economic, and religious institutions and the major trends of philosophy, science, literature, and art.

Offered: Every other semester
3 semester hours

HISTORY 102

World Civilization II — 17th Century to the Present

The second semester of a historical survey of major world cultures. Because of the nature of the period studied, additional emphasis on political, economic and social developments and on the role of science and technology.

Offered: Every other semester
3 semester hours

HISTORY 207

American History to 1877

European background to discovery and exploration. The English colonies; struggle for North America; the Revolution; constitutional development; growth of democracy; westward expansion; sectionalism; Civil War and Reconstruction. Major political, social, economic, and cultural trends in American society through Reconstruction.

Offered: Every other semester
3 semester hours

HISTORY 208

American History Since 1877

Gilded Age; industrial development; big business; expansion; imperialism; the U.S. as a world power; wars and foreign affairs; constitutional trends; political developments, economic and social trends and problems; cultural trends.

Offered: Every other semester
3 semester hours

HISTORY 222

The Ancient Greeks

From pre-Mycenaean times to the Hellenistic period, ending in 146 B.C. Emphasis on institutions, everyday life, ideas, and culture.

Offered: Every two years
3 semester hours

HISTORY 223

Ancient Rome

From earliest Roman society to the time of Constantine. Emphasis on institutions of the Roman Republic and Empire and their impact on Western Civilization.

Offered: Every two years
3 semester hours

HISTORY 228

Foundation of Modern England

Examination of social, economic, political and cultural resources and events from the English Renaissance under Henry VIII (1509) to the Colonial wars under George III (1783). Special focus on the Reformation, Civil War, Cromwell and the Glorious Revolution (1688); early development of Empire; life-styles and culture or rural and early industrial society.

3 semester hours

HISTORY 230

The Civil Rights Movement

3 semester hours

HISTORY 232

History of Science

This course provides a global perspective on the growth of human knowledge by tracing the development of science and technology from the beginning of civilization to the present day.

3 semester hours

HISTORY 233

Roots of Modern Culture

Topics and themes important to the understanding of the origin and development of modern Western society and culture. Subjects such as industrialism, the growth of the city, class conflict, the emergence of new values and expectations, the importance of war, and the role of minorities are explored in a variety of literary and historical texts. (Cross-listed as English 233)

Offered: Every two years
3 semester hours

HISTORY 299

Independent Study in History

Designed for the student who wishes to develop a survey project not covered by the listed course offerings. Individual or group conferences with designated faculty advisor. Prerequisite: Permission of School Director

Offered: Every semester
1-6 semester hours

HISTORY 304

Civil War and Reconstruction

Causes of the war; sectionalism, slavery, the territories, economic, social and intellectual factors, secession and war; major military campaigns, constitutional developments, presidential and congressional reconstruction, and the disputed election of 1876.

Offered: Every two years
3 semester hours

HISTORY 316

Early African-American History

A study of the slavery experience from 1619 to

1877 focusing on the political, social, and economic aspects of the system, and the varieties of resistance to the system.

Offered: Every two years
3 semester hours

HISTORY 317

Twentieth Century African-American History

Emphasis is placed on the struggle of African Americans to attain full rights of citizenship. Examination of African-American leadership, its ideas, and the impact of its ideas upon various African-American movements, such as integration, emigration, separatism, civil rights, and black power.

Offered: Every two years
3 semester hours

HISTORY 350

Connecticut History

The history and geography of Connecticut and study of the political and social development of Connecticut towns, lands and political institutions.

3 semester hours

HISTORY 335

Topics in European/Non-West History

3 semester hours

HISTORY 336

Portrait of an Age

Comprehensive study of life and manners of a particular historical period, with emphasis on original sources such as diaries, memoirs, official records, literature, art and music. Periods could include the ante-bellum South, the Gilded Age, Victorian Society in England or the United States, France in the time of Louis XIV, and so on. May be repeated for credit if topics vary.

Offered: Every two years
3 semester hours

HISTORY 360

Studies in African History and Culture

Examinations of African historiography up to, including, and after the period of colonization, as well as of the concepts underlying African religions.

Offered: Every two years
3 semester hours

HISTORY 361

Modern Africa

This course takes up where History 360 leaves off. It addresses the following: 19th century colonialism in Africa, African resistance to European colonization, African independence movements, decolonization in the mid 20th century and the subsequent establishment of independent African states.

History • Human Services

Offered: Every two years
3 semester hours

HISTORY 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

HISTORY 399

Independent Study in History

For the student who desires to specialize in advanced projects not covered by the regular course offerings. Individual or group conferences with designated faculty advisor. Prerequisite: Permission of School Director.
1-6 semester hours

Human Services

HUMAN SERVICES 101

Introduction to Gerontology

An interdisciplinary overview of the implications of aging in American society. This course is designed to acquaint the student who is contemplating a career in gerontology, with the physical, psychological, social, economic and cultural dimensions of the total experience of growing older.
3 semester hours

HUMAN SERVICES 105

Strategies for Effective Parenting

Students will acquire relevant child-rearing information and constructive parenting techniques. Several therapy models useful for understanding child development will be explored. Emphasis will be on exploring personal parenting influences and preparing students to parent positively.
3 semester hours

HUMAN SERVICES 110

Alcohol and Other Drugs in Society

This course explores alcohol and other drug use and abuse in society. Included in the course will be a historic review, the role of culture in use of drugs, the effect on society, the family and the individual, and an overview of the etiology, assessment and treatment of dependence.
3 semester hours

HUMAN SERVICES 150

Career Management

This course prepares students to manage their own careers early in their college experience for their eventual college to work transition. Through self-exploration, students learn more about themselves in relationship to the world

of work and about creating college experiences that will make them more marketable in a global community.
1-3 semester hours

HUMAN SERVICES 201

Introduction to Counseling

This course focuses on skills, theories and techniques of the helping profession. The importance of helpers knowing themselves is crucial in the helping field. An integrated, experiential component designed for self-exploration and increased understanding of self is explored through family of origin work.
3 semester hours

HUMAN SERVICES 203

Introduction to Human Services

This course briefly explores the historical beginnings of the human service field and focuses on the present day service delivery models, the needs of clients and the training of human service professionals. An integrated approach including community site visits and case studies will assist students in gaining a firm understanding of this field.
3 semester hours

HUMAN SERVICES 205

Counseling Methods for Specialized Populations

Students study through biographies specialized populations (i.e. those with mental and physical disabilities, drug and alcohol users, and emotionally, physically, and sexually abused) while becoming familiar with the various counseling approaches useful in effecting changes in these individuals.
3 semester hours

HUMAN SERVICES 225

Sign Language I

This course introduces students to the Art of Sign Language. Using American Sign Language they will be able to communicate on a basic level. Students will learn subtle aspects of language, such as facial expression, gestures (non-verbal communication), use of classifiers, and directional verbs. Students will learn the manual alphabet and be able to use it in the everyday interactions if needed.
3 semester hours

HUMAN SERVICES 230

Sign Language II

Sign Language II will reinforce the knowledge students have gained in Sign Language I: Using American Sign Language, students will begin to speak more fluently. Their skills will be perfected as they continue to learn subtle aspects of the language, such as facial expressions, gestures, from verbal communications, use of

classifiers, and directional verbs. Students will perfect the manual alphabet and be able to use it in their everyday interactions when needed.
3 semester hours

HUMAN SERVICES 277

Practicum in Human Services

Students enrolled in the practicum receive individually arranged on-site placement in human service agencies. This arrangement is intended to provide students the opportunity to experientially investigate the specific area of interest that they have developed and/or to allow for the individualization necessary to meet the student's specific skill area needs. Students are expected to be concurrently in a class where they have an opportunity to discuss and process their on-site learning experiences.
1-6 semester hours (Every Semester)

HUMAN SERVICES 299

Special Topics

Investigation of current topics in the human services field.
1-6 semester hours

HUMAN SERVICES 301

Crisis Management

This course provides a background in cultural diversity and competence specifically related to human services settings. This includes culturally centered communication skills related to clients. It also includes sensitivity and awareness around the design and implementation of human services programs. The course will help students effectively navigate ethnic, race, gender and age related issues as they relate to client service and program development.
3 semester hours

HUMAN SERVICES 302

Multicultural Perspectives in Human Services

Students are exposed to models of crisis intervention that facilitate crisis resolution. Crisis theory, critical factors, developmental and situational crisis as well as intervention with unique populations and special issues are discussed. Course includes competency-based skill-building exercises.
3 semester hours

HUMAN SERVICES 305

Strategies and Techniques of Group Interaction

Students become aware of strategies and techniques of group interaction as they relate to behavioral outcomes. Different theoretical models will be offered and opportunities will be given to demonstrate the effectiveness of specific approaches to unique populations.
3 semester hours

Human Services • Integrated Studies • International Business

HUMAN SERVICES 312

Internship in Human Services

The internship differs from the practicum in that it emphasizes the organizational aspects of the placement, i.e. management, planning, research, etc.

1-6 semester hours

HUMAN SERVICES 315

Substance Abuse and Chemical Dependency

This course concentrates on assessment and diagnosis of substance abuse and chemical dependency as well as the different treatment modalities and methods used to help the addicted. Included in the course will be a look at the different addictions and compulsive behavior patterns including alcohol and other drug dependency, gambling, and eating disorders.

3 semester hours

HUMAN SERVICES 316

Strategies for Effective Families

This course explores functional and dysfunctional families. Students will gain an understanding of the family system and methods of intervention and treatment for the family as well as individuals within the family.

3 semester hours

HUMAN SERVICES 320

Applied Ethics for Human Services Professionals

A general introduction to basic ethical principles as applied to human services and direct support workers across a spectrum of programs. Programs include work in hospital, community, day care, school, recreational, rehabilitation and mental health settings. Students apply ethical principles throughout the course to topics and case studies from the class text and from actual examples from their own practicum placements. Students engage in reading, discussion, writing, and individual presentations during the course. Students recognize basic ethical terminology, apply ethical models to relevant cases, and draft their own ethical decision-making model as a product of this course.

3 semester hours

HUMAN SERVICES 331

Process of Living and Dying

A seminar based on the premise that death and dying are closely related to life and living. This course explores the processes of death and dying, its effect on family members, cultural attitudes toward death, and various professional and paraprofessional roles available to deal with these issues.

3 semester hours

HUMAN SERVICES 333

Social Policy and Administration

This course introduces the student to the various components of social policy; formation, implementation, administration, and evaluation. Theoretical issues as well as historical factors in policy are presented. Practical problems in administration of non-profit agencies are presented and analyzed.

3 semester hours

HUMAN SERVICES 350

Seminar in Human Services

This seminar course is designed as a culminating experience incorporating primary readings and case studies. Students will have an opportunity to explore and discern current issues and personal interests in the human service field.

3 semester hours

HUMAN SERVICES 351

Social Gerontology

This course deals with societal aspects of aging and focuses upon socio-cultural factors that contribute to patterns of aging in the USA. Topics covered include the cultural meaning of aging; the socialization process of aging; the population dimension of aging; human ecology of the aged; social stratification among the aged; deviance and crime among the aged; social power of the aged; and social change and the aged. Prerequisites: HUSV 101 or SOC 101

3 semester hours

HUMAN SERVICES 389

Seminar in Critical Issues in Contemporary Gerontology

This course is interdisciplinary in its orientation and its purpose is to familiarize students with the rich diversity of professional literature contributing to the field of gerontology. In addition, it is designed to demonstrate the linkages between theoretical issues and practical concerns in the field of aging. The course will draw upon the knowledge and experience of a variety of scientists and practitioners who will lead discussions on selected issues to be identified by the seminar's participants. Prerequisites: GERO 101 and 12 additional hours of gerontology course work

3 semester hours; upon student demand

Integrated Studies

INTEGRATED STUDIES C101

Ethical Issues in Computing

Ethical basis for dealing with technological issues involving the computer. Context for ethical decision-making; ethical relativism, utilitarian-

ism, deontology, virtue ethics. Software piracy, intellectual property rights, computer crime, computer viruses and worms, privacy, responsibility, liability and professional ethics. The course includes oral presentations, discussions and written papers on issues currently in the news and/or related to the topics at hand. Prerequisite: ENGL C101 or Department Permission.

3 semester hours

International Business

INTERNATIONAL BUSINESS 325

Import/Export

This course surveys functions and responsibilities of international traffic personnel; terms of trade; U.S. and foreign rules and regulations; documentation; methods of payment; ocean transportation; price quotations; analysis of transportation and marine insurance. Prerequisites: ECON 201, ECON 202; junior or senior status.

3 semester hours

INTERNATIONAL BUSINESS 360

Business and International Law

This course covers International Business Law fundamentals which operate as the "constitution" for international economic relations. A basic proposition of the course is that understanding International Business Law is essential to the study of International Relations, including the global economy and business.

3 semester hours

INTERNATIONAL BUSINESS 362

International Sales (Commercial) Transactions

This course introduces the basic issues in an international sales transaction. Based on the United Nations Convention on Contracts for the International Sale of Goods (CISG), the course examines formation of international sales contracts, transfer of title to goods, allocation of risk of loss, methods of financing the sale of goods, assurance of payment for goods, and rights and responsibilities of air and sea carriers.

3 semester hours

INTERNATIONAL BUSINESS 363

Settlement of International Business Disputes

This course examines the techniques and institutions available to states, corporations, or individuals for the peaceful settlement of international business disputes. It focuses on the settlement of international business disputes through such means as negotiation, mediation, arbitration, court systems of sovereignties, and the International Court of Justice.

3 semester hours

International Business • International Political Economy and Diplomacy

INTERNATIONAL BUSINESS 366

International Business and Customs Unions

This course examines the origins and historical development of the European Union, its institutions, business policies and special relationships with the rest of the world to create a common currency to achieve open trade in business across borders.

3 semester hours

International Political Economy and Diplomacy

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 201

Economics and Development

This is an introductory course of economics from a political science perspective. Major concepts and issues in both macro and micro economics will be covered, particularly as they relate to politics.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 202

Introduction to Political Economy

The Introduction to Political Economy reviews the ways in which politics, trade, and economics are interwoven in today's world. The course introduces students to basic concepts and issues in political economy and examines the factors that have contributed to the evolution of political economy and to the rise and fall of competing models of political economy.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 203

Political Economy of North America

This course examines the interactions of politics and economies of the United States, Mexico, and Canada. Issues to be covered include NAFTA, immigration, drug-trafficking, environment, terrorism, and foreign policies of the region.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 321 (IPED 321/PSCI 321)

Political Economy of East Asia

In recent decades, the East Asian region has often been described as a model of socioeconomic development, which newly developing regions should emulate. This course will encourage learners to explore the extent to which the East Asian paradigm of development is valid for other regions. This course will explore the cultural and historical factors contributing to the political and economic trajectories of China, Korea, and Japan. Through studying East Asia's unique sociopolitical and economic

trajectory, students should be equipped to better contextualize and assess the challenges and opportunities currently facing the Peoples Republic of China, Taiwan, Hong Kong, Japan, and the Koreans.

3 semester hours

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 329

Political Economy of China

This course is designed to help students make sense of contemporary China—its dynamic social and economic changes, its lasting political culture, its enduring struggle for modernization and democratization, and its evolving relations with the rest of the world. The focus will be on major achievements, problems, and challenges facing China today. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 340 (IPED 340/PSCI 303)

Political Economy of Latin America

This course will explore pre-Colombian, as well as colonial and post-colonial political and economic development in Latin America. It will pay particular attention to socio-political developments of the Cold War period as well as recent significant initiatives such as the Santiago Commitment, MERCOSUR, and NAFTA, attempting to assess their impact upon Latin America's transformation from developmentalism, to Third World politics, to an emerging center of democratic capitalism.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 341

Political Economy of Middle East

This course will familiarize the students with the patterns of economic development and the evolution of economic institutions in the Middle East and North Africa region after World War Two. To the extent that political and social institutions are relevant for understanding the region's economic development, the course will also cover these subjects selectively. For example the students will learn about how regional instability and political institutions of MENA countries have affected their ability to implement economic reforms. Another important topic that will be covered in detail is the impact of oil wealth on political and economic development of the region. The course will also familiarize the students with tools and procedures of country analysis and regional analysis and apply these tools to understanding the present conditions of the MENA countries with an eye to the future trends. The emphasis will be on analysis of the main drivers of eco-

nommic growth such as the leading economic indicators, prospects for macroeconomic stability, and major risk factors that could have an adverse effect on business climate.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 345

Political Economy of EU

This course studies the origin, evolution and current development of the European Union. Focus will be on the political, economic, and social impact of EU on Europe as a whole, on individual member state, and on EU-US relations. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 390

Multinational Corporations in IPED

This course analyzes the role of MNCs in IPE. Topics include the nature, objectives, and decisions of MNCs in today's politics and economics, the political and economic implications of foreign direct investment, and the effects of MNCs' operations overseas on the political economy of the host country and the home country such as issues of outsourcing and insourcing. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 391

Sustainable Development

This course concentrates on the relatively new concept of sustainable development in international political economy. Topics include, but are not limited to, pollution and pollution control, environmental protection, education and occupational training, infrastructure, legal system, political and economic reform, productivity, human resources, and linkage to the outside world. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 392

The Geopolitics of Oil

Due to its critical importance in world economy, petroleum has assumed a significant role in the maintenance of a stable international political, economic, and security order. This course examines the international political economy associated with the exploration, production, trading, and consumption of petroleum. It focuses on how petroleum influences global and regional politics and economics in an interdependent world. Instructor's permission may be

International Political Economy and Diplomacy • Japanese • Korean • Law • Literature and Civilization

required for this course.
3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 395

Political Economy of Environment

This course studies various environmental issues in international political economy. A global perspective is stressed with references made to several international environmental agreements, their enforcement, and their impact on global and regional economy. The course will also discuss issues related to environment such as epidemics and their relations to international political economy. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 396

Seminar on IPED

This is an advanced research seminar for IPED majors. It focuses on IPE research methods and senior thesis writing. Instructor's permission may be required for this course.

3 semester credits

INTERNATIONAL POLITICAL ECONOMY AND DIPLOMACY 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.

1-3 semester hours

Japanese

JAPANESE 101

Elementary Japanese I

Introduction to the Japanese language, stressing speaking, listening, reading and writing. The course will feature the Japanese writing system, and introduce the student to the language's phonetic/phonemic structure gradually, with additional stress on pronunciations, aural comprehension and basic conversation.

3 semester hours

JAPANESE 102

Elementary Japanese II

Continuation of Japanese 101. Prerequisite: Japanese 101

3 semester hours

JAPANESE 103

Intermediate Japanese I

Conversation based on the reading of current prose texts. Thorough review of grammar and vocabulary, and continued drill in writing. Introduction to Japanese culture and recent his-

tory through use of film, video s, and newspapers. Prerequisite: JAPN 102.

3 semester hours

JAPANESE 104

Intermediate Japanese II

Continuation of Japanese 103, with special focus on reading and writing with style and fluency. Prerequisite: JAPN 103.

3 semester hours

JAPANESE 399

Independent Study

Special projects on topics not studied in detail in regular courses, or on topics included in regular courses when those course are not available. Prerequisite: Permission of advisor and School Director.

1-6 semester hours

Korean

KOREAN 101

Elementary Korean I

Introduction to the Korean language, stressing speaking, listening, reading and writing. The course will start with the Korean writing system, its phonetic/phonemic system, and its structure, continue with an examination of what makes Korean unique to other languages, and then proceed with a step by step study of grammar, vocabulary, writing and conversation.

3 semester hours

KOREAN 102

Elementary Korean II

Continuation of Korean 101. Prerequisite: KORN 101

3 semester hours

KOREAN 103

Intermediate Korean I

Conversation based on the reading of modern prose texts. Drill in written and oral expression. Prerequisite: KORN 102

3 semester hours

KOREAN 104

Intermediate Korean II

Continuation of Korean 103. Prerequisite: KORN 103

3 semester hours

KOREAN 399

Independent Study

Special projects on topics not studied in depth in regular courses, or on topics included in regular courses when those courses are not available. Prerequisite: Permission of advisor and School Director.

1-6 semester hours

Law

LAW 251

Business Law I

Court systems, sources of law in the United States, the constitutional basis of the legal system, government power to regulate business, the types and powers of administrative agencies, civil dispute resolution and alternatives to civil litigation; the law of contracts, fairness and good faith in interpretation of contracts, and the United Nations Convention on Contracts for the International Sale of Goods; problems in Agency and Employment, the ethical implications of business decisions, the broad functions of criminal and tort law, the Foreign Corrupt Practices Act, and the constitutional limitations on criminal procedure.

3 semester hours

LAW 252

Business Law II

Uniform Commercial Code (Sales, Commercial Paper, Bank Deposits and Collection); business organization; Property (Personal Property, Real Property, including Landlord and Tenant, and Estates and Wills).

3 semester hours

Literature and Civilization

HUMANITIES C201A

The American Dreamer

An interdisciplinary course which employs history, literature and philosophy to examine and explain the cultures and values of a civilization over time and place. Works studied include primary historical and philosophical texts, as well as literary and artistic creations. Currently, the course looks at the civilization of the United States, focusing on the "American Dream," its origins, growth and significance. This is a Core Heritage Course. Prerequisite: English C101 or department permission.

3 semester hours

HUMANITIES 300

Seminar

An interdisciplinary and thematic seminar that focuses on the different approaches of history, literature, and philosophy to a common theme or text.

3 semester hours

HUMANITIES 395

Thesis

The student will work closely with his or her academic advisor on a mutually acceptable project involving serious research.

3 semester hours

Management and Industrial Relations

MANAGEMENT 300

Interpersonal and Group Behavior in Organizations

The student is introduced to behavior in organizations on interpersonal, group and intergroup levels. Group process is examined on both conceptual and experiential levels to enhance understanding of interpersonal and group processes, as well as to test and hone individual interpersonal and group participation skill. Theories of Social Psychology and Group Sociology are examined and applied. Prerequisite: junior or senior status.

3 semester hours

MANAGEMENT 301

Operations Management

The student is introduced to the basic tools and concepts used in managing the delivery of products and services. Inventory cost control, work flow design, development of work standards, workplace layout, quality control, project management, forecasting, capital investment planning, capacity policy and related methods for management of operations are presented in this course. Prerequisite: junior or senior status.

3 semester hours

MANAGEMENT 302

Multicultural Management

This course introduces students to the basics of organization and management theory, as they apply to the global market place. A cross-cultural approach is used to examine the similarities, differences and application of theory across national boundaries; and to identify those structural constants that permit business to be conducted on a global scale. Organization culture, role structure, coordination and control methods, leadership, and business strategy are the basic theoretical constructs introduced and evaluated in the course. Prerequisite: junior or senior status.

3 semester hours

MANAGEMENT 305

Human Resource Issues in Management

The student is introduced to current theory, research and practice in the management of human resources in organizations. Job design, recruitment, selection, performance feedback, goal setting, training, employee rights, safety, compensation and benefits issues are reviewed within the context of their application in the US as a world standard for such practices, with comparisons to customs and practices

in the international arena. Prerequisite: MGMT 302; junior or senior status.

3 semester hours

MANAGEMENT 311

Comp and Benefit Administration

Students in this course will examine the major foundation programs and skills that under grid the current practice of Human Resource Management. Theory and method used in the design of compensation systems is explored, interviewing method and skill as applied to data gathering for problem solving or personnel selection, surveys for compensation benchmarking or employee attitude measurement, and development of performance feedback and goal setting (MBO) programs are intensively reviewed. Student projects in program applications are required. Prerequisite: MGMT 302; junior or senior status.

3 semester hours

MANAGEMENT 320

Entrepreneurship and Small Business Management

For starting or buying a new business, it is critical to develop practical business plans, obtain financing, develop a marketing plan, project cash flow, organize the business, and develop financial controls to take advantage of opportunities in both domestic and international markets. Work is done in teams and computer analysis is used. Prerequisites: ACCT 102, MKTG 305, and MGMT 302.

3 semester hours

MANAGEMENT 330

Leadership Lessons from the Movies

In this course students watch a variety of movies to examine the dynamics of leadership. Organizations and work units rise and fall based on leadership. Leaders must influence other people to accomplish organizational goals in a way that often entails self-sacrifice and living for the sake of others.

3 semester hours

MANAGEMENT 340

Conflict and Negotiation

The development of conflict-management and negotiating skills with particular emphasis on achieving effective and efficient outcomes within a global and multi-cultural context. Experiential exercises, readings and discussions will demonstrate various strategies for a broad range of negotiating scenarios, e.g., buyer-seller, management-labor, personal salary increase, cross-national, etc. Prerequisite: junior or senior status.

3 semester hours

MANAGEMENT 342

Labor Law and Arbitration

Modern labor legislation and its practical impact on present relations between labor and management. Increasing role of government through federal statutes and agencies. Historical background, principles, procedures and judicial aspects of arbitration process. Nature and function of arbitration; powers of arbitrator; and arbitration cases. Prerequisite: MGMT 305; junior or senior status.

3 semester hours

MANAGEMENT 350

Business Policy and Strategy

A study of decision-making including integrative analyses and policy determination at the overall management level. Students search for new knowledge and solutions to long and short term problems and opportunities in specific businesses. The coordination, integration and innovative application of theory and methods learned in previous courses are the tools of research. Accordingly, the final examination of each course shall constitute, therefore, an outcome assessment of what the student has learned in the program. This examination, normally an extensive and comprehensive case study, will be graded by several faculty members representing different and relevant disciplines.

3 semester hours; open only to seniors

The following courses are suggested for those students who wish to take elective courses in other disciplines which are related to or useful in the practice of management:

Communication in Industry.

—See MCOMM 385.

Industrial Psychology.

—See PSYC 309.

Social Psychology.

—See PSYC 305.

Tests and Measurements.

—See PSYC 323.

Marketing

MARKETING 305

Principles of Marketing

The scope and significance of marketing. The retailing and wholesaling of consumer goods. Marketing agricultural and industrial goods. Marketing policies and practices of business firms. Prerequisite: junior or senior status.

3 semester hours

MARKETING 306

Digital Consumer Behavior

A qualitative analysis of marketing as a sys-

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tem for the satisfaction of human wants. The contribution of psychologists, sociologists, anthropologists, and other behavioral scientists to the understanding of consumer behavior. Such topics as motivation, learning, life-cycle and social-class analysis, culture and custom. Prerequisite: junior or senior status.

3 semester hours

MARKETING 307

Management of Promotion

Advertising, personal selling, trade support, and public relations as elements of strategy. Situation analysis planning, execution, and evaluation of promotional campaigns. Social responsibilities of the firm and some of its ethical problems. The impact of consumerism. Prerequisite: MKTG 305; junior or senior status.

3 semester hours

MARKETING 308

Marketing Research

Objectives, techniques, and limitations of library and field research applied to advertising, retailing, or sales management problems. Assignment of group projects requiring considerable initiative and resourcefulness. Measurements of individual accomplishment by both group activity and individual evaluation of the project. Prerequisites: MGMT 120 and MKTG 305; junior or senior status.

3 semester hours

MARKETING 309

Digital Marketing

New and developing digital technologies have impacted many basic platforms for which today's organizations operate and function. This course will focus on how businesses can develop, incorporate and leverage digital marketing into their overall marketing strategies. Additionally this course will investigate current e-commerce and mobile commerce trends.

3 semester hours

MARKETING 310

Service Marketing

Marketing in service industries, stressing the unique problems of marketing intangibles. This course focuses on the development, implementation and control of strategy, systems and people for effective service operations. Case studies are selected from professional services, transportation, hotels and resorts, and various other retail services. Prerequisite: MKGT 305.

3 semester hours

MARKETING 319

Advertising Management

A critique of advertising from the viewpoint of management. Case problem-solving of situa-

tions that have confronted businessmen. The impact of advertising on demand for products and services. Principal problems in the building, implementing and evaluating of advertising programs. Prerequisite: MKGT 305. Junior or senior status.

3 semester hours

MARKETING 325

Sales Management

Management of manufacturer's salesmen. Sales department organization. Selecting, training, compensating, and supervising salesmen. Sales territories, travel expenses, quotas, and budgets. Principles are applied to concrete problems. Prerequisite: MKGT 305; junior or senior status.

3 semester hours

MARKETING 339

Retailing Management

Use of the case method to analyze and solve problems faced by senior retail executives. Case histories set forth detailed background information to train the student in developing alternative solutions and choosing from among them. Cases in each of the major fields of retail management, merchandising, publicity, personnel, control, and service activities. Prerequisite: MKGT 305; junior or senior status.

3 semester hours

MARKETING 342

Multinational Marketing

Lecture and case studies, exploring cultural, political, economic and legal aspects of the development and operation of companies marketing overseas. Planning, organizing, controlling, and promoting for industrial and consumer goods. Prerequisite: junior or senior status.

3 semester hours

MARKETING 350

Marketing Management

The nature and scope of marketing management. The interpretation of environmental factors affecting marketing decisions and application of managerial concepts to marketing strategy. Adaptation of resources and objectives in the development of marketing plans. Prerequisite: junior or senior status.

3 semester hours

Martial Arts Studies

MARTIAL ARTS STUDIES 110

Taekwondo Practicum 1

This is an introduction to Taekwondo, commencing with instructions in essential classroom etiquette and training rules. Through this course, students are expected to achieve mastery of Taekwondo forms Taegeuk No. 1 & 2 as well as white belt Hammer Fist and Axe kick

breaking techniques, and yellow belt Palm Fist and Front Snap kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 111

Taekwondo Practicum 2

This level of Taekwondo training focuses on the adaptation of the body to martial art training. Through this course, students are expected to achieve mastery of Taekwondo forms Taegeuk No. 3 & 4, self defense techniques No. 3 & 4, kicking techniques with a focus on the Roundhouse kick and Side kick, sparring techniques with a focus on orange belt Elbow strike and Roundhouse kick breaking techniques and green belt Straight punch and Side kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 112

Taekwondo Practicum 3

This course focuses on enhancing the student's ability to maintain and increase physical balance. Through this course, students are expected to achieve mastery of Taekwondo forms Taegeuk No. 5 & 6 (20 motions No. 5 & 23 motions No. 6, guiding themes "wind & flowing like water"), self defense techniques No. 5 & 6, kicking techniques with a focus on the Back kick and Hook kick, sparring techniques with a focus on 1:1 basic sparring, blue belt Back fist and Back kick breaking techniques and brown belt Knife hand and Hook kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 114

Taekwondo Practicum 4

This Taekwondo class will focus on enhancing concentration skills. Through this course, students are expected to achieve mastery of Taekwondo form Taegeuk No. 7, self defense technique No. 7, kicking techniques with a focus on the Back Spin Hook kick, sparring techniques with a focus on basic skill sparring, breaking techniques of Half Knuckle punch and Back Spin Hook kick. At the completion of this course, there will be a 1st degree black belt test for participating students.

1 semester hour

MARTIAL ARTS STUDIES 121

Taiji Practicum 1

This course introduces the student to Martial Arts of Taiji including the performance of the first part of the Yang Style short form. It includes an introduction to Taiji principles, and will work to expand the student's range of motion, coordination, and introduce students to Qigong level 1 training on exercises one to five. It will introduce and compare the major Taiji styles and note how they differ from each

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other. Fighting applications of Taiji (as well as the health applications) will be presented. The concepts of flexibility and range of motion are introduced as tools to explain Taiji's principles. Practicum 1 will also introduce physical principles of head suspended; the pelvis tucked in with toe in and knee out; relaxed execution of smooth movements; exercises for overall coordination of the body and the mind-body connection. This practicum presents the first 16 movements of the Yang Style Short Form. Students will learn to demonstrate the 16 movements and begin to incorporate the physical principles into the 16 Taiji movements. Students will learn the horse stance and bow stance and be introduced to the role that they play in Taiji movements. Emphasis is on slow and relaxed movement of the body as a single coordinated unit.

1 semester hour

MARTIAL ARTS STUDIES 122

Taiji Practicum 2

This course will include form correction of the first part of the Yang Style Short Form, further analysis of Taiji principles and a detailed application and study of the meaning of Taiji movements. Form correction incorporates the concept of qi into movement and into the execution of the form. The focus is on correctly executing the first 16 moves while observing Taiji's physical principles. This course will include body strengthening and alignment using Qigong training on exercises six to twelve. It also introduces the physical principles of the seesaw movement and the concave chest. Additional instruction is provided to strengthen the body to maintain proper alignment and balance throughout the form. Form correction further seeks to eliminate the reinforcement of poor execution caused by repeating incorrect form movements in the early stages of Taiji training. Taiji 2 expands basic Qigong training by introducing Qigong exercises to promote alignment and strength. Prerequisite: Marts 121 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 123

Taiji Practicum 3

This course will introduce students to the second part of the Yang Style Short Form. Students will learn to incorporate Taiji principles into the form. At this stage, greater emphasis will be placed on integrated body movement and mind power (concentration) to move the body as a single unit and will include Qigong training level 3 on the entire set of exercises one to twelve.

Taiji 3 reinforces the understanding of the

physical principles (head suspended; pelvis tucked in with toe in and knee out; chest concave; body rounded; shoulders lowered; waist loose; 'qua' loose; and deep breathing). It introduces the skills required to incorporate the principles into Taiji learning and practice. The concepts of flexibility and range of motion are presented for discussion and written assignments. Research methods will be introduced to permit independent gathering of Taiji information for study and personal growth. Taiji 3 also presents Qigong training, continuing to prepare students physically for proper Taiji execution. Qigong exercises are more strenuous and are aimed at greater flexibility with longer strength-training periods.

Prerequisite: Marts 122 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 124

Taiji Practicum 4

This course will introduce the third part of the Yang Style Short Form. It will incorporate breathing techniques into the form and will introduce the concept of form assessment for the incorporation and execution of Taiji principles. It will build on earlier training to begin to introduce the martial arts applications of Taiji in preparation for push hands classes and Qigong training level 4 on the entire set (exercises one to twelve). This course will begin to prepare students to assume leadership roles in higher levels of study. Taiji 4 reviews Taiji's principles and communicates how the Taiji form performance is assessed based on the principles. Both the self-defense aspects and the self-cultivation aspects (of body, mind & spirit) of the Yang Style Short Form will be presented. The class will stress ongoing individual Taiji training and students will be encouraged to develop individual Taiji training formats. This class also presents training and information required to lead Qigong classes on the entire set of twelve exercises. Prerequisite: Marts 123 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 212

The History of Martial Arts

This course traces the origins, growth and diversification of the Martial Arts in China, Korea and Japan. Emphasis is placed on the evidence of primary historical texts, including the Five Classics of pre-Qin China as well as early histories of Korea and Japan such as the Samguk Yusa and the Kojiki. The historical information gleaned from these sources is compared to the narratives and mythologies passed down through the written and oral traditions of the

various schools. We examine the unfolding of the Shaolin Gongfu schools influenced by Chan as well as the Wudang tradition influenced by Daoism, the emergence of Martial Arts in the Hwarang movement of the Korean Silla kingdom and their revival after the Japanese occupation, and the transformation of Gongfu traditions in Japan via Okinawa.

3 semester hours

MARTIAL ARTS STUDIES 213

Martial Arts and East Asian Thought

This course examines the impact of East Asian philosophy and religion on the Martial Arts. The course begins by outlining the major teachings of Buddhism, Daoism, and to a lesser extent, Confucianism, focusing on key classics. Following this we will explore the ways in which these teachings came to influence what was originally a martial tradition, resulting in a variety of complex systems that placed greater emphasis on mental as well as physical powers, self-cultivation and personal fulfillment.

3 semester hours

MARTIAL ARTS STUDIES 214

Daoism and Taiji

This course will examine both the historical and conceptual relationship between Daoism and Taiji. It will examine ways in which key concepts of Daoism are reflected in Taiji practice. In the study of the history of the relationship between Daoism and Taiji, we will note the differences between the received tradition of this relationship (as transmitted from master to student in the pedagogical process) versus historical documentation that, through primary sources, independently confirms the longstanding ties between the two. In the review of the linkage between Daoism and Taiji we will focus on the cosmology of the Book of Changes, which informs the conceptual framework of Taiji, as well as influential Daoist concepts such as Wu Wei (No Action), Yin and Yang and passive values as depicted in the Laozi, Zhuangzi, the Book of Changes, and the Taijiquan Treatise.

3 semester hours

MARTIAL ARTS STUDIES 234

Issues in Taiji

This course invites students to be participants in a discussion on the challenges faced by Taiji at this stage of its one thousand year history. Through selected readings and class discussions students will consider pertinent issues such as the ongoing division among the styles of Taiji and various perceptions of Taiji in modern society (e.g., the view of Taiji as primarily an activity for seniors and the perception that Taiji is disengaged from the world).

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Furthermore, it will invite students to consider ways in which the study of Taiji can contribute to academic discourse, to the improvement of social well-being, and to the future direction of society.

3 semester hours

MARTIAL ARTS STUDIES 235

Issues in Taekwondo

This course invites students to consider the challenges faced by Taekwondo at this stage in its history. Through selected readings and class discussions students will consider such pertinent issues as the perception of Taekwondo as an overly aggressive sport or as an unregulated industry, far removed from the ideals of its progenitors. Discussion will also consider ways in which Taekwondo has been transformed through its assimilation into academia and into non-Korean society. Participants will consider the impact that Taekwondo has had on youth in the United States and will examine whether and how it might make a positive contribution towards the problems that they face.

3 semester hours

MARTIAL ARTS STUDIES 241

Taekwondo Practicum 5

This level of Taekwondo training focuses on the cultivation of self-control.

Through this course, students are expected to achieve mastery of Taekwondo forms Go-Ryo & Pal-Gae No. 1, intermediate self defense techniques No. 1 & 2, kicking technique and board breaking with a focus on the Jump Axe kick and Jump Front kick, sparring techniques with a focus on Olympic style sparring offense combination skills, 1st degree black belt (level 7) Jump Axe kick breaking techniques and 1st degree black belt level 6 belt Jump Front kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 242

Taekwondo Practicum 6

This level of Taekwondo training focuses on the cultivation of self-confidence.

Through this course, students are expected to achieve mastery of Taekwondo forms Pal-Gae No. 2 & 3, intermediate self defense techniques No. 3 & 4, kicking techniques with a focus on the Jump Roundhouse kick and Jump Side kick, sparring techniques with a focus on Olympic style sparring defense combination skills, 1st degree black belt level 5 Jump Roundhouse kick breaking techniques and 1st degree black belt level 4 belt Jump Side kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 243

Taekwondo Practicum 7

This level of Taekwondo training focuses on the cultivation of patience and endurance. Through this course, students are expected to achieve mastery of Taekwondo forms Pal-Gae No. 4 & 5, intermediate self defense techniques No. 5 & 6, kicking technique with a focus on the Jump Back kick and Jump Hook kick, sparring techniques with a focus on Olympic style sparring offense and defense combination skills, 1st degree black belt level 3 Jump Back kick breaking techniques and 1st degree black belt level 2 belt Jump Hook kick breaking techniques.

1 semester hour

MARTIAL ARTS STUDIES 244

Taekwondo Practicum 8

This level of Taekwondo training focuses on the cultivation of self-esteem as well as self-control. Through this course, students are expected to achieve mastery of Taekwondo forms Pal-Gae No. 6 (guiding theme "water"), intermediate self defense technique No. 7, kicking techniques with a focus on the Jump Back Spinning Hook kick, sparring techniques with a focus on Olympic style sparring offense and defense combination skills and hand combination techniques, 1st degree black belt level 1 breaking Jump Back Spinning Hook kick techniques. After this level is completed, there will be the 2nd degree black belt test including a Martial Arts Essay test.

1 semester hour

MARTIAL ARTS STUDIES 251

Taiji Practicum 5

Practicum 5 introduces the ways in which beginning fighting techniques rely on movement from the Short Form. The intermediate practica (practica 5-8) are meant to provide a comprehensive grasp of the self-defense and martial arts aspects of Taiji through the acquisition of specific techniques and training. Systematic training is divided into 4 levels designed to educate students in basic self-defense techniques and internal strength training up to the competitive Martial Artist level. Practicum 5 emphasizes coordination and flexibility. In Practicum 5 students begin the practice of the push hands and are introduced to the fast form that consists of set routines of defense, repositioning, attacks, movements and strikes. Prerequisite: MARTS 124 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 252

Taiji Practicum 6

Practicum 6 dedicates special attention to the philosophy and practice of Qi Gong for the purpose of cultivating qi and improving self defense and short form skills. Self-defense on

this level includes the study of yielding and sticking to neutralize an attacker's strength and skills. The intermediate practica provide a comprehensive grasp of the self-defense and martial arts aspects of Taiji through the acquisition of specific techniques and training. Systematic training is divided into 4 levels designed to educate students in basic self-defense techniques and internal strength training up to the competitive Martial Artist level. Practicum 6 also emphasizes correction and improvement of the Short Form. Prerequisite: MARTS 251 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 253

Taiji Practicum 7

Practicum 7 focuses on the application of the short form for self defense and it also emphasizes continued Short Form improvement. The intermediate practica (5-8) provide a comprehensive grasp of the self-defense and martial arts aspects of Taiji through the acquisition of specific techniques and training. Systematic training on this level is meant to help to prepare with the basic self-defense techniques and internal strength training needed to begin to compete on the level of a Taiji Martial Artist. Prerequisite: MARTS 252 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 254

Taiji Practicum 8

Practicum 8 is meant to complete students' training in basic self-defense techniques and internal strength training to the level needed to be a Martial Artist who can participate in Taiji competitions. Practicum 8 focuses on Punching & kicking techniques, footwork and endurance training. It also emphasizes correction and preparation of the Short Form for demonstration. In preparing students for graduation, Practicum 8 provides a comprehensive review of the Taiji topics and techniques introduced in earlier practica. Prerequisite: MARTS 253 or Instructor's Approval based on Testing.

1 semester hour

MARTIAL ARTS STUDIES 261

Psychosocial Aspects of Martial Arts

The present course introduces students to the Western concepts of psychosocial development and self-actualization and to the East Asian concept of self-cultivation. It then identifies the character development objectives of three different martial arts—Taiji, Taekwondo, and Judo. It follows with an examination of research on the psychological impact of practicing martial arts, with an emphasis on self-concept, self-esteem, mood, phenomenology,

Martial Arts Studies

psychological health, psychotherapeutic outcomes, and self-actualization. In addition, the course examines the impact of the martial arts on aggression and hostility, sex discrimination and feminist awareness, and traditionalism versus modernization.

3 semester hours

MARTIAL ARTS STUDIES 278

Survey of the Martial Arts

This course introduces the theoretical foundations of a variety of Martial Arts, including Taiji, Gongfu, Taekwondo, Hapkido, Karate, Judo, and Jujitsu. Through video, demonstrations, and other modalities students will also be exposed to the major techniques used in each of the Martial Arts introduced.

3 semester hours

MARTIAL ARTS STUDIES 311

Communication and Martial Arts

This course is designed to introduce Martial Arts Studies students to the concepts and practices of intercultural communication. Topics will include Martial Arts and non-verbal communication, Martial Arts and verbal communication, the influence of culture on communication and intercultural conflict resolution. The course will be conducted in the context of the martial artist as a leader and as a communicator. The martial artist will be viewed as a communicator both in the role of instructor and in the role of manager.

3 semester hours

MARTIAL ARTS STUDIES 312

Image and Reality in the Martial Arts

This course explores popular concepts about the Martial Arts as depicted in modern media, particularly cinema and television, and contrasts them with historical and literary perspectives drawn from East Asian classics and Martial Arts texts.

3 semester hours

MARTIAL ARTS STUDIES 319

Taekwondo Practicum 9

This level of Taekwondo training focuses on enhancing team spirit and cooperation. Through this course, students are expected to achieve mastery of Taekwondo form Keumkang (guiding theme “wisdom and virtuosity”), advanced self defense techniques No. 1 & 2, kicking technique with a focus on the Double Front kick and Double Roundhouse kick, sparring techniques with a focus on Olympic style offense strategy skills, 2nd degree black belt level 7 Double Front kick breaking techniques and 2nd degree black belt level 6 belt Double Roundhouse kick breaking techniques Beginning with the achievement of the 2nd degree black belt, students are qualified to serve as

teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 320

Taekwondo Practicum 10

This level of Taekwondo training focuses on cultivating the sense of personal achievement. Through this course, students are expected to achieve mastery of Taekwondo form Taeback (guiding theme “human”), advanced self defense techniques No. 3 & 4, kicking technique with a focus on the Double Side kick and Double Back kick, sparring techniques with a focus on Olympic style defense strategy skills, 2nd degree black belt level 5 Double Side kick breaking techniques and 2nd degree black belt level 4 belt Double Back kick breaking techniques. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 321

Taekwondo Practicum 11

This level of Taekwondo training focuses on cultivating dedication to goals and ideals. Through this course, students are expected to achieve mastery of Taekwondo form Sipjin (guiding theme “nature’s 10 ideas”), advanced self defense techniques No. 5 & 6, kicking technique with a focus on the Double Hook kick and Double Back Hook kick, sparring techniques with a focus on Olympic style offense and defense strategy skills, 2nd degree black belt level 3 Double Hook kick breaking techniques and 2nd degree black belt level 2 belt Double Back Hook kick breaking techniques. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 322

Taekwondo Practicum 12

This level of Taekwondo training focuses on cultivating humility. Through this course, students are expected to achieve mastery of Taekwondo form Keumkang (guiding theme “wisdom and virtuosity”), advanced self defense techniques No. 7, kicking technique with a focus on the Tornado kick, sparring techniques with a focus on Olympic style psychological strategy skills, 2nd degree black belt level 1 breaking techniques of Tornado kick. After this level is completed, there will be the 3rd degree black belt test including a Martial Arts Essay test. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 323

Taekwondo Practicum 13

This level of Taekwondo training focuses on

enhancing the sense of magnanimity and service to others. Through this course, students are expected to achieve mastery of Taekwondo form Jitae (guiding theme “human and nature”), high advanced self defense techniques No. 1 & 2, kicking techniques with a focus on the Jump Point kick and Jump Scissor kick, sparring techniques with a focus on free style defense sparring, 3rd degree black belt level 7 Jump Point kick breaking techniques and 3rd degree black belt level 6 belt Jump Scissor kick breaking techniques. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 324

Taekwondo Practicum 14

This level of Taekwondo training focuses on cultivating social and leadership skills. Through this course, students are expected to achieve mastery of Taekwondo form Cheonkwon (guiding theme “universal”), high advanced self defense techniques No. 3 & 4, kicking technique with a focus on the Jump Split Front kick & Jump 360° Back Kick, sparring techniques with a focus on free style offense sparring, 3rd degree black belt level 5 Jump Split Front kick breaking techniques and 3rd degree black belt level 4 belt Jump 360° Back kick breaking techniques. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 325

Taekwondo Practicum 15

This level of Taekwondo training focuses on the cultivation of ethical thinking. Through this course, students are expected to achieve mastery of Taekwondo form Hansoo (guiding theme “water”), high advanced self-defense techniques No. 5 & 6, kicking technique with a focus on the Jump Triple Front kick & Jump Triple Roundhouse Kick, sparring techniques with a focus on free style offense/defense combination sparring, 3rd degree black belt level 3 Jump Triple Front kick breaking techniques and 3rd degree black belt level 2 belt Jump Triple Roundhouse kick breaking techniques. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 326

Taekwondo Practicum 16

This level of Taekwondo training focuses on consolidating the various aspects of self cultivation. Through this course, students are expected to achieve mastery of Taekwondo form Ilyo (guiding theme “mind/body unity”), high advanced self-defense techniques No. 7,

Martial Arts Studies

kicking technique with a focus on the Creative kick, sparring techniques with a focus on the meaning of sparring, 3rd degree black belt level 1 Creative kick breaking techniques. Upon the completion of this level, students will have the 4th degree black belt test including both a practical test and a written examination. Students in this class are qualified to serve as teaching assistants.

1 semester hour

MARTIAL ARTS STUDIES 330

Internship

Senior level students of the Martial Arts Studies degree program should complete an internship at an established Martial Arts school or in a business, or government agency. The internship will be complemented by a written report and will be done under the supervision of a professor.

3 semester hours

MARTIAL ARTS STUDIES 340

Senior Thesis or Presentation

The senior thesis or a creative presentation based on the Martial Arts emphasizes research and research methods. This course may only be taken after having completed 90 semester hours or more in the program. If a student elects to write a thesis, his/her work will be expected to demonstrate a theoretical understanding of the Martial Arts (e.g., technical, philosophical, and historical) and their relationship with the broader cultural, philosophical, and social context in which they evolved. Independent research and creative thinking will be emphasized as well as the ability to gather and conduct research and formulate a position in a critical and analytical manner.

Students choosing to do a presentation based on their Martial Arts skills would normally do so both to demonstrate their technical mastery of the Martial Arts as well as their creativity. The senior presentation might consist of projects such as the creation and performance of a new form or the adaptation of a Martial Arts form to music or to poetry. The presentation should show ways in which the Martial Arts contribute to a broader socio-cultural context.

3 semester hours

MARTIAL ARTS STUDIES 351

Taiji Practicum 9

Practicum 9 focuses on the first part of the Long Form with an emphasis on continuity of movement and on new moves not included in the Short Form. Practicum 9 and above are designed for students who enter the Martial Arts of Taiji track with advanced standing. Beginning with this practicum, systematic training is

designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training that is meant to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. In Practicum 9 Students are also introduced to the Qi Gong 5 exercise set. Prerequisite: MARTS 254 Taiji Practicum 8 or successful testing into the program for those who studied Taiji prior to coming to the University of Bridgeport.

1 semester hour

MARTIAL ARTS STUDIES 352

Taiji Practicum 10

Practicum 10 introduces the second part of the Long Form. Systematic training in this practicum is designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Practicum 10 again stresses continuity of movement, coordination and presents new Taiji movements that are not found in the Short Form. Students are also introduced to the Qi Gong 10 exercise set. Prerequisite: MARTS 351 Taiji Practicum 9.

1 semester hour

MARTIAL ARTS STUDIES 353

Taiji Practicum 11

In practicum 11 students are introduced to the third part of the Long Form. Systematic training in advanced practica is designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Practicum 11 stresses continuity of movement and coordination. In this Practicum, students are introduced to additional new Long Form movements, not included in the Short Form. They continue the study and application of the Qi Gong 10 exercise set. Prerequisite: MARTS 352 Taiji Practicum 10.

1 semester hour

MARTIAL ARTS STUDIES 354

Taiji Practicum 12

Practicum 11 includes the Long Form correction and places emphasis on coordination and continuity of (108) movements. It also continues with the Qi Gong 10 exercise set. The advanced practica provide a comprehensive grasp of Taiji through the acquisition of sets

of advanced techniques. Systematic training in practica 9-16 is designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Prerequisite: MARTS 353 Taiji Practicum 11.

1 semester hour

MARTIAL ARTS STUDIES 355

Taiji Practicum 13

Practicum 13, along with continuing the study of Long Form technique, provides an introduction to the role of meditation in martial arts and introduces meditation techniques. Each advanced practicum represents an additional step toward the student developing a comprehensive grasp of Taiji through the acquisition of sets of advanced techniques. Systematic training in practica 9-16 is designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Prerequisite: MARTS 354 Taiji Practicum 12.

1 semester hour

MARTIAL ARTS STUDIES 356

Taiji Practicum 14

Practicum 14 introduces advanced Taiji fighting techniques. Systematic training in practica 9-16 is designed to build on basic and intermediate Taiji knowledge in self defense and in physical strength training to bring students to the level of accomplished Martial Artists. Study includes emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Practicum includes light contact sparring and introduces students to the role that the forms play in self-defense. Prerequisite: MARTS 355 Taiji Practicum 13.

1 semester hour

MARTIAL ARTS STUDIES 357

Taiji Practicum 15

Practicum 15 continues the systematic training designed to build on basic and intermediate Taiji knowledge in self-defense and physical strength training to help to bring students to the level of accomplished Martial Artists. In Practicum 15 students are introduced to the philosophy of qi and are provided with an understanding of how qi relates to the meridian chart, to alignment, and to the body's internal systems. Prerequisite: MARTS 356 Taiji Practicum 14.

1 semester hour

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MARTIAL ARTS STUDIES 358

Taiji Practicum 16

Practicum 16 represents the highest level of training in Taiji at the University. It is meant to contribute to the students' comprehensive grasp of Taiji because of their acquisition of proficiency in sets of advanced techniques. This course is meant to build on basic and intermediate Taiji knowledge in self defense and in physical strength training in previous practica to bring students to the level of accomplished Martial Artists. Study in this practicum continues the emphasis on self-cultivation (body and mind), internal strength training and cultivation of qi. Practicum 16 prepares each student to perform a demonstration of the combined Long and Short forms. This practicum serves as a comprehensive review of Taiji topics and techniques prior to graduation. Prerequisite: MARTS 357 Taiji Practicum 15. *1 semester hour*

Mass Communication

MASS COMMUNICATION 110

Public Communication

The process and variables of everyday public address are examined through situations, content, presentation strategies and effects, and by classroom practice in the basic principles of oral communication.

3 semester hours

MASS COMMUNICATION 111

Introduction to Mass Communication

The role and function of the mass media. Survey of newspapers, magazines, books, radio, television, film, advertising and public relations. Criticism, challenges and professional opportunities.

3 semester hours

MASS COMMUNICATION 200

Co-Operative Education

Professional, supervised work in an organization related to career goals. Prerequisite: Permission of department required.

1-3 semester hours

MASS COMMUNICATION 201

Persuasive Communication

Study of communication as a form of influence; the process and functions involved, its potential and limitations; social and personality factors related to persuasibility, attitude formation and change. Students will analyze and present persuasive messages.

3 semester hours

MASS COMMUNICATION 205

Interpersonal Communication

An introductory survey of interpersonal communication theories and their application to face-to-face, group, organizational and mediated contexts. The classroom becomes a laboratory for gaining knowledge of the processes of communication, perception, language and meaning.

3 semester hours

MASS COMMUNICATION 211

Communication Theory

An examination of communication theories which includes theories on verbal communication, nonverbal communication, interpersonal communication, self-concept, relationship development, influence, conflict, group communication, decision-making, gender communication, organizational communication, intercultural communication, and media communication.

3 semester hours

MASS COMMUNICATION 218

Media Aesthetics

The artistic philosophy and practical applications of creating effective media. This is a hands-on laboratory course. The study focuses on aesthetics as a physical expression of creative and marketing goals and how this is put into practice when communicating messages through images and words. Subjects include compositional strategy, visual literacy and message design. This knowledge shapes design critical to working in new media and every other type of media produced—documents, ads, brochures, video, proposals, and more. This course will offer an introduction to Photoshop. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 220

Introduction to Advertising

An examination of the theories and practices of advertising. Historical, legal, and social psychological aspects of advertising. Advertising explored from both client side and agency side perspectives. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 235

Writing for Media

This course is an introduction to media writing. Students will practice writing and editing news, public relations materials, broadcast scripts, and advertising copy. It includes a grammar and style review specifically for print

and interactive media.

3 semester hours.

MASS COMMUNICATION 240

News Reporting & Writing

Introduction to reporting techniques – sources of news, interviewing, public document and database searches – and their application in writing various forms of news stories. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 242

Introduction to New Media

An overture to computer-based media, technology and the digital information age. This primer includes history, current digital media, a look at technology trends and the future of digital media. Topics include computers—their origins and functions; hardware and software; file management; networks; data security; E-Commerce; the Internet—its history and development; the basis of interactivity between humans and machines, and machine to machine; and other timely issues. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 247

Fashion Journalism

This course covers the basic elements of fashion journalism for magazines (women's and men's) and newspapers. Students will analyze examples of fashion journalism and will learn fashion writing, photo shoot coordination (planning, styling, budgeting, etc.), and copy preparation. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 251

Sports Journalism

It covers both sports writing and sports broadcasting. Learn skills of reporting of competition and play-by-play coverage, communicating about sports through word and image, commentary, and interview skills. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 252

Introduction to Web Publishing

A comprehensive overview in planning, organizing and creating a web site. The course features emphasis on creative and communications imperatives in web page creation including design, layout, navigation and usability. This course offers the use of Dreamweaver. Topics include web site types, structures, the importance of the home page, understanding screen real estate and how to use it effectively,

Mass Communication

white space, typography, titles and headlines, search engines and how to get listed and many other issues and topics related to effective web page creation. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 255

Sports Business and Marketing

This course provides an overview of major sports business issues. It covers professional, Olympic, collegiate sports, studies sports as a business, and discusses sports marketing, promotion, and sports sponsorships. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 262

Writing for Interactive Media

Understanding the Internet as an information vehicle and how the role of the writer is more than just creating strong text. This course offers discussion and hands-on work in the art and science of effective organization, preparation, writing and editing for the interactive media audience. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 270

Public Relations

Current practices and problems, with emphasis on the role of the public relations practitioner as a specialist in communications, analyst of public opinion, and counselor to the major sponsors of public communication. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 272

Creating Digital Media

From pre-production through post-production, video production technique for digital media is explored. Lectures and projects will lead students to a greater understanding of message direction, aesthetics and finessing a project through conclusion. This course is designed as an introductory primer to the creation of digital video. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 284

Business and Professional Communications

Understanding and development of communications skills necessary for individuals to function effectively in business and corporate roles. Special consideration given to the verbal and nonverbal elements of the work situation: barriers to communications, listening skills, interviewing, instructional skills, forms of negotia-

tion, technical reports, and principles of group behavior. Students' skills are assessed relative to the levels of communication required in various career areas and cultural milieus.

3 semester hours

MASS COMMUNICATION 290

Intercultural Communication

Study of basic concepts, theories, and practices of intercultural communication, including elements of cultural systems, social identification and group relations, influence of culture, language and culture, nonverbal communication, intercultural negotiation, and intercultural conflict resolution. Intercultural communication as applied to interpersonal communication, group communication, organizational communication, public communication, and mass communication. Communication principles will be applied to intercultural interaction so that misunderstanding, prejudice, stereotypes, and discrimination can be reduced or eliminated.

3 semester hours

MASS COMMUNICATION 303

Communication and Group Decision-Making

Study of group communication patterns, group functions, group dynamics, and theories of group communication. Special attention given to listening, formation of messages, critical thinking, decision-making process, leadership, group conflicts, problem solving, and techniques for effective group communication.

3 semester hours

MASS COMMUNICATION 306

Argumentation and Debate

Knowledge and practice in the craft of research and reasoning in argumentative communication. Practice in analysis, evidence, briefing, refutation, and delivery of arguments.

3 semester hours

MASS COMMUNICATION 323

Advertising Copywriting

Critical study and application of communication principles and concepts as applied to planning and preparing advertising messages. Intuitive versus research based aspects of advertising creativity. Writing and visualization for print, broadcast, and new media. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 330

Advertising Media Planning

An investigation of various mass media audiences' characteristics, preferences and composition and how that information is obtained and used in planning media strategy in advertising. Topics include characteristics and evaluation of major media rates and sources of information;

problems of coverage, duplication, costs and scheduling. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 333

TV Commercials

Study how advertising strategies are translated into creative briefs and message strategies that guide the creative process. Special consideration is given to the roles of TV commercials, the format elements of TV commercials, the advantages of TV commercials, the creative process of designing TV commercials, and the creation of TV commercials. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 339

Advertising and Public Relations Campaigns

In-depth analysis and practice in strategies and tactics employed in creating advertising and public relations programs for clients. Principal focus on working on a competitive group project preparing an agency-style presentation for a real or hypothetical client. Instructor's permission may be required for this course. Prerequisites: Mass Communication 220, 323, 330.

3 semester hours

MASS COMMUNICATION 340

The Community Newspaper

A total working environment centered about the publication of a community newspaper. Reporting, coverage of beats, interviews, handling complex stories and in-depth news reports. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 341

Magazine and Feature Writing

An in-depth experience of writing for periodicals. Focus is on the additional research and preparation needed for this medium. Principles of advocacy and rhetoric and their relevance in the news media are explored. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 342

Digital Project Management

Students work in teams to create and produce an original web site or extensively improve an existing one, working in conjunction with a real-world client. The work is performed in a real-life, deadline driven environment and will produce a portfolio piece for those entering the field of digital media. Students learn the roles and duties of those who work on interactive teams. Instructor's permission may be required for this course. Prerequisite:

Mass Communication

MSCOM 252 Introduction to Web Publishing
3 semester hours

MASS COMMUNICATION 345
Newspaper Editing and Production

Principles of editing in print media. The editorial process from selection of editorial materials to publication. Analysis of contemporary editing styles. Preparation of materials for production, including copyediting, writing headlines and designing newspaper pages. Legal and ethical issues confronting newspaper editors. The editor-writer relationship. Laboratory training in the making of editorial judgments. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 346
Media Management

Examination of the internal functioning and management practices related to the various media institutions. Discusses management by objectives, work plans, analysis methods, budget-setting, research planning, message strategy and plans, media/channel strategy and plans, and evaluation methods related to communication activities. Emphasis is on developing integrated approaches to solving communication problems under changing environmental conditions. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 352
Advanced Web Publishing

This course sets out to define and apply advanced concepts of HTML and introduce JavaScript and CGI scripting. Students will develop data driven sites incorporating scripting and advanced HTML concepts, combining technical skills with professional design approaches. Instructor's permission may be required for this course. Prerequisite: MCOM 252 Introduction to Web Publishing

3 semester hours

MASS COMMUNICATION 354
Media, Sports, and Society

This course studies the relationship between and among media, sports, and society. It examines media coverage of sports, the mediated sports culture, sports and politics, the spectators' enjoyment of sports violence, the dark side of competition, and gender and ethnicity issues in sports. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 360
Broadcast News Writing

A course on writing news for broadcast media. Emphasis on broadcast style, specificity of language, time constraints, writing to tape and other actualities, and other considerations unique to radio and television news. Instructor's permission may be required for this course. Prerequisite: MCOM 240.

3 semester hours

MASS COMMUNICATION 364
International Journalism

This course examines the practices of news-gathering, news making and news reporting in different countries. It also studies international news agencies, issues of freedom of the press, global information flow, new world information order, media development and barriers to media development, cultural imperialism, the relationship between Western media and world media, foreign news reporting, and media and international relations. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 357
The Portfolio Project

The semester is spent creating professional portfolios students can use to seek employment. This is a highly specialized, hands-on class where actual portfolios are created to help students obtain work in their specific area of interest - advertising, public relations, sports media, new media, broadcast, non broadcast, production, and many more.

Prerequisites: Juniors and Seniors who already have portfolio pieces created from prior classes. Sophomores upon instructor's approval.

3 semester hours.

MASS COMMUNICATION 370
Publicity Methods

Elements of publicity writing for mass media. Students may work for not-for-profit organizations in planning and implementing publicity campaigns or other public relations projects. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 372
Advanced Digital Video Creation

The semester is devoted to the creation and execution of one project which could potentially be used as a "reel" sample to find work in the digital video, advertising or public relations industries. Each student will work on a project most suitable to their ultimate career objective. Choices of projects might include:

documentary, news stories, video news releases, product demonstration, training videos, and many others. Instructor's permission may be required for this course. Prerequisite: MCOM 272 Creating Digital Video.

3 semester hours

MASS COMMUNICATION 384
Organizational Communication

Communication in formal organizations, such as schools, industry, hospitals, and government, with emphasis on how organizational variables affect communication behavior of humans at work. Simulation, role-playing, case method, and videotape are used as techniques for evaluating personal and organizational effectiveness.

3 semester hours

MASS COMMUNICATION 380
Media Law and Ethics

Legal interpretations and standards of judgment that affect the reporter and the mass media. Theory of the First Amendment. Problems of libel, privacy, censorship, contempt, news source protection. Relationship of media regulations to community standards and social mores. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 385
Senior Seminar in Mass Communication

A senior seminar, with emphasis on the analysis of mass media institutions, content, function, and policy. Problem-centered approach, requiring experimentation in media forms and journalistic inquiry. Prerequisite: Senior standing within the Department of Mass Communication. Instructor's permission may be required for this course.

3 semester hours

MASS COMMUNICATION 388
Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of department required.

3 semester hours

MASS COMMUNICATION 399
Independent Study

Advanced project not covered by a regular course offering. Term paper or other academic fulfillment project is required. Faculty sponsor must be secured in advance. Prerequisite: Permission of the department and school director is required.

By arrangement; 1-6 semester hours

Mathematics

MATHEMATICS 98

Elementary Algebra

An introductory course in basic algebra with applications. Topics include fundamental operations, fractions, exponents, radicals, factoring, linear equations and systems, linear inequalities and quadratic equations.

0 semester hours

MATHEMATICS 100

Elementary Algebra

An introductory course in basic algebra with applications. Topics include fundamental operations, fractions, real numbers, algebraic equations, linear equations and inequalities, exponents and polynomials, factoring and rational equations. This is a course for those students who are not ready for Math C105, Intermediate Algebra. This course is a three university semester hour course which means it does not meet distribution requirements or count toward the minimum semester hour requirement for graduation. This course is not open to students who have passed the Math Placement Exam (Basic Algebra Exam) or passed MATH C105 or above.

3 semester hours

MATHEMATICS 103

Intro to College Algebra/Statistics

This is an introductory course of college algebra and statistical procedures including algebraic expressions and equations, polynomials, and relations between two variables. This course is intended for students primarily in health and social sciences, liberal arts, and STEM students in need of a review prior to college algebra. This course emphasizes the use of tables, graphs and elementary descriptive statistical applications. The course also introduces the student to the sampling and surveying done in many everyday life experiences. This course satisfies the mathematics general education requirement towards graduation.

3 semester hours

MATHEMATICS C105

Intermediate Algebra

A survey course in selected topics from college algebra and elementary functions. This course satisfies the Core Curriculum Basic Skills mathematics requirement. Topics include set notion, number systems, rules of algebra, operations with polynomials, factoring, linear equations and inequalities, solving polynomial equations, linear systems, and functions. Prerequisite: "C" or better in MATH 100 or Mathematics Placement Exam.

3 semester hours

MATHEMATICS C105A

Intermediate Algebra

A survey course, covered at a slower pace than Math C105, in selected topics from college algebra and the elementary functions. Prerequisite: "C" or better in MATH 100 or Mathematics Placement Exam.

3 semester hours

MATHEMATICS 106

College Algebra

An introductory college level mathematics course focusing on polynomial, rational, logarithmic and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions of higher degree polynomials. This course is intended primarily for students in programs that require pre-calculus and beyond. Prerequisite: Placement Test or Math 103 with a grade of "C" or better.

3 semester hours

MATHEMATICS 107

The Nature of Mathematics

A survey course of mathematics drawn from areas of algebra, logic, sets, geometry, combinatorics, probability and statistics. Includes applications of mathematics and the use of logical and quantitative reasoning. Prerequisite: Mathematics Placement Exam

3 semester hours

MATHEMATICS 108

Ideas of Mathematics

A survey of mathematical ideas and their applications. The course will focus on five core areas: logic, algebraic systems, functions and graphs, analysis, and probability and statistics. Applications will be drawn from the social sciences, natural sciences, arts and technology. The course will introduce the use of graphing calculators and computer applications software as tools to enhance creative thinking. Intended for non-specialists, the course will explore the beauty and power of mathematical reasoning through problem-solving and readings. Prerequisite: Competency in high school level Intermediate Algebra as demonstrated by the University placement exam or completion of MATH C105 with a "C" or better.

4 periods, (3 lecture/1 lab); 3 semester hours

MATHEMATICS 109

Precalculus Mathematics

A course for those intending to study calculus at the university level. Topics from college algebra and trigonometry. Definition of function. Algebra of functions. Elementary functions and their graphs. Inverse functions. Polynomials, rational and algebraic functions.

Trigonometric identities. Systems of equations. Cramer's rule. Augmented matrices and Gaussian elimination. Prerequisite: "C" or better in MATH C105 or Mathematics Placement Exam.

4 semester hours

MATHEMATICS 110

Calculus and Analytic Geometry I

Review of functions. Limits and continuity of functions. Composite functions. Definition of the derivative. Derivatives of algebraic and trigonometric function. Rules for differentiation; sum rule, difference rule, product rule, quotient rule, chain rule. Rolle's Theorem and the Mean Value Theorem. Applications of the derivative; equations of motion, linear approximation of functions, error analysis, topics from geometry, maxima and minima of functions, curve sketching, related rates. Antidifferentiation and the indefinite integral. Fundamental Theorem of Calculus. Definite integrals. Integration by substitution. Applications of integration. Areas and volumes. Introduction to Derive™ symbolic manipulation software. Prerequisite: "C+" or better in MATH 109 or Mathematics Placement Exam.

4 semester hours

MATHEMATICS 112

Calculus and Analytic Geometry II

Derivatives and integrals involving exponential and logarithmic functions. Inverse trigonometric functions. Hyperbolic functions. L'Hopital's rule. Techniques of integration including substitution method, integration by parts, partial fraction expansions, approximate integration and use of integral tables and of symbolic manipulation programs. Parametric equations. Polar coordinates. Improper integrals. Infinite sequences and series. Taylor and MacLaurin series. Applications to geometry, engineering and physics. Prerequisite: "C" or better in MATH 110.

4 semester hours

MATHEMATICS 200

Mathematics Cooperative Work Study

Students entering the Mathematics Cooperative Education Program take this course each semester that they are employed full-time in paid work assignments. A written report will be required describing achievements resulting from the work experience. Prerequisite: Completion of at least 30 semester hours and permission of the Department.

1 semester hour with a maximum of 6 semester hours to be applied to the degree

MATHEMATICS 203

Elementary Statistics

A non-calculus introduction to applied statistics for business, life and social science stu-

Mathematics • Mechanical Engineering

dents. Probability. Classification of data, averages, dispersion, frequency distributions, confidence intervals, and test of significance. Elementary linear regression and correlation. The course will make use of statistical software. Prerequisite: "C" or better in MATH C105. *3 semester hours*

MATHEMATICS 214

Linear Algebra

System of linear equations and matrix algebra, determinants, vector spaces, eigenvectors, linear transforms and inner product spaces. Prerequisite: "C" or better in MATH 110. *3 semester hours*

MATHEMATICS 215

Calculus and Analytic Geometry III

Vector algebra and calculus and the geometry of space. Functions of several variables and partial differentiation. Directional derivatives and the gradient vector. Maximum and minimum values and Lagrange multipliers. Multiple integrals. Rectangular, cylindrical and spherical coordinates. Vector fields, del operators and vector integral theorems. Prerequisite: "C" or better in MATH 112. *4 semester hours*

MATHEMATICS 227

Discrete Structures

This course is an introduction to some of the discrete mathematical structures relevant to computer science, including set theory, propositional calculus, predicate calculus, algebraic operations and relations, counting techniques and graph theory. Required of Math majors. Identical to Computer Science 227. Prerequisite: "C" or better in MATH 109. *3 semester hours*

MATHEMATICS 314

Numerical Methods

A first course dealing with basic numerical methods for finding roots of non-linear equations, interpolation theory, approximation of functions, numerical integration and differentiation, numerical solutions of systems of linear equations, the matrix eigenvalue problem and the numerical solutions of ordinary differential equations. Prerequisite: CPSC 101 and "C" or better in MATH 112. *3 semester hours*

MATHEMATICS 319

Introduction to the Theory of Numbers

Fundamental properties of integers, divisibility, primes. Algorithms and factorization. Congruence and diophantine equations. Number theoretic functions. Order and primitive roots. Elementary results on the distribution of

primes. Applications in cryptography. Prerequisite: "C" or better in MATH 215 or permission of the instructor. *3 semester hours*

MATHEMATICS 323

Probability and Statistics I

Classical theory of probability. Sample spaces, probability and conditional probability, random variables and their distributions. Standard discrete distributions, normal distributions, moment generating functions and central limit theorems. Prerequisite: "C" or better in MATH 112. *3 semester hours*

MATHEMATICS 341 (MATH 341/CPSC 341)

Operations Research

Linear programming formulation of optimization problems, hyper planes, convex sets, linear independence, bases of vector spaces, matrix inversion, theory and computation techniques of simplex, revised simplex methods, degeneracy, duality. Transportation and assignment problems, integer programming and network flows. Prerequisite: "C" or better in MATH 214, CPSC 227. *3 semester hours*

MATHEMATICS 393

Senior Seminar in Mathematics

This course is, in part, designed to acquaint the participants with mathematics reference works, resource materials, periodicals, and expository writings. Each student is required to write several papers and to make periodic oral presentations. Visiting speakers conduct some of the seminars. Required of mathematics majors and normally taken in the junior or senior year. Prerequisite: "C" or better in MATH 214 or permission of instructor. *3 semester hours*

MATHEMATICS 399

Independent Study

Prerequisite: Permission of Division Director. The following mathematics courses, described in the Graduate Section are also open to selected upperclassmen: 401, 402—Advanced Analysis for Scientists and Engineers I and II. *1-3 semester hours*

MATHEMATICS 401

Advanced Analysis for Scientists and Engineers I

Partial differential equations, Bessel functions, Legendre polynomials. Fourier series, boundary and initial value problems, topics in vector analysis, tensor analysis. Prerequisite: Math 301 (Differential Equations), or permission of the instructor. *3 semester hours*

MATHEMATICS 402

Advanced Analysis for Scientists and Engineers II

Functions of a complex variable conformal mapping, calculus of residues, operators. Prerequisites: Math 301 (Differential Equations), or permission of the instructor. *3 semester hours*

Mechanical Engineering

MECHANICAL ENGINEERING 112

Engineering Graphics

This course provides an introduction to engineering graphics and visualization including engineering drawing and 3-D solid modeling with a computer aided design (CAD) package. Topics include the design process, multiview projection and sectioning, dimensioning, tolerancing, and working drawings. *3 semester hours*

MECHANICAL ENGINEERING 203

Thermodynamics

This course introduces principles of thermodynamics, properties of ideal gases and water vapors, first and second laws of thermodynamics, and entropy. Applications of thermodynamic analysis in engineering applications. Prerequisites: PHYS 111 Introduction to Physics I *3 semester hours*

MECHANICAL ENGINEERING 223

Materials Science for Engineers

A study of the properties of materials of importance to engineers. Structure-property-processing relationships. Mechanical, physical and electrical properties of metals, ceramics and polymers. Prerequisite: CHEM 103. *3 semester hours*

MECHANICAL ENGINEERING 250

Engineering Mechanics: statics

This course utilizes vector algebra and free body diagrams to solve problems in engineering statics. The topics include vector algebra of forces and moments, free body diagrams, equilibria of particles and rigid bodies, internal forces in trusses and frames, centroids and centers of gravity, internal forces in trusses and frames, friction and applications to machines, and moments of inertia. Prerequisites: MATH 112 Calculus II and Phys 111 Principles to Physics I *3 semester hours*

MECHANICAL ENGINEERING 252

Engineering Mechanics: Dynamics

This course is designed to teach kinematics and kinetics of particles and rigid bodies in one, two, and three dimensions. Newton's laws of motion, work-energy, and impulse-momentum

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are studied and applied to practical engineering problems. Prerequisites: MEEG 250 Engineering Mechanics: Statics (C or better)

3 semester hours

MECHANICAL ENGINEERING 307

Fluid Mechanics

This course introduces the fundamentals of fluid mechanics and explores the topics of fluid statics, buoyancy, key properties which affect fluid motion, fluid flow regimes, governing equations, empirical and analytic methods of internal and external flows.

Prerequisites: MEEG 252 Engineering Mechanics: Dynamics, MATH 215 Calculus III (C or better), and MATH 301 Differential Equations (C or better)

3 semester hours

MECHANICAL ENGINEERING 309

Fluid Mechanics II

Continuation of first course in fluid mechanics. Introduces the student to more advanced topics including laminar and turbulent boundary layer theory, lift and drag, subsonic and supersonic compressible flow, introduction to turbo-machinery and introduction to computational fluid mechanics. Prerequisites: Permission of the instructor.

3 periods; 3 semester hours; 1 design semester hour

MECHANICAL ENGINEERING 310

Mechanics of Materials

This course introduces the concepts of stress, deformation and strain in solid materials. Topics include stress and strain analysis applied to beams, vessels, and pipes; combined loading; stress and strain transformations; bending stresses and shear stresses in beams; column buckling.

Prerequisites: MEEG 250 engineering mechanics: statics

Concurrent: Math 301 differential equations

3 semester hours

MECHANICAL ENGINEERING 315

Mechanical Vibrations

Free and forced vibrations. Damped and un-damped, single and multiple-degree-of-freedom systems. Vibration measuring instruments. Normal mode analysis including matrix methods. Lagrange's equations. Approximate and computer methods of analysis. Pre-requisite: Permission of the instructor.

3 lecture hours; 3 semester hours; 1 design semester hour

MECHANICAL ENGINEERING 350D

Machine Design

This course covers part modeling, selection,

and engineering analysis of machine components to design structural frame, bearings, supporting beam, shafts, springs, gears, fasteners, and other elements in a machinery and mechanical systems.

Prerequisites: MEEG 310 Mechanics of Materials

3 semester hours

MECHANICAL ENGINEERING 361

Senior Design I Project

The first part of the senior design project, which covers topics of product design and development process. Design project proposals, computer-aided design, analysis, and modeling of an open-ended engineering design problem. Development and presentation of conceptual designs.

Prerequisites: MEEG 307 Fluid Mechanics, MEEG 372 Manufacturing Engineering, Concurrent enrollment in MEEG363 Heat and Mass Transfer and MEEG 350D Machine Design.

3 semester hours

MECHANICAL ENGINEERING 362

Senior Design II Project

The second part of the senior design project, which covers topics of product design and development process. Development of a working design started in the previous semester using computer-aided design, analysis, modeling, and optimization methods and manufacture a prototype of the final design.

Prerequisites: 361 Senior Design Project I

3 semester hours

MECHANICAL ENGINEERING 363

Heat and Mass Transfer

This course introduces heat transfer principles and their applications in a wide range of engineering applications. The three fundamental modes of heat transfer are studied in detail: conduction (steady-state and transient) convection (forced and natural) and radiation. Basic concepts such as Fourier's Law, Newton's Law of Cooling and the Stefan-Boltzmann Law are presented as well as analytic, empirical and numerical methods of solution. Key properties which affect the rate of heat transfer such as the heat transfer coefficient, thermal conductivity and emissivity are examined.

Prerequisites: MATH 301 Differential Equations (C or better), MEEG 203 Thermodynamics, and MEEG 307 Fluid Mechanics

3 semester hours

MECHANICAL ENGINEERING 369D

Thermal Fluid Systems Design

This course integrates thermodynamics, fluid mechanics and heat transfer through application to the design of various thermal systems comprised of several components requiring

individual analyses. Emphasis on modeling, analysis, and design of engineering systems and components with state-of-the-art computer software.

Prerequisites: MEEG 307 Fluid Mechanics, and MEEG 363 Heat and Mass Transfer

3 semester hours

MECHANICAL ENGINEERING 372

Manufacturing Engineering

This course covers major manufacturing processes for engineering materials, including forming and shaping processes and equipment, machining processes and machine tools, etc. It also introduces modeling and analysis for manufacturing process design and optimization.

Prerequisites: MEEG 310: Mechanics of Materials

3 semester hours

MECHANICAL ENGINEERING 380

Mechanical Measurement and Data Analysis

The course introduces the fundamentals of basic instrumentation, experimental measurement and data analysis used in mechanical engineering. In addition to instrument use and the planning and execution of experiments, the topics of calibration, precision, sampling, accuracy and error are included. Special focus is given to the preparation of technical reports.

Prerequisites: MEEG 310 Mechanics of Materials, MEEG 307 Fluid Mechanics, MEEG 252 Engineering Mechanics: Dynamics

Concurrent: MEEG 363 Heat Transfer, and MATH 323 Probability and Statistics

3 semester hours

MECHANICAL ENGINEERING 381

Mechanical Engineering Systems Lab

This course is the application of measurement techniques developed in MEEG 380 to various mechanical systems and processes. Emphasis is on data acquisition, reduction, analysis, and report preparation.

Prerequisites: MEEG 380 Mechanical Measurement and Data Analysis, MEEG 363 Heat Transfer, and MATH 323 Probability and Statistics with Applications

3 semester hours

MECHANICAL ENGINEERING 407

Modern Materials and Advanced Manufacturing Technologies

This course focuses on the study of modern industrial materials and the process of developing creative solutions through conceptual analysis and synthesis on different advanced and automated manufacturing processes. The course will help students to learn the emerging topics in the material and manufacturing industries. The topics cover the study on to-

Mechanical Engineering

day's popular industrial materials, material selections and industrial applications, and their related manufacturing techniques in US industry. Topics also include the introduction of quality control (QC) process that is important to the production with the high quality. The course has two class projects which will guide and help students to learn the ways of preparing for professional research and keep track of the latest technologies in modern materials, advanced and automated manufacturing processes. Pre-requisites: Engineering 111, Mechanical Engineering 223.

3 semester hours

MECHANICAL ENGINEERING 410

Advanced Fluid Dynamics

Advanced topics in applied fluid mechanics. Review of continuity, momentum, and energy equations for viscous, incompressible fluid; vorticity and circulation concepts and theorems. Selected topics from the following areas: Complex potential, conformal mapping and applications. Airfoil and wing theory. Boundary layer theory; similarity solutions for laminar flows, integral techniques for turbulent flows. Compression and expansion waves in compressible flows; oblique shock waves, Prandtl-Meyer flow. Propagating waves and applications; shock tube, transients in duct systems. Pre-requisite: Undergraduate Fluid Mechanics, Mechanical Engineering 309.

3 semester hours

MECHANICAL ENGINEERING 415

Propulsion

The course instructs the student in aerospace propulsion systems including both air breathing and non-air breathing devices. The course reviews the basic physics, chemistry, thermodynamics and gas laws applicable to propulsion devices. Details of individual engine components such as diffusers, compressors, turbines, propellers, nozzles, and afterburners as well as all major engine types (turbofans, turboprops, turbojets, ramjet) are studied. Course projects include utilization of engine propulsion software and sizing an engine for an aircraft. Prerequisite: Mechanical Engineering 203, Mechanical Engineering 307.

3 semester hours

MECHANICAL ENGINEERING 421

Computer Aided Engineering Design

This course applies 3-D CAD system e.g., Pro E to industrial product and system design. These CAD systems are very practical and powerful 3-D CAD tools and they have been widely used in the industry. The first half of the class focuses on learning fundamentals of

the 3-D system, its popular applications and its related techniques. The special topics of design concept are also included. The second half covers several practical projects. Students will combine the design techniques with the real project and use 3-D tools to design the product or part of industrial system. All projects will be presented by students in class. Pre-requisites: Engineering 111, Physics 111, Mechanical Engineering 350D.

3 semester hours

MECHANICAL ENGINEERING 422

Advanced Computer Aided Project Design

This advanced course focuses on some hot and very practical topics in today's industrial design applications. Also, some useful knowledge, such as PLC (Program Logic Control), calculation and selection of industrial motors, fundamentals of automation, sensor technology, and selection of material on different industrial applications are included. Several more complicated projects in this class will help students learn how to manage the different engineering projects and understand all related design issues which will improve the future production and manufacturing process. Pro-E will be used as a 3-D CAD tool to design these advanced engineering projects. All projects should be presented by students in the class.

Pre-requisites: Mechanical Engineering 421.

3 semester hours

MECHANICAL ENGINEERING 423

Computer Aided Manufacturing (CAM) and NC Machining

This course applies manufacturing and various numerical controlled software for designing computer-aided manufacturing and NC machining systems, processes and algorithms. This course is heavy in implementation of various manufacturing technologies and programming of NC machines. Pre-requisites: Engineering 111, Physics 111, Mechanical Engineering 421.

3 semester hours

MECHANICAL ENGINEERING 424

Advanced CAM & Automation

This course teaches students to simulate advanced manufacturing processes by learning high level functions in Pro-Engineer/Pro-Manufacturing software package. This course will cover the topics of some advanced and special manufacturing technologies, including laser cutting & welding, water jet cutting & cleaning, and plasma cutting & welding. Automation related topics will also be introduced, including the analysis and application of PLC control systems in manufacturing facilities and modern production systems. Several advanced and real

projects will help students to be proficient in using this CAD/CAM package and learn more of US industrial & engineering knowledge through the instructor's lectures & guidance and also the students' self-motivated work. Pre-requisites: Mechanical Engineering 350D, Pre-requisites: Mechanical Engineering 372.

3 semester hours

MECHANICAL ENGINEERING 425

Machinery and Mechanical System Design

This course focuses on the process of developing creative solutions through conceptual analysis and synthesis on machinery and biomedical instrument design and development processes. The topics cover the concepts of automated and high speed machinery design, basic biomedical instrument design, FDA regulation in biomedical instrument design, basic instrument mechanism design in assisting manufacturing processes, and other biomedical design techniques in today's US biomedical industries. Pro/Engineer will be used as the computer-aided design CAD tool to design the high function machinery and biomedical instrument in this class. Pre-requisites: Mechanical Engineering 350D.

3 semester hours

MECHANICAL ENGINEERING 426

Material Selection for Mechanical Engineers

This course provides students a systematic approach to the selection of materials and processes at various design stages for mechanical engineering applications. The concept of materials performance indices and materials selection charts are introduced with the detailed background of material properties, processing, and mechanics. Structured case studies are shown to use this methodology to select materials for numerous mechanical designs. CES Edu Pack will be introduced as a materials and processes database and a tool for students to compare, analyze and select materials and processes. Pre-requisites: Mechanical Engineering 223, 310, 372.

3 semester hours

MECHANICAL ENGINEERING 429 (MEEG 429/ELEG 429)

Electronics Cooling

This course is designed to help students understand the thermal challenges and demands of the electronics field. Fundamentals and physics of thermodynamics, heat transfer and fluid mechanics will be introduced and shown how to apply them to the design and testing of electronic hardware. The thermal characteristics and thermal failure modes of electronic components, and reliability prediction techniques will be reviewed. Numerical simulation and commercial CFD packages will be introduced

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for thermal analysis. Students will have a good understanding of the heat transfer and fluid mechanics principles affecting proper thermal management of electronic components and develop skills to identify potential thermal design problems and develop reliable, cost-effective solutions. Pre-requisites: Mechanical Engineering 310, Mechanical Engineering 363.
3 semester hours

MECHANICAL ENGINEERING 430

Design & Innovation

The objective of this course is to convey a sense of Design and Innovation in the development of products. To accomplish this the class shall review a number of case studies and participate in the design of a project. In addition to the semester project we shall discuss a number of topics of concern to Design and Engineering through illustrated talks (slides/tapes) and when available with guest designers and engineers. Pre-requisites: Engineering 111, Engineering 300.
3 semester hours

MECHANICAL ENGINEERING 440

Ergonomic Factors in Design

This course introduces the student to the concepts of ergonomics. Ergonomics is the study of fitting the workplace and devises to the capabilities of the human worker. Students will have an understanding of the beginnings and evolution of the field of ergonomics. They will learn to recognize risk factors associated with repetitive stress disorders (e.g., carpal tunnel syndrome) and potential sprain/strain injuries as well as be familiar with the body areas affected. This course covers principles of physiology and biomechanics and how they apply to workstation and tool design. Pre-requisites: Engineering 111.
3 semester hours

MECHANICAL ENGINEERING 441

Heating, Ventilating and Air-Conditioning System Design

This course focuses on HVAC systems design. Coverage of HVAC systems includes system type and selection, design, components, materials, installation, and commissioning. Pre-requisites: Mechanical Engineering 307, Mechanical Engineering 363.
3 semester hours

MECHANICAL ENGINEERING 451

Advanced Strength Analysis

This course is designed to give students an advanced understanding of mechanics of materials and their usage in design of mechanical structures and systems. Two-dimensional and three dimensional stress and strain, stress and strain relations, principal stresses; failure

theories, factors of safety, stress concentration; beam theory, plate theory, column theory, thin-walled pressure vessels; energy methods, contact stresses, thermal strains, impact effects, fatigue and fracture, elastic stability. This course includes a design project. Pre-requisites: Mechanical Engineering 310.
3 semester hours

3 semester hours

MECHANICAL ENGINEERING 452

Advanced Vibrations

Brief review of systems with one and two degrees of freedom. Rayleigh's method. Application of Lagrangian and matrix methods to discrete systems with many degrees of freedom; normal mode theory; vibrations of finite continua; solution methods and mathematical properties. Numerical and computer methods. Sensitivity analysis. Applications to machines and structures. Pre-requisites: Mechanical Engineering 315 or equivalent.
3 semester hours

3 semester hours

MECHANICAL ENGINEERING 453

Finite Element Methods in Mechanical Engineering

Formulation of finite element characteristics using energy methods. Convergence criteria. Consistent load and mass matrices. In-plane and axisymmetric analysis using simple and higher-order triangular and quadrilateral elements. Finite element analysis of plate-bending problems. Isoparametric concepts and formulation; applications to two- and three-dimensional stress analysis. Topics from the following areas will be chosen as time allows: buckling and vibration studies using discrete element techniques; finite element applications in fluid flow and heat transfer. Prerequisite: Mechanical Engineering 450 or permission of instructor. Pre-requisites: Basic Structural Mechanics, Math 214, Math 215, Engineering 111 or consent of instructor.
3 semester hours

MECHANICAL ENGINEERING 454

Advanced Dynamics

Orthogonal coordinate systems and their transformations. Particle kinematics in inertial and noninertial rotating coordinate systems. Dynamics of systems of particles and rigid bodies. Virtual work and generalized coordinates. Lagrange's equations and Hamilton's principle for holonomic and non-holonomic systems with applications. Lagrange multipliers. Prerequisites: Undergraduate Dynamics, Mathematics 301.
3 semester hours

3 semester hours

MECHANICAL ENGINEERING 456

Mechanics of Composite Materials

Introduction to the mechanics of laminated

filamentary composites. Prediction of stiffness and strength of laminated plates. Applications. Prerequisites: Undergraduate Strength of Materials, Mechanical Engineering 223.

3 semester hours

MECHANICAL ENGINEERING 458

Fatigue and Fracture Mechanics

Brittle fracture of structures, elastic stress analysis of cracked components, static and dynamic failures, plane stress and plane strain, elastic-plastic fracture mechanics, fatigue crack growth and life prediction under constant and variable amplitude loading, environmental effects. Term work is mainly design problems and is computer oriented. Pre-requisites: Undergraduate Strength of Materials, Mechanical Engineering 223.

3 semester hours

MECHANICAL ENGINEERING 462

Applied Thermodynamics

This course is designed to review the fundamentals of classical thermodynamics and apply them to the analysis and design optimization of power and refrigeration energy systems incorporating heat exchangers and combustion processes. The topics include: principles of thermal energy conversion; properties of pure substances and mixtures; first and second laws of thermodynamics; entropy; exergy; closed and open systems of various types; applications of the principles of thermodynamics to components and systems, including pumps, compressors, engines, turbines, power plants, renewable energy systems; power and refrigeration cycles. Prerequisite: Mechanical Engineering 203, Mechanical Engineering 307, Mechanical Engineering 363
3 semester hours

3 semester hours

MECHANICAL ENGINEERING 463

Advanced Heat Transfer

Topics in conduction, convection and radiation heat transfer. Numerical methods, phase change, boundary layer principles, gas and solar radiation, combined heat and mass transfer. Prerequisite: Mathematics 301, Physics 209, Mechanical Engineering 208.

3 semester hours

MECHANICAL ENGINEERING 464

Advanced Heat Transfer

This course provides the examination of using renewable energy resources within thermal fluid systems. This class will explore principles and technical details of various thermal renewable energy technologies, such as solar heating & cooling, solar power plant, thermal energy storage, wind energy, geothermal. Prerequisite: Mechanical Engineering 203, Mechanical

Mechanical Engineering • Medical Laboratory Science

Engineering 307, Mechanical Engineering 363
3 semester hours

MECHANICAL ENGINEERING 470

Satellite Design and Technology

This course teaches the entire process of small satellite design, fabrication, integration and testing. The course covers the following topics: history of satellite design, satellite mission design; environment and hazards of space flight; orbits and astrodynamics (including spacecraft orbital elements and satellite tracking software); thermal control, materials and structures, power (including solar panels), propulsion, overview of payloads (communications and observation) data acquisition systems; ground station operation; NASA small satellite testing specifications and thermal, vacuum and vibration testing. Prerequisites: Mechanical Engineering 252, Mechanical Engineering 307, Mechanical Engineering 363 or consent of instructor.

3 semester hours

MECHANICAL ENGINEERING 477

Additive Manufacturing

Additive manufacturing (AM) or 3D printing is a process of joining materials to make objects from 3D computer aided design (CAD) data. This course is designed to introduce students to the various AM processes, their theory and industrial practices, the latest developments and critical challenges in developing novel AM processes and applications. The expected outcome of this course is to train future engineers to innovate AM processes, select appropriate AM process for specific design-manufacturing applications. It includes a design project with 3D printing practices. Prerequisites: Mechanical Engineering 223, Mechanical Engineering 350D.
3 semester hours

MECHANICAL ENGINEERING 479

CNC Machine Control and Milling

This course introduces the CNC milling machine to students. Included are machine and shop safety, CNC coding, material selection, machine maintenance, proper use of the coolant systems and tools. Routine machine procedures and implementation are covered in preparation for several machine operations to develop student skills.

3 semester hours

MECHANICAL ENGINEERING 490

Intellectual Property and Technology

This course is designed for graduate students who have an undergraduate degree in Engineering. Computer Science, Mathematics, Physics, Biology, Industrial Design, etc. Students need not have any familiarity with

United States law but they must be prepared to read extensively under the instructor's guidance, statutes and cases decided by the Federal and State courts. Pre-requisites: Undergraduate degree in Engineering or Sciences.

3 semester hours

Medical Laboratory Science (MLSC)

MEDICAL LABORATORY SCIENCE 301

Phlebotomy

Introduction to the theory and practice of phlebotomy and laboratory safety. Pre-analytical, analytical and post analytical components of laboratory service. Introduction to the principle and practice of quality assurance and quality improvement.

2 Semester hours

MEDICAL LABORATORY SCIENCE 310

Intro to Hematology

Lecture/laboratory course that emphasizes basic hematologic principles. Manual and automated procedures are performed. Emphasis on morphology and clinical applications. The course includes hemostasis and components in the blood related to hemostatic mechanisms. Includes principles of procedures involved and their relationship to diagnosis and treatment of disease. Prerequisite: BIOL 102 with a C or better. Recommend MLSC 315 or Bio 114 as a pre-requisite for Biology majors.

2 semester hours

MEDICAL LABORATORY SCIENCE 311

Intro to Clinical Chemistry

Lecture/laboratory course focusing on clinical significance and methodology of carbohydrates, proteins, lipids, enzymes, electrolytes, blood gases, acid-base balance, liver function, kidney function, and endocrinology. Emphasis on quality control as it applies to selected clinical chemistry procedures. Review of lab math and statistics. Prerequisite: CHEM 380 with a C or better.

2 semester hours

MEDICAL LABORATORY SCIENCE 314

Intro to Immunohematology

Lecture/laboratory course emphasizing immunohematologic concepts and properties underlying scientific principles of blood banking. Includes theory and practical applications of blood-group systems, antibody identification and compatibility testing, hemolytic disease of the newborn, autoimmune hemolytic anemia, and donor testing introduction to procurement and processing. Prerequisite: BIOL 102 with a C or better.

2 semester hours

MEDICAL LABORATORY SCIENCE 315

Fundamentals of Medical Laboratory Science

Lecture and laboratory introduction to Medical Lab sciences. Topics to include: Safety, Professionalism, Introduction to all areas of the modern clinical laboratory (Chemistry, Hematology, Microbiology, Immuno/Serology, Blood banking with a special emphasis on Clinical Microscopy and urinalysis. Pre-requisite: Bio102, Chem 103 with a C or better

2 semester hours

MEDICAL LABORATORY SCIENCE 317

Mycology/Parasitology/Virology

Overview of medically significant fungi, parasites, and viruses. Emphasis will be placed on pathogenesis, modes of transmission, and identification. Laboratory techniques used in isolation, cultivation, and identification will be used. Also included will be discussions of epidemiology and host response regarding these microorganisms. Prerequisite: BIOL 101 or BIOL 332, both with a C or better.

4 semester hours

MEDICAL LABORATORY SCIENCE 320

Pre-clinical Seminar

An introduction to the profession of clinical laboratory science., review of Ethics and professionalism, confidentiality, health care issues, application of safety and government regulations and standards, customer service, interpersonal and interdisciplinary communication and team building skills, UBMLSC policy manual student handbook review, preparation for clinical interviews, resume writing, laboratory organization, roles, and credentialing of laboratory practitioners are discussed. Standards, ethics, and current professional issues are examined. Communication skill development and review of scientific literature are included. Review for the successful completion of the clinical readiness examination.

1 semester hour

MEDICAL LABORATORY SCIENCE 321

Clinical Seminar I

Educational methodology, including objective and examination, writing and item analysis curriculum design and evaluation of Cognitive, affective and psychomotor domains. Accreditation, Certification and licensure related issues. Dynamics of the health care delivery system as it relates to the clinical laboratory and services.

1 semester hour

MEDICAL LABORATORY SCIENCE 322

Clinical Seminar II

Introduction to human resource and financial management, Lab operations including critical pathways and clinical decision making, per-

Medical Laboratory Science • Music

formance improvement, lab information systems LIS, personnel management and financial management of a clinical laboratory. Advanced principles and practices of quality assurance and quality improvement, Career advancement and planning, Professionalism, CMP.

1 semester hour

MEDICAL LABORATORY SCIENCE 332

Medical Microbiology

This course is taught in conjunction with the Bio332 Medical microbiology course, the laboratory section is open to MLS majors and focuses on techniques used for the identification of microorganisms in a clinical laboratory. Prerequisite: Bio 320 with a C or better.

4 semester hours

MEDICAL LABORATORY SCIENCE 341

Immunology

This course is taught in conjunction with the Bio441 immunology course, the laboratory section is devoted to immunologic and serologic techniques utilized in a clinical laboratory. Prerequisite: Bio 211 with a C or better

4 Semester hours

MEDICAL LABORATORY SCIENCE 350

Advanced Hematology

Lecture/laboratory focusing on advanced principles of hematologic testing leading to improved interpretative skills in hematology. Emphasis on correlation of data with disease states and disorders. Case studies and discussion used to illustrate the pathophysiology of hematological dysfunction. Prerequisite: MLSC 310 with a C or better.

3 semester hours

MEDICAL LABORATORY SCIENCE 354

Advanced Immunohematology

Lecture/laboratory focusing on problem-solving and special techniques used in antibody identification and compatibility testing. Also includes a discussion of donor requirements, blood component preparation and therapy, and quality assurance in the blood bank/transfusion service. Prerequisite: MLSC 314 with a C or better.

2 semester hours

MEDICAL LABORATORY SCIENCE 355

Advanced Clinical Chemistry

Lecture/laboratory focusing on clinical significance and methodology of trace elements, vitamins, therapeutic drug monitoring, and toxicology. Newer testing methods used to identify diseases/disorders will be discussed. Emphasizes instrument selection and method validation process. Prerequisite: MLSC 311 with

a C or better.

2 semester hours

MEDICAL LABORATORY SCIENCE 380

Phlebotomy Rotation

Performance and observation of various phlebotomy techniques in potentially both inpatient and outpatient settings.

2 semester hours

MEDICAL LABORATORY SCIENCE 382

Clinical Hematology Laboratory Rotation (Clinical site)

Automated and manual methods of cell counting and differentiation are performed on blood and other body fluids. Instruction and experience in advanced instrumentation using automated cell counters and differential systems, coagulation and platelet analyzers, and special hematologic testing of white and red cells using cytochemistry techniques are provided to identify disease states and disorders. Prerequisite: MLSC Successful completion of MLSC 310 with C or better. and successful completion of the clinical readiness examination.

4 semester hours

MEDICAL LABORATORY SCIENCE 384

Clinical Chemistry Laboratory Rotation (Clinical)

Provides an opportunity to apply chemical and immunologic theory and practice to routine and special clinical chemistry procedures, toxicology, therapeutic drug monitoring, and urinalysis. Also includes immunologic procedures. Includes instruction and experience in the use, standardization, and maintenance of sophisticated laboratory analyzers. Prerequisite: MLSC 311 with a C or better and successful completion of the clinical readiness examination.

5 semester hours

MEDICAL LABORATORY SCIENCE 385

Clinical Microbiology Laboratory Rotation (Clinical)

Isolation and identification of clinically important bacteria, mycobacteria, and fungi including antibiotic susceptibility testing. Techniques for identifying parasites are included. Prerequisite: MLSC 332 with a C or better and successful completion of the clinical readiness examination.

4 semester hours

MEDICAL LABORATORY SCIENCE 386

Clinical Immunohematology Laboratory Rotation (Clinical)

Blood typing, antibody screening and identification, compatibility testing, and other immunohematologic procedures are included. Emphasis is on operation and problem-solving in a modern transfusion service. Prerequisite: MLSC

314 with a C or better and successful completion of the clinical readiness examination.

3 semester hours

MEDICAL LABORATORY SCIENCE 388

Clinical Correlation (Clinical)

Use of problem-based case studies to analyze clinical situations and correlate laboratory data. Prerequisite: Successful completion of the clinical readiness examination.

2 semester hours

MEDICAL LABORATORY SCIENCE 393

Clinical Research

A review of qualitative and quantitative research methods and statistics resulting in the completion of a clinical based technical or educational based research project.

1 semester hour

Music

MUSIC 100

Private Lessons

Private instrumental/vocal lessons are available at a special fee. One credit per semester will be given for 30 minute weekly lessons. Two credits per semester will be given for 60 minute weekly lessons. Applied music may be repeated for credit each semester. Prerequisite: Permission of instructor.

1-2 semester hours

Music	100 - Bass
Music	100 - Bassoon
Music	100 - Clarinet
Music	100 - Composition
Music	100 - Conducting
Music	100 - Flute
Music	100 - French Horn
Music	100 - Classical Guitar
Music	100 - Jazz Guitar
Music	100 - Harp
Music	100 - Oboe
Music	100 - Organ
Music	100 - Piano
Music	100 - Jazz Piano
Music	100 - Percussion
Music	100 - Saxophone
Music	100 - Sitar
Music	100 - Tabla
Music	100 - Trumpet
Music	100 - Trombone
Music	100 - Tuba
Music	100 - Violin
Music	100 - Viola
Music	100 - Violoncello
Music	100 - Classical Voice
Music	100 - Jazz Voice

Music

MUSIC 109

Theory I

A thorough exploration of music fundamentals: principles of notation, clefs, time signatures, musical terms, rhythmic concepts, scales, keys, triads, and seventh chords. Application of these fundamentals is emphasized through study of musical literature.

3 semester hours

MUSIC 109A

Aural Theory I

Development of aural recognition and singing. Includes intervals, scales, and triads in all forms.

1 semester hour

MUSIC 110

Theory II

Counterpoint. Beginning with first species tonal counterpoint and progressing to four-part chorale textures, students will develop the skills of writing multiple musical lines according to standard practices. Musical examples are studied.

3 semester hours

MUSIC 110A

Aural Theory II

Continues the development of aural recognition and singing, with emphasis on two-part music.

1 semester hour

MUSIC 121

Music Appreciation

A basic course in the elements of music and their historical application in Western music. Active listening and student participation is emphasized.

3 semester hours

MUSIC 201/202

Master Works of Music I, II

Designed to increase knowledge of musical literature and to refine awareness of musical patterns and syntax. Representative works in contrasting instrumentation are analyzed and compared.

2 semester hours each

MUSIC 203

History of Western Music I

The historical development of music and musical styles from ancient Greece to the end of the baroque era.

3 semesters hours

MUSIC 204

History of Western Music II

The historical development of music and musical styles from the baroque era through succeeding classical, romantic and modern periods.

3 semester hours

MUSIC 205

Twentieth Century Music

An examination of the diverse styles of the

20th century, the composers, and social, cultural, and philosophical trends which influence them. Prerequisite: Music 121 or Music 203/204, or permission of the instructor.

3 semester hours

MUSIC 207

The History of Jazz

A study of the periods of jazz, jazz performers and composers, trends, influences, stylistic features, and related materials.

3 semester hours

MUSIC 208A / 208B

Jazz Improvisation and Repertoire I, II

A beginning approach to jazz improvisation through the study of contemporary harmony. Lyrical style will be emphasized. Students analyze and transcribe solos. Prerequisites: Music 109-110.

3 semester hours

MUSIC 212

Studio Recording

Introduction to the use of microphones, mixing consoles, digital and analog recorders in the university's recording studio. Labs include on-campus concerts.

2 semester hours

MUSIC 215

Theory III

Harmony and Analysis. Introduction to the harmonic and formal practices of the seventeenth and eighteenth centuries in Western music. Examples from the repertoire studied. Continues the study of four-part writing.

3 semester hours

MUSIC 215A / 216A

Aural Theory III, IV

Continues the development of aural recognition and solfège singing. Includes aural recognition of four-part music, cadences, and modulations.

1 semester hour each

MUSIC 216

Theory IV

Harmony and Analysis. Introduction to the harmonic practices of the nineteenth and early twentieth centuries in Western music, with an emphasis on chromaticism and large scale formal considerations. Examples from the repertoire will be examined.

3 semester hours

MUSIC 220

Vocal Diction

Study of IPA and vowel and consonant production required for singing in Italian, German, French and English. Specific application to the song and operatic literature.

3 semester hours

MUSIC 255

Group Piano

A beginning course in the fundamentals of piano technique and playing. Simple pieces, scales, exercises and transposition.

2 semester hours

MUSIC 256

Keyboard Harmony

Keyboard skills are developed which include playing harmonic progressions in any key, cadences, and diatonic and chromatic sequences. Sight-reading diatonic melodies and simple figured bass are also required.

2 semester hours

MUSIC 295

Junior Recital

A full-length recital performed on declared major instrument. Format and repertoire must be approved by music faculty. Pass/Fail.

0 credit

MUSIC 304A, 304B

Jazz Arranging I, II

Beginning and intermediate study and application of modern techniques of writing for large and small jazz ensembles. Prerequisite Music 215 or permission of instructor.

3 semester hours each

MUSIC 311

Conducting I

Fundamental patterns and expressive techniques of conducting. Emphasis in choral techniques and conducting choral ensembles.

3 semester hours

MUSIC 312

Conducting II

Advanced patterns and expressive techniques of conducting. Emphasis in instrumental techniques and conducting instrumental ensembles and orchestras

3 semester hours

MUSIC 115

Introduction to Composition

Specific creative projects to be performed by University ensembles or soloists. Techniques of instrumentation and notation are emphasized. Prerequisite: Music 216 or permission of instructor.

3 semester hours

MUSIC 195

Senior Recital

A full-length recital performed on declared major instrument. Format and repertoire must be approved by music faculty. Pass/Fail.

0 credit

MUSIC 398

Internship

Professional, supervised, work experience in

Music

an organization related to career goals (may be unpaid). Prerequisite: Permission of advisor and School director.

3 semester hours

MUSIC 399

Independent Study

Specialized advanced projects in subjects not covered by course offerings. Conferences with designated Independent Study advisor. Prerequisite: Permission of advisor and school director.

3 semester hours

MUSIC 414

Business of Music

Practical knowledge of skills necessary to function and flourish as a professional musician. Standard business models for private studio teaching, not-for-profits, performing contracts, artist management, recording and publishing.

2 semester hours

MUSIC 426

Computers in Music

An introduction to computer functions essential for musicians including music engraving, MIDI sequencing, and desktop publishing.

3 semester hours

MUSIC 427

MIDI Performance

Using MIDI (Musical Instrument Digital Interface) as a recording studio tool, students learn to configure personal computers and MIDI controllable devices (synthesizers, lighting systems, sound modules, and/or effects). Emphasis placed on the creative end result. Prerequisite: Music 212 and Music 426.

3 semester hours

Ensembles

MUSIC 103

University Singers

Presentation of choral works from a variety of cultural and historical perspectives. Performances at university and community functions. All who enjoy singing are encouraged to enroll.

1 semester hour

MUSIC 105

Orchestra

A university-community orchestra offering opportunity for public performance.

1 semester hour

MUSIC 107

Chamber Ensembles

Development of musical skills related to functioning within an ensemble. An exploration of rehearsal techniques and group dynamics leading to performance of repertoire for

chamber ensembles. Prerequisite: Permission of instructor.

1 semester hour

Brass Ensemble - 107A

String Ensemble - 107B

World Music Ensemble - 107E

Chamber Singers - 107F

Early Music Ensemble - 107M

Accompanying - 107P

Small Group Jazz Ensemble - 107R

(Each 1 semester hour)

MUSIC 112

Sinfonietta

A large instrumental ensemble designed to produce compelling programs that showcase the variety of musical talents and skills of students.

1 semester hour

MUSIC 115

Concert Choir

Limited to a balanced choral ensemble selected by audition during registration. Extensive performance opportunities with emphasis on traditional and contemporary choral literature. Membership on full-year basis only.

1 semester hour

Music Education

MUSIC EDUCATION 183

Group Instruction in Voice

Instructing the future teacher in techniques of tone production, pitch, and modern effects used in choral singing, especially at the junior and senior high school levels.

2 semester hours

MUSIC EDUCATION 221

Group Instruction in Strings

Designed to provide the future school music teacher with proficiency in tone production, and the technical development of string players at the junior and senior high school levels.

3 semester hours

MUSIC EDUCATION 225

Group Instruction in Brass

Designed to provide the future school music teacher with the necessary proficiency in brass instrument teaching.

3 semester hours

MUSIC EDUCATION 226

Group Instruction in Percussion

Designed to provide the future school music teacher with the necessary proficiency in percussion instrument teaching.

3 semester hours

MUSIC EDUCATION 227

Group Instruction in Recorder I

The recorder is one of the most important tools in music education today. This class will present the history, physics, and repertoire of the recorder. It will provide students with pedagogical tools and strategies for teaching all levels of music education.

3 semester hours

MUSIC EDUCATION 228

Group Instruction in Recorder II

This class will focus on repertoire and performance of repertoire most pedagogically useful when teaching recorder classes. This class, in conjunction with Group recorder I M227, and participation in early music ensembles will equip students with enough solo and ensemble techniques to develop and teach innovative recorder programs. Prerequisite: ME227

3 semester hours

MUSIC EDUCATION 240

Pre-Teaching Practicum

Consists of developing teaching styles, plans, and materials designed to: (1) help the student determine professional goals. (2) provide insights and experiences in music teaching prior to professional music education classes.

0 semester hours

MUSIC EDUCATION 241

Choral Practicum

Designed to give the education student an opportunity to expand conducting technique, develop rehearsal techniques, and expand familiarity with standard choral literature. Opportunity will be provided to rehearse and conduct University choral ensembles.

0 semester hours

MUSIC EDUCATION 242

Instrumental Practicum

Designed to give the education student an opportunity to expand conducting technique, develop rehearsal techniques, and expand familiarity with standard instrumental chamber literature. Opportunity will be provided to rehearse and conduct University chamber ensembles.

0 semester hours

MUSIC EDUCATION 331

Literature and Techniques for Chorus

A study of choral literature appropriate for the middle and high school levels. Includes techniques of voice testing, tone development, range, diction, and musicianship. Prerequisite: Mse 183 or permission of instructor.

3 semester hours

Music • Nursing • Nutrition

MUSIC EDUCATION 332

Literature and Techniques for Band and Orchestra

Study of band and orchestra literature with emphasis on rehearsal techniques and problems related to band and orchestra organization. Prerequisite: Mse 221, 223, and 225

3 semester hours

MUSIC EDUCATION 336

Literature and Techniques for Jazz Ensemble

Methods, materials, and rehearsal techniques in arranging for small and large jazz ensembles at the high school level. Prerequisite Music 304 or permission of instructor.

3 semester hours

MUSIC EDUCATION 343

Music in Elementary Schools

An examination of significant teaching methods, procedures, materials, and problem-solving necessary to teach music in grades one through six.

3 semester hours

MUSIC EDUCATION 380

Music in Secondary Schools

An examination of significant teaching methods, procedures, materials, and problem-solving necessary to teach music in secondary schools.

3 semester hours

MUSIC EDUCATION 399A

Independent Study

Specialized advanced projects in subjects not covered by regular course offerings. Conferences with designated advisor. Prerequisite: permission of advisor and school director.

3 semester hours

Nursing

NURSING 301

Nursing Theory & Evidence-Based Practice (pre-req Statistics)

This course is designed to introduce the RN student to the conceptual, philosophical, scientific, and ethical bases for professional nursing practice. The relationship among theory, research and evidence-based practice is explored and applied to real life practice situations. The role of the nurse in support of this theory, research, and evidence-based practice is addressed through a theoretical paper, research critiques, and discussion of evidence-based care in selected scenarios.

3 Credits

NURSING 302

Health Assessment

The focus of this course is to provide the essential elements of health assessment relevant

to the role of the BSN graduate. Skills and tools for holistic health assessment are provided that facilitate the implementation of safe, quality nursing care across the lifespan.

3 Credits

NURSING 303

Community Health

This course is designed to provide students with the opportunity to apply the nursing process to the community as the health client. Students will apply principles of community assessment and health promotion to investigate a community/ population health status. The health needs of populations at risk within the community are identified and plans are formulated to meet those needs. Implementation of a community health education project with a local community group is an expected outcome for this course.

4 Credits (3 credits theory, 1 credit practice experience)

NURSING 304

Professional Seminar

A seminar course focusing on issues pertinent to professional nursing practice. This course provides an opportunity for the RN student to complete the synthesis to the BSN role prior to program completion while exploring current trends that impact the practice of professional nursing.

3 Credits

NURSING 305

Leadership and Management in Nursing

Introduces the RN student to organizational theory, management, structure of nursing care delivery systems, and components of leadership behavior. This course focuses on the role of the nurse as both a formal and informal leader in multiple roles of organizing, teaching, decision making, evaluating, and managing conflict.

4 Credits (3 credits theory, 1 credit practice experience)

NURSING 306

Quality, Safety/Health Policy

This course examines health care policy and politics as it relates to the quality and safety of nursing practice. Historical, ethical, political, and economic factors are discussed and the nurse's responsibility and role in health care policy is explored. A project facilitates application of principles addressed in the course.

4 Credits (3 credits theory, 1 credit practice experience)

NURSING 307

Nursing & Healthcare Informatics

The focus of this course is to introduce the

principles of health care informatics, communication networks, and health care technology in the assessment, delivery, and evaluation of quality nursing care in a variety of settings. Ethical and legal considerations are integrated into the application of technological best practice to care.

3 Credits

NURSING 308

Capstone II

This seminar style course is designed to provide an opportunity for synthesis of learning experiences from past and current learning to promote professional practice emphasizing principles of lifelong learning and caring practices. Collaboration with other health care providers to improve evidence-based outcomes of care for individuals, families, and communities is emphasized. The application of these concepts through the development of a professional portfolio will document a strategic change project that reflects successful completion of individual goals and program learning outcomes.

3 Credits

CAPSTONE 390

Capstone Seminar (Full semester)

The Capstone Seminar is the culmination of learning in the Core Curriculum. As such it reflectively builds upon learning from the various liberal arts. The purpose of the course is to expand reading comprehension through a series of challenging and interrelated texts and to improve the understanding of and potential for creative verbal and written expression as the scholarly capstone of undergraduate experience. Students should demonstrate the ability to analyze texts and synthesize ideas and to relate texts to contemporary situations. All students write an original essay that integrates themes raised in course readings and discussions.

3 Credits

Nutrition

NUTRITION 121

Anatomy and Physiology I, II

A detailed study of the structure and function of cells, tissues, and organ systems. Control systems of the human body, homeostatic mechanisms, and the interrelations between the systems are studied.

8 full day weekend sessions; 6 semester hours

NUTRITION 122

Introduction to Biochemistry

A review of basic general chemistry topics in-

Nutrition • Philosophy

cluding atomic theory, periodic law, chemical bonding, chemical reactions, kinetics, acids, bases and organic chemistry topics including isomerism, and physiochemical properties of various functional groups. Biochemical properties of carbohydrates, lipids, proteins, and nucleotides will also be discussed.

6 full day weekend sessions; 4 semester hours

NUTRITION 123

Nutrition Seminar

A seminar designed to provide students with the basic principles of nutrition. Topics include classes and sources of nutrients, energy intake and expenditure, dietary standards and guidelines, food labeling and food safety. Emphasis will be placed on the role of macronutrients in the diet.

2 full day weekend sessions; 1 semester hour

NUTRITION 204

Principles of Nutrition

The principles of nutrition are presented with emphasis upon diet counseling and behavioral modification for the dental patient. The case method is used both in theory and practice to relate prevention and control of oral disease through nutritional status. Prerequisite: CHEM 114.

2 semester hours

NUTRITION 205

Fundamentals of Nutrition

The fundamentals of normal and therapeutic nutrition are presented. Attention is focused on the promotion of health, prevention of illness and the restoration of health following illness for injury. This course includes a self analysis of the participant's diet.

3 semester hours

NUTRITION 299

Independent Study

Students examine specific nutritional topics of personal interest. Permission of instructor is required.

3-6 semester hours

NUTRITION 350

Community Nutrition

This course will provide students with the knowledge, skills, tools and evidence-based approaches needed by community nutritionists to promote health and prevent diseases.

3 semester hours

Philosophy

PHILOSOPHY 101

General Philosophy

A survey of the central problems of metaphysics,

epistemology, and ethics. Topics include the existence of God, extreme skepticism, the relationship between mind and body, free will versus determinism, and freedom of expression. The course includes analysis of representative thinkers.

3 semester hours

PHILOSOPHY 103

Men, Women, Issues

A discussion of gender differences and sex equality. The course critically examines topics such as sexual harassment, comparable worth, monogamous marriage, prostitution, and rape. These topics are examined from a variety of perspectives, including conservatism, liberal feminism, traditional Marxism, radical feminism, and the care and justice outlooks that Carol Gilligan has identified.

3 semester hours

PHILOSOPHY 104

Logic and Scientific Method

Study of logical inference, both deductive and inductive. Analysis of propositions, arguments, fallacies, language, and the nature and functions of the methods of the sciences.

3 semester hours

PHILOSOPHY 110

Health Care Ethics

3 semester hours

PHILOSOPHY 203

Ethics

A study of problems of applied ethics, such as abortion, animal experimentation, affirmative action, and gay and lesbian rights. These problems are explored from the standpoint of ethical theories such as utilitarianism and Kantian ethics. The course helps students formulate and interpret moral values by which they may think and act.

3 semester hours

PHILOSOPHY 205

History of Western Philosophy

A survey of the historical development of philosophy from antiquity through the 19th Century, with weight given to the contributions of Greek philosophers and those of the Middle Ages and the Enlightenment. In the 19th Century, attention is given to the rationalist, idealist, and empiricist schools of thought and their influence.

3 semester hours

PHILOSOPHY 210

Animal Rights

This course explores philosophical theories of animal rights as well as the practical applica-

tions of these theories. Topics include vegetarianism, animal experiments, hunting and fishing, the treatment of animals in zoos and circuses, the treatment of companion animals, the treatment of animals in the fur and leather industry, and the use of violence by some animal rights activists.

3 semester hours

PHILOSOPHY 211

Philosophy of Human Rights.

This course explores the following questions: Do human beings have rights? What rights do human beings have? Is torture ever morally justified? How far should freedom of speech and freedom of action extend? Does a fetus have a right to life? To what extent does a free market promote human rights? To what extent are Confucian ideas compatible with human rights?

3 semester hours

PHILOSOPHY 213

Philosophy of Science

This course will introduce students to the philosophy of science by focusing on connections between science and philosophy. Students will examine the ontological status of theories, the social organization of science and interactions between these topics and epistemological questions.

3 semester hours

PHILOSOPHY 216

Philosophy of World Religions

A comparison and analysis of the philosophical foundations of some of the world's major religions. Among the religions studied are: Judaism, Christianity, Islam, Hinduism, Buddhism, and Confucianism.

3 semester hours

PHILOSOPHY 323 (PHIL 323/PSCI 323)

Classics in Political Theory

Analysis of principles of political theories of the Ancient Greek, Roman, Medieval, and Early Modern periods. Emphasis on the thought of Plato, Aristotle, the Stoics, St. Augustine, St. Thomas Aquinas, Machiavelli, Hobbes, Locke and Montesquieu. Application of these theories to contemporary political ideas and problems.

3 semester hours

PHILOSOPHY 324 (PHIL 324/PSCI 324)

Recent Political Theory

An examination of a broad spectrum of recent world views, with particular attention paid to systems such as anarchism, Marxism-Leninism, and fascism. Other topics include Third World perspectives, black power, radical feminism, and futurism.

3 semester hours

Philosophy • Physics • Political Science

PHILOSOPHY 340

Selected Topics in Philosophy

Concentrated study of a major figure or theme that will supplement the offerings in the department.

3 semester hours

PHILOSOPHY 399

Independent Study

For the student who wishes to specialize in advanced topics not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of School Director.

3 semester hours

Physics

PHYSICS 103

Basic Concepts of Physics I

Space and matter, particles in motion, Newtonian mechanics, atoms and heat, wave phenomena.

2 lectures; 1 two-hour lab; 3 semester hours

PHYSICS 104

Basic Concepts of Physics II

Electricity and magnetism, relativity, and optics. The fundamental structure of matter.

2 lectures; 1 two-hour lab; 3 semester hours

PHYSICS 111

Principles of Physics I

The principles of mechanics and their applications. Kinematics, Newtonian mechanics, conditions for equilibrium, statics, work, energy and conservation laws. Rotation. Simple harmonic motion; Co-requisite: MATH 110, or MATH 111.

3 lectures; 1 three-hour lab; 4 semester hours

PHYSICS 112

Principles of Physics II

Electric forces and fields, electrical potential, electric properties of matter. Magnetic forces and fields, charges in motion, magnetic properties of matter. Electromagnetic induction, Maxwell's equations. Wave motion, electromagnetic waves. Prerequisite: Physics 111; Co-requisite: MATH 112.

3 lectures; 1 three-hour lab; 4 semester hours

PHYSICS 201

General Physics I

A non-calculus course which presents an introduction to classical mechanics, heat and thermodynamics. Prerequisite: MATH C105 or its equivalent.

3 lectures; 1 three-hour lab; 4 semester hours

PHYSICS 202

General Physics II

A non-calculus course covering the fundamen-

tal laws of electricity and magnetism, electric circuits, and optics, including topics from modern physics. Prerequisites: Mathematics C105 or its equivalent, PHYS 201 or its equivalent.

3 lectures; 1 three-hour lab; 4 semester hours

PHYSICS 304

Thermodynamics and Statistical Mechanics

The zeroth, first, second, and third laws of thermodynamics with applications to physical phenomena. An introduction to statistical physics. Prerequisite: PHYS 209; Co-requisite: MATH 215.

3 lectures; 3 semester hours

PHYSICS 305

Electricity and Magnetism I

Electric charge, field, and potential. Electrostatic problems. Dielectric media. Electrostatic energy. Electric current. Prerequisite: PHYS 209; Co-requisite: MATH 215 or MATH 301.

3 lectures; 3 semester hours

PHYSICS 306

Electricity and Magnetism II

Magnetic fields and magnetic properties of matter. Electromagnetic induction. Maxwell's equations and electromagnetic waves. Prerequisite: PHYS 305.

3 lectures; 3 semester hours

PHYSICS 312

Photonics

The wave aspects of radiation and the kinematics of wave motion giving rise to interference and diffraction, together with the interaction of electromagnetic waves and matter leading to such phenomena as reflection, dispersion, and polarization. Prerequisite: PHYS 209; Co-requisite: MATH 215

3 lecture periods; 3 semester hours

PHYSICS 315

Quantum Mechanics I

Formalism of quantum mechanics; angular momentum, perturbation theory, other approximation methods, and applications of quantum theory. Prerequisites: MATH 215 and PHYS 209.

3 lectures periods; 3 semester hours;

PHYSICS 317

Analytical Mechanics I

Elements of Newtonian mechanics. Motion of a particle, particles, and rigid bodies in one, two, and three dimensions. Prerequisite: PHYS 209; Co-requisite: MATH 215.

3 lectures; 3 semester hours

PHYSICS 318

Analytical Mechanics II

Lagrangian and Hamiltonian Mechanics, perturbation theory, central force fields, applications of vector and tensor analysis to nonlinear

physical problems. Prerequisite: PHYS 317.

3 lectures; 3 semester hours

PHYSICS 321

Techniques in Modern Physics

Experimentation and Instrumentation. Undergraduate laboratory experiments in physics. Prerequisite: At least two physics courses numbered above 300.

1 three-hour lab; 1 semester hour

PHYSICS 322, 323, 324

Physics Laboratory

Undergraduate laboratory experiments in physics. Prerequisite: At least two physics courses numbered above 300 and 321.

1 three-hour lab; 3 semester hours

PHYSICS 360

Selected Topics in Physics

Selected topics in physics on specialized subjects beyond the scope of required courses to inform students of current areas of interest or to train students in special areas of physics.

3 semester hours

PHYSICS 390, 391

Physics Seminar

Discussion of advanced and current topics in the field of physics. Students will make literature searches and present papers to the seminar in their areas of interest.

2 semester hours

Political Science

POLITICAL SCIENCE 101

American Government.

The Constitution. Structure and function of the national government: proper citizenship, civil rights, elections, and party organizations.

3 semester hours

POLITICAL SCIENCE 103

Intro to Political Science and Political Science Research Methods

This course serves as a gateway to the study of political science for IPED majors and political science/international relations minors. We'll survey the historical and philosophical foundations of the political science discipline, major subject fields under the general category of political science, key concepts and issues in political science, and basic scientific methods in political science study and research.

3 semester credits

POLITICAL SCIENCE 203

U.S. Foreign Policy

This course examines contemporary US foreign policy from theoretical and policy per-

Political Science • Professional Studies

spectives. How American foreign policy is formulated and conducted will be discussed during the first half of the semester. The second half will be devoted to evaluations of US policies, especially economic and trade policies, towards key regions of the world.

3 semester credits

POLITICAL SCIENCE 204

Government and Politics Abroad

Principal institutions, methods, and problems of government of selected foreign countries in Europe, Asia, Africa, and Latin America as compared with the American System.

3 semester hours

POLITICAL SCIENCE 206

The Political Economy of North-South Relations

Political-economic disparities between “North” (the developed nations) and “South” (developing countries). The causes of these disparities analyzed from an interdisciplinary point of view. Recurring patterns of obstacles to development in some new nations. The role of international financial and other organizations.

3 semester hours

POLITICAL SCIENCE 207

World Politics

This course explores the principal elements of world politics, examining the context in which the major actors play their roles, as well as the salient features of the international community. It will review the most significant aspects of global politics by examining such topics as foreign policy, the nature of national power, and war. It will examine the origin, organization, and function of the major international institutions, and conclude with a discussion of global issues.

3 semester hours

POLITICAL SCIENCE 208

Introduction to International Law

History and nature of international law, territorial sovereignty, natural resources and international norms (e.g. exclusive economic zones, the continental shelf, outer space, etc.), diplomatic & consular relations, International Court of Justice and other tribunals, and the use of force in international law.

3 semester hours

POLITICAL SCIENCE 209

Introduction to United Nations Studies

Examination of the successes and failures of the United Nations, its prospects for the future, principal organs, especially the Security Council, budgetary system, role in arms control, relations between the United Nations and the United States, and related issues.

3 semester hours

POLITICAL SCIENCE 215

International Human Rights

A study of the international protection of human rights. The course analyzes the origin and nature of human rights, the content of human rights standards guaranteed by international law, as well as the global international mechanism for the protection of human rights. It includes a comparative examination of the regional systems in Europe, the Americas, Asia, and Africa for the protection of human rights.

3 semester hours

POLITICAL SCIENCE 233

An Introduction to the U.S. Legal System

This course will offer a comprehensive overview of the U.S. legal system, including an overview of legal practice sources and techniques with emphasis on the major substantive areas of the law. Students will begin by examining issues in constitutional law, with an overview of how government functions and how laws are made. A legal writing segment of the course will allow students to use legal analysis while refining their writing skills.

3 semester credits

POLITICAL SCIENCE 299

Selected Topics in Political Science

A course with variable topic focus, dependent upon student needs and the expertise of the instructor.

3 semester hours

POLITICAL SCIENCE 303 (PSCI 303/IPED 340)

Political Economy of Latin America

This course will explore pre-Colombian, as well as colonial and post-colonial political and economic development in Latin America. It will pay particular attention to socio-political developments of the Cold War period as well as recent significant initiatives such as the Santiago Commitment, MERCOSUR, and NAFTA, attempting to assess their impact upon Latin America's transformation from developmentalism, to Third World politics, to an emerging center of democratic capitalism.

3 semester hours

POLITICAL SCIENCE 321 (PSCI/IPED 321)

Political Economy of East Asia

In recent decades, the East Asian region has often been described as a model of socioeconomic development, which newly developing regions should emulate. This course will encourage learners to explore the extent to which the East Asian paradigm of development is valid for other regions. This course will explore the cultural and historical factors contributing to the

political and economic trajectories China, Korea, and Japan. Through studying East Asia's unique sociopolitical and economic trajectory, students should be equipped to better contextualize and assess the challenges and opportunities currently facing the Peoples Republic of China, Taiwan, Hong Kong, Japan, and the Koreans.

3 semester hours

POLITICAL SCIENCE 323 (PSCI 323/PHIL 323)

Classics in Political Theory

Analysis of principles of political theories of the Ancient Greek, Roman, Medieval, and Early Modern periods. Emphasis on the thought of Plato, Aristotle, the Stoics, St. Augustine, St. Thomas Aquinas, Machiavelli, Hobbes, Locke and Montesquieu. Application of these theories to contemporary political ideas and problems.

3 semester hours

POLITICAL SCIENCE 324 (PSCI 324/PHIL 324)

Recent Political Theory

Analysis of the major contemporary ideologies, their historical-philosophical backgrounds and public policy implications. Among the ideologies and belief systems considered are liberalism, conservatism, Marxism (including Leninism and Maoism), fascism, anarchism, religious fundamentalism, and feminism. The cultural expressions of these ideologies in arts and literature are also examined.

3 semester hours

POLITICAL SCIENCE 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.

3 semester hours.

POLITICAL SCIENCE 399

Independent Studies

This course permits the advanced political science student to undertake individual research in the area approved by the instructor. Continuous consultation with the instructor is required. Prerequisite: Permission of School Director.

1-6 semester hours

Professional Studies

PROFESSIONAL STUDIES 201

Fundamentals of Management and Leadership

This course explores the fundamental principles, theory and functions applicable to a variety of organizational settings. Specific techniques related to managerial functions are explored as well as the broad issues and trends influence the practice of contemporary man-

Professional Studies

agement: globalization, technology, diversity, and competitive advantage. Special emphasis is on the role leadership plays in motivation, performance management, communication, team building, innovation, and change management. Prerequisite: None

PROFESSIONAL STUDIES 202

Business Math

Business Math will assist students in learning to use mathematics effectively as a tool in their personal and business lives. After students complete this course, they will be able to understand the terminology used, apply basic math skills, and use common mathematic formulas to solve a variety of personal and business mathematics problems. Prerequisite: None

PROFESSIONAL STUDIES 204

Social Impact of Technology

This course is designed to critically assess the institutional forces that shape and create the demand for information technology (IT). It will also discuss how the consumption of IT impacts economy and society. The course will help participants think about how changing social and economic conditions determine what technologies are consumed and how they are consumed, who consumes them and where they are consumed. Prerequisite: None

PROFESSIONAL STUDIES 220

Analytical & Persuasive Writing

Continuing to practice the rhetorical skills introduced in ENGL 101, students will develop analytical, interpretive, and information literacy skills necessary for constructing a well-supported, researched, academic argument. Prerequisite: ENGL 101

PROFESSIONAL STUDIES 224

Critical Thinking & Writing

Develops the ability to analyze, criticize and advocate ideas. Examines relationship of language to logic, induction and deduction, facts, inferences, judgments, formal and informal fallacies of language and thought. Instructs in writing about issues of critical thinking to develop both thinking and writing skills. Prerequisite: ENGL 101

PROFESSIONAL STUDIES 250

Budgeting & Finance for Organizations

This course familiarizes managers with the core tasks needed for effective financial planning and explains the budgeting process in diverse organizations. Organization, techniques, and politics of administrative planning, budget preparation and legislative appropriations, and control systems in public administration. Prerequisite: PRST 202

PROFESSIONAL STUDIES 250

Organizational Behavior

This course provides a comprehensive analysis of individual and group behavior in organizations. Its purpose is to provide an understanding of how organizations can be managed more effectively and at the same time enhance the quality of employees work life. Topics include motivation, rewarding behavior, stress, individual and group behavior, conflict, power and politics, leadership, job design, organizational structure, decision-making, communication and organizational change and development. Prerequisite: PRST 201 Minimum grade C,TR

3 semester hours

Healthcare Administration

HEALTHCARE ADMINISTRATION 333

Management of Health Care Information Systems

This course examines healthcare organizations from the perspective of managing the information systems that exist within the enterprise. Identifying the clinical and healthcare delivery processes and how they relate to information systems is a main focus. The intent of the course is to identify the key issues confronting the management of healthcare information systems today, examine their causes, and develop reasonable solutions to these issues. Prerequisite: PRST 201 & MGMT 300

HEALTHCARE ADMINISTRATION 331

Law and Ethics in Health Care

This course presents an overview of the legal and ethical issues faced by healthcare consumers, practitioners, and administrators. The course will introduce students to the legal aspects of health care at the federal, state, and local levels. Topics covered will include criminal and civil claims against health care providers, corporate and individual liability, and legal and ethical decision-making. Prerequisite: PHIL 203

HEALTHCARE ADMINISTRATION 334

Healthcare Financial Management

This course is an application of financial management techniques to decision making for health care professionals. This course examines aspects of modern hospital & health care organization financial management to prepare students for supervisory and management roles. In addressing the types of financial decisions that health care executives are most likely to be involved in the course objective is to understand the underlying importance of (1) accounting information; (2) health care industry knowledge; and (3) principles of economics. Prerequisite: PRST 250

HEALTHCARE ADMINISTRATION 332

Health Care Organization & Administration

This is an introductory course on the organization, finance and delivery of health care services from a societal perspective. It examines alternatives that a society may organize, finance, and deliver health care services, and the philosophical, social, and political economic foundation underlying a health care system. It begins with examining the nature of health and health care services, and followed by reviewing the role of government and free market on health and health care services. Alternative ways of organizing and financing health care services are then explored. Among private health institutions, the focus of inquiry is on health insurance and its provision, hospitals, the role of physicians, and long-term care organizations. Finally, current issues of the U.S. health care system and possible development are also studied. While this course uses mostly examples from the U.S., experiences from other countries are also discussed where it is pertinent. Prerequisite: PRST 201 & MGMT 300

HEALTHCARE ADMINISTRATION 365

Healthcare Strategic Management

This course will introduce students to concepts, principles, and practices of strategic management in multiple health care settings. Case studies will be used from the health care industry as well as other business sectors to expose students to the field of organizational behavior. Students will develop their knowledge in areas including negotiation, leadership, organizational design, organizational culture, how people work in organizations, and strategy (including stakeholder and SWOT analysis, and the current approaches to the development of strategic plans). Prerequisite: HLAD 334 & 332

Human Resource Administration

HUMAN RESOURCE ADMINISTRATION 334

Training Methods

This course explores current and emerging models and theories, and practical methods to effectively connect training and learning to organizational/business goals. In this course, the student will learn how to 1) identify training and development needs through needs assessments, 2) analyze jobs and tasks to determine training and development objectives, 3) create appropriate training objectives, 4) design effective training and development programs using different techniques or methods, 5) implement a variety a different training and development activities, and 6) evaluate training and development programs. Prerequisite: MGMT 305

Organizational Leadership

ORGANIZATIONAL LEADERSHIP 341

Supervision and Team Building

The course develops management theories of planning, organizing, staffing, leading, and controlling. Emphasis will be given to the effectiveness of human relations in communication, leadership matters, and team-building concepts as it relates to the workplace. Although the course emphasizes principles and practices of first-line supervision, it also introduces concepts and skills for supervisory leadership and supervisory management needed for effective team building, program or organizational innovation, group decision-making, and mediating intra-staff conflict as well as conflict between staff and administration. Prerequisite: MGMT 300

ORGANIZATIONAL LEADERSHIP 342

Non-profit Management

This course will introduce students to strategic management issues in the nonprofit sector. The course will cover key issues in founding, leading, managing, and governing nonprofit organizations and new nonprofit ventures, including organizational mission, strategic analysis and planning, board governance, multiple constituencies, partnerships and collaborations, human resources, financial management, fundraising and resource development, and performance measurement and impact. Prerequisite: MGMT 300

ORGANIZATIONAL LEADERSHIP 350

Organizational Change and Leadership

This course offers students a comprehensive, relevant perspective on leadership and management. While the course provides grounding in important concepts, it also stresses application to professional and community settings. Students analyze concepts such as leading as an interactive process (involving the leader, the “followers”, and the situation), managing with innovation and creativity, escaping from embedded practices, and embracing new managerial principles. Prerequisite: PRST 201 & MGMT 300

ORGANIZATIONAL LEADERSHIP 351

Challenges in Leadership Seminar

This course will explore in a seminar format leaders and leadership situations. The key elements of leadership will be discussed and should facilitate the development of a coherent and consistent perspective on leadership. Prerequisite: ORLD 350

Psychology

PSYCHOLOGY 103

Introduction to Psychology

An introduction to the field of psychology, including such topics as research methods, the brain, neuronal structure and functioning, sleep and dreaming, cognitive and social development, learning, memory, intelligence, personality, psychopathology, psychotherapy, social cognition, and social influence. This course is a prerequisite of all higher-numbered psychology courses, with the exception of PSYC 201 (Child Psych) which can be taken concurrently with Psyc 103.

3 semester hours

PSYCHOLOGY 201

Child Psychology

This course will examine the theories and issues surrounding biological, cognitive and psychosocial development from conception to pubescence. This course is interactive with a focus on personal life experience and current social events. This course is the first in a series of 4 courses that can lead to a certificate in human development.

3 semester hours

PSYCHOLOGY 202

Adolescence

This course will examine the theories and issues surrounding biological, cognitive and psychosocial development from pubescence to adulthood. Students explore experiences and values related to risk taking, friendship, peer-groups, peer-pressure, marriage, relationships, parenting, and sexuality. This course is the second in a series of 4 courses that can lead to a certificate in human development.

3 semester hours

PSYCHOLOGY 203

Maturity and Aging

This course will examine the theories and issues surrounding biological, cognitive and psychosocial development from adulthood through death and the process of dying. This course is interactive and focuses on personal experiences and reactions. Important questions about health, longevity, aging, and the dying process are explored. This course is the third in a series of 4 courses that can lead to a certificate in human development.

3 semester hours

PSYCHOLOGY 230

Abnormal Psychology

The course will focus on the study of those thoughts, feelings, and behaviors that interfere with psychologically adaptive function-

ing. The causes and appropriate treatments of mood disorders, personality disorders, schizophrenia, adjustment reactions, and other disorders as specified in the DSM will be discussed.

3 semester hours

PSYCHOLOGY 240

Social Psychology

This course is designed to provide an overview of the field of social psychology. Learning will be accomplished through reading and discussion of the text, as well as presentation of supplemental material provided by the instructor along with in-class activities, videos and discussion. Topics will include discussion of the varying domains of research in social psychology, important studies in the field, and how it applies to academia and everyday life. Topics will include: attitudes and attitude formation, persuasion, aggression, conformity, obedience, culture, helping behaviors, attraction, self-concept, as well as discrimination and prejudice.

3 semester hours

PSYCHOLOGY 303

Personality Psychology

This course will focus on the structure, dynamics, and development of personality. Major personality theories – psychoanalytic, trait, behavioral, cognitive, socio-biological, humanistic/existential – and their implications for understanding human cognition and behavior, will be discussed.

3 semester hours

PSYCHOLOGY 307

Cognitive Psychology

This course will focus on recent advances in the understanding of thought processes. There will be a focus on attention, perception, memory, imagery, problem solving, language, intelligence, creativity, and dreaming.

3 semester hours

PSYCHOLOGY 309

Industrial/Organizational Psychology

This course provides an application of psychological principles to industry, business, transportation, communications, institutions, leadership, and consumer behavior.

3 semester hours

PSYCHOLOGY 310

Human Sexuality

Physiological and psychological components of human sexuality, and their interaction will be discussed. There will be a focus on health and social issues and on individual, gender, and cultural differences.

3 semester hours

Psychology

PSYCHOLOGY 314

Educational Psychology

Psychological concepts, principles, theory, and research will be applied to the teaching and learning process. There will be a focus on growth and development, adjustment and personality, learning, measurement, and evaluation.
3 semester hours

PSYCHOLOGY 316

Current Topics in Psychology

Examination of one or more currently prominent topics in psychology, such as memory reconstruction, sexual orientation, emotional intelligence, brain plasticity, or hate crimes.
3 semester hours

PSYCHOLOGY 321

Research Methods

Students will explore and evaluate the validity of various experimental and non-experimental research strategies and gain experience collecting psychological data, in groups and individually. The course provides foundations of statistical analysis, including both descriptive and introductory inferential statistics.
3 semester hours

PSYCHOLOGY 345

Health Psychology

This course will explore how psychological theories are applied to behaviors associated with health. Students will examine the cognitive and behavioral processes associated with a wide range of mental and physical health activities. Theories and research from clinical, social, developmental and biological backgrounds will be discussed in regards to their application to health behaviors. Specific topics will include stress and coping, drug and alcohol use, social support, health stigmas, patient/provider interactions, pain and pain management, and disorders related to health.
3 semester hours

PSYCHOLOGY 346

Animal Behavior

This course integrates the proximate and ultimate causes of behavior through survey of key concepts, theories and models in the field of Animal Behavior. Students will explore the mechanistic causes of behavior including the, genetic, hormonal, neural and environmental influences on behavioral development and expression. Students will examine behaviors important to survival (such as finding food and avoiding predators) and those important to reproduction (such as selecting mates) while considering the manner in which these behaviors are shaped and constrained by ecology and evolutionary history. Students will actively ex-

amine classic theories and research in this area, and compare and contrast it with modern scientific perspectives from numerous disciplines.
3 semester hours

PSYCHOLOGY 348

Psychology of Women

This course will cover various aspects of the psychology of women such as gender stereotypes and biases, gender comparisons social situations, women and work, love relationships, women and psychological disorders, and violence against women. Prerequisite Course: PSYC 103 and 201 or 202
3 semester hours

PSYCHOLOGY 355

Sports Psychology

A study of the psychological foundations of physical activity. An overview of the psychological and mental factors that influence and are influenced by participation and performance in sports, exercise and physical activity. Included are applications of the knowledge gained through research to everyday settings.
3 semester hours

PSYCHOLOGY 370

Forensic Psychology

Surveys the overall intersection of psychology and the American court system. Emphasis will be placed on issues related to clinical psychology/psychiatry in the criminal justice system such as sanity evaluation, criminal profiling and assessment of dangerousness. Students will explore how forensic psychologists have been involved in the jury selection process and have contributed to our understanding, of eyewitness testimony (limitations of memory) and the detection of deceit through the polygraph and other techniques. Finally, students will explore how professionals trained in developmental, organizational, and clinical psychology interact with the court system when they serve as "expert witnesses" in a variety of civil and probate matters.
3 semester hours

PSYCHOLOGY 375

Psychology of Stigma

This course will broadly explore the psychological foundations of stigma, as well as the ramifications of being stigmatized. Theories as to why people stigmatize others, how this is justified and rationalized, and how people cope with being stigmatized will be explored. Specific topics will include racism and discrimination, social exclusion, gender and sexuality bias, stigma consciousness and self-concept, ageism, and taboo behavior. Students will integrate theories of stigma with other modern

psychological principles, and will actively discuss and write on these concepts.
3 semester hours

PSYCHOLOGY 380

Biological Psychology

The biological mechanisms underlying human behavior will be explored. This course will focus on evolution, genetics, and the anatomy and physiology of the human brain and nervous system. How these systems are affected and impacted by sensory systems, movement, waking and sleeping, homeostasis, hormones, sexual behavior, emotions, learning, memory, and language will be discussed.
3 semester hours

PSYCHOLOGY 381

Drug Effects and Behavior

Fundamentals of psychopharmacological research with emphasis on human drug-taking behavior will be discussed. A discussion of the various psychoactive drugs and implications of their use will occur.
3 semester hours

PSYCHOLOGY 385

Statistical Methods in Psychology

This course will provide the student with an overview of basic statistical theories and methodologies used in modern psychological research. Topics will include the theoretical basis, application, and methodologies involved in descriptive statistics, correlations, t-tests, ANOVAs and regressions.
3 semester hours

PSYCHOLOGY 390

Psychology Research Practicum

This course is designed to give students the opportunity and experience of assisting with empirical research in psychology, under directed mentorship of a faculty member at UB. Prior approval by that faculty member is required. Directed mentorship in a psychology laboratory outside of UB will be considered. Students will learn about the ethics involved in human research, and will assist a faculty member in their research through activities such as participant recruitment, survey administration and other forms of data collection, data entry, and empirical literature review. Students will provide a written summative overview of their experience at the end of the semester. This course is by instructor permission only, and is limited to psychology (or closely related area) majors with a minimum of sophomore standing and a 3.3 cumulative GPA.
2 – 4 semester hours

Psychology • Retailing

PSYCHOLOGY 395

Senior Thesis in Psychology

Students work individually with their advisor to produce an integrative review or conduct empirical research on a specific topic within psychology.

3 semester hours

PSYCHOLOGY 398

Careers in Psychology (Internship)

This course is designed to give students practical experience applying their knowledge of psychology or psychology related principles to an actual career or work setting. Internships may take place in local businesses, mental health and crisis centers, schools, residential settings, criminal justice programs, camps, college campuses, hospitals, community centers and other related environments. Students must have a designated, qualified supervisor within the work environment. Students provide written documentation that relates their knowledge to the work setting. This course is by instructor permission only.

1-6 semester hours

PSYCHOLOGY 399

Individual Study in Psychology

An opportunity to study topics not covered in regular course offerings or to carry out an individual course of instruction.

1-6 semester hours

PSYCHOLOGY 407

Psychology of Consciousness

This course will focus of all aspects of consciousness. Topics include sleep and dreams, meditation and prayer, yoga, daydreaming, creative insights, extrasensory perception, spiritual experiences, drug-induced states, hallucinations, and the mind-body issue.

3 semester hours

Retailing

RETAILING 180

Seminar in Professional Development

Surveys retail and related career areas, entry requirements and employment opportunities. Students are provided with opportunities to develop pertinent retailing related resumes, professional portfolios and interview techniques, as well as letters of application. Detailed study of the current job market and business ethics are also included.

3 semester hours

Offered: Alternating semesters annually

RETAILING 201

Retail Advertising and Fashion Promotion

Principles and methods of advertising and pro-

motion for producers, manufactures and retailers with emphasis on the retailers most often used media — the newspaper. Varying advertising approaches of the mass merchandiser, the prestigious department store and the specialty store are included. Additionally, students work on individual or group assignments in special events planning, visual merchandise, direct marketing, publicity, newspaper and magazine advertising. The role of the retail buyer and product developer in the advertising function in the planning and budgeting of ads is also included.

3 semester hours

Offered: Alternating semesters annually

RETAILING 202

Retailing Mathematics

A functional and realistic approach to retailing principles and operations by the application of mathematical formulas and procedures. Emphasis on income statements, pricing techniques, markup, markdown, sales volume, inventory control, merchandising terminology, and merchandising planning. Math placement test must be taken.

3 semester hours

Required: A grade of at least a "C" to enter

Retailing 304

Offered: Alternating semesters annually

RETAILING 203

Fashion and Retail Buying I

The study of buying theory and techniques for department stores and specialty retailers. Analyzes the buying function and examines how buyers' responsibilities vary in different types of merchandising organizations. Study of the principles, procedures, and techniques practiced by merchandisers of fashion goods in determining resources to select, and assortments to buy includes private label development.

3 semester hours

Offered: Alternating semesters annually

RETAILING 205

Textiles I

Basic concepts of textiles dealing with fibers, yarns and methods of fabric construction. Specific laboratory assignments devoted to natural and synthetic fiber identification and testing. \$50 lab fee.

3 semester hours

Offered: Alternating semesters annually

RETAILING 206

Textiles II

Continuation of textile concepts including the study of films, foams, laminated fabrics, fiber webs, knitted constructions, knotted fabrics,

laces and flocked fabrics. In depth study of aesthetic and functional fabric finishes with emphasis on specific needs of the clothing and home furnishings industries. Laboratory work applies industry testing standards to individual fabrics. Woven, knitted, and applied fabric patterns are explored using a variety of mediums including CAD. CAM software. Students are responsible for submitting testing results and aesthetic development projects in addition to preparing sample books of commercially produced designs and functional finishes. Prerequisite: RETL 205. \$50 laboratory fee.

3 semester hours

Offered: Alternating semesters annually

RETAILING 207

Strategies of Selling

Development of professional selling techniques necessary for efficiency and success in all phases of retailing and wholesaling. Expertise in a retail product line is developed through a product research project.

3 semester hours

Offered: Alternating semesters annually

RETAILING 280

Industry Internship

Paid work experience in a faculty-approved retail organization. Six week full-time on-the-job assignment combined with written research into corporate structure and marketing strategy. Holiday selling season of sophomore year. Prerequisite: 2.5 Q.P.R. Student must maintain 2.5 Q.P.R. during the internship semester. Fashion Merchandising and Retailing majors only.

3 semester hours

Offered: Alternating semesters annually

RETAILING 300

Mass Merchandising and Marketing

An analytical study of national and multi-national mass merchandising organizations that include origin, concepts, operations, technology, and profitability. Comparison of in-store mass merchandisers and non-store catalog retailers, on-air merchandisers, and on-line marketers. Students research one in-store and one non-store mass merchandiser of their choice in depth. Students prepare a catalog, an on-air, and an e-tailing presentation using a mass market approach. Students utilize "CATALOG," "STORY-BOARD," software to prepare presentations. Students explore the benefits of social media on the mass market. Prerequisites: RETL 201, RETL 204, RETL 207 and RETL 213; open to juniors and seniors only.

3 semester hours

Offered: Alternating semesters annually

Retailing • Science • Social Sciences

RETAILING 304

Fashion and Retail Buying II

Inventory and stock control procedures, analysis of consumer demand in the buying and marketing of fashion products. Six month budget planning of sales, goods, and promotional activities. Spreadsheets and computer applications are used to plan, analyze, and adjust retailing activities by revisions in quantities and merchandise assortments. Practice in buying from a variety of domestic and international resources. Prerequisites: RETL 102 with a grade of "C" or better and RETL 203.

3 semester hours

Offered: Alternating semesters annually

RETAILING 307

Surface Design I

Introduction to the business of Textile Surface Design. Course focus is on applied surface designs using natural and geometric motifs as they apply in a variety of fashion markets including infant's and children's, women's, men's, domestics and paper goods. Students research current market design and color trends. Using classic, modern, or ethnic motif students work with layout, repeat size and color ways. Students develop their own collection libraries in paper and disc formats. Students design applied patterns and alternative color ways using "DESIGN and REPEAT" and "EASY COLORING" CAD/CAM software. Students prepare portfolios of their best designs. Open to juniors and seniors only. Prerequisites: RETL 205, RETL 206, Design 103. \$50.00 lab fee.

3 semester hours

Offered: Alternating semesters annually

RETAILING 313

Organizational Management

A study of the management decisions faced by the retail executive in today's marketplace. Topics include locations, retail store layout, security, the customer service mix, retail credit arrangements and their cost-benefit relationships. Human resource concerns include recruitment, personnel changes, retraining and layoffs; employee benefits and their impact on both morale and budgets. Students research in-depth one of the top international retailers for practical solutions to a profitable retail environment. Prerequisite: Retailing 201, and Marketing 305; junior and seniors majors only. May not be taken same semester as Fashion Merchandising 270.

3 semester hours

Offered: Alternating semesters annually

RETAILING 330

International Fashion Marketing/Product Development

An examination of international trade for textile and apparel industries. This course studies supporting agencies, foreign manufacturing, distribution, financing, transportation, tariffs and customs regulation. The student will be required to research exporting and importing a product and to prepare both a written and oral presentation. Prerequisites: RETL 205 and RETL 206.

3 semester hours

Offered: Alternating semesters annually

RETAILING 398

Internship Experience

Field study of an organization in action, Students participate in an internship experience at an outside organization in the Fashion or Retail Industries. Students receive a performance evaluation from their supervisor in that organization and from an FM faculty evaluator who will visit the internship site periodically during the term. Students submit a paper with an analysis of their experiential learning. Offered: Every semester

3 semester hours

Offered: Alternating semesters annually

RETAILING 399

Independent Study in Fashion Merchandising, Textiles or Related Retailing Techniques

Independent study in fashion merchandising, textiles or related retailing techniques. Prerequisite: B.S. Degree Fashion Merchandising and Retailing seniors only; permission of chair. A three-credit internship is possible which combines one-credit of work experience with two-credits of independent research.

1-3 credits

Offered: Alternating semesters annually

Science

SCIENCE C101

Our Environment: The Earth

The scientific examination of our planet focusing on the interaction of astronomy, biology, chemistry, geology, and physics, in the formation, evolution, and dynamics of the Earth.

2 lecture periods; 1 two-hour laboratory; 3 semester hours

SCIENCE C102

Humans and the Environment

A scientific examination of the human organism and the interactions between humans and the environment as they affect not only humans but also the health and viability of home planet Earth.

2 lecture periods; 1 two-hour laboratory; 3 semester hours

SCIENCE C106

Microbes in Our World

A course designed to provide the student with an understanding of the role of microbes in our lives, and their real and alleged effects on the environment. Emphasis is placed on both the beneficial and the detrimental effects of microbes on humans and the environment.

2 lecture periods; 1 two-hour laboratory; 3 semester hours

SCIENCE C201

Our Environment: The Oceans

The scientific examination of the geological, physical, chemical, and biological characteristics of the oceans. The course will include laboratory and field studies of local marine environments. Prerequisite: SCI C101 or SCI C102 or an equivalent course.

2 lecture periods; 1 three-hour laboratory; 3 semester hours

Social Sciences

SOCIAL SCIENCES C201

Introduction to the Social Sciences I

A survey of the development of the social sciences, how they were shaped by historical forces, and their role in understanding society. The emergence of economics, anthropology, sociology, psychology, and political science from social philosophy. Prerequisite: ENGL C101 or department permission. A Core Heritage Course.

3 semester hours.

SOCIAL SCIENCES 207

World Regional Geography

A survey of world physical and human geographic patterns. Each world region will be analyzed in terms of its environment and resource distributions, agricultural systems and rural development, population growth and characteristics, and patterns of urbanization and industrial growth. Considerable emphasis will be placed on the non-Western world, issues of sustainable development, and the changing nature of geography. Students will be required to write one research paper on a particular world region of their choice.

3 semester hours

SOCIAL SCIENCES 300

Seminar in Social Science Methods

An introduction to the methods of research and criticism employed in history, economics, anthropology, sociology, psychology, and political science. Social Sciences majors will gain experience in both statistical and interpretative methods that will be useful for their senior thesis. PC access required. Prerequisite: Sophomore standing. Required of Social Sci-

Social Sciences • Sociology • Spanish

ences majors in the junior year.
3 semester hours

SOCIAL SCIENCES 395

Senior Thesis

Students work individually with their advisors, preferably starting in the second semester of the junior year, to research and write a thesis on a topic related to the social sciences. This topic may be the extension of an idea first developed in the Seminar on Social Science Methods. Prerequisite: SOSC 300. Required of Social Science majors in the senior year.
3 semester hours

SOCIAL SCIENCES 398

Internship

Professional, supervised, unpaid work in an organization related to career goals. Prerequisite: Permission of advisor and School Director.
3 semester hours

SOCIAL SCIENCES 399

Independent Study

For the student who wishes to specialize in advanced projects not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Sociology

SOCIOLOGY 101

Principles of Sociology

Fundamentals of sociological study. Concepts, logic, and methods of sociology. Social interaction and social change in groups, institutions, and society.
3 semester hours

SOCIOLOGY 102

Sociology of Social Problems

Analysis of major problems in modern society; existing methods for dealing with these problems.
3 semester hours

SOCIOLOGY 118

Introduction to Criminal Justice

This course is intended to introduce you to the field of criminal justice and criminology. More specifically, we will explore how the American criminal justice system interacts with society and reacts to societal issues. In turn this will help us understand how society functions in response to the criminal justice system.
3 semester hours

SOCIOLOGY 204

Marriage and the Family

Courtship, marriage patterns, social sexual ad-

justment. Social interaction within the family. The family and society.
3 semester hours

SOCIOLOGY 231

Cultural Anthropology

Origins and growth of culture. Pattern of culture as related to personality and social structure. Comparative cultures.
3 semester hours

SOCIOLOGY 270

Sociology of Deviance

Specialization into deviance; social typing; deviant subcultures; deviant identity; accommodation to deviance; public and informal regulation of deviance; treatment approaches to deviance; theoretical frameworks. Implications for policy-making. Prerequisite: SOC 101
3 semester hours

SOCIOLOGY 299

Selected Topics in Sociology

A course with variable topic focus; dependent upon student needs and the expertise of the instructor.

SOCIOLOGY 310

Race and Ethnicity

Racial and ethnic stratification; causes and consequences of prejudice and discrimination; problems of assimilation and pluralism; racial and ethnic conflict in the U.S. and in other societies.
3 semester hours

SOCIOLOGY 311

Juvenile Delinquency

Analysis of delinquency causation, methods of treating delinquents, juvenile court procedures, interrelationship of police and youth, and problems of prevention.
3 semester hours

SOCIOLOGY 315

Criminology

A critical examination of the conditions under which crime and delinquency occur. Theories of crime and punishment. Treatment of offenders.
3 semester hours

SOCIOLOGY 348

Religion & Society

A sociological and anthropological analysis of religion as a universal social institution, with emphasis upon theories of the origins of religion, relationships of religion to other social institutions, study of selected Western and non-Western religions in their socio-cultural contexts, religion as a source of social equilibrium and conflict, types of religious movements.
3 semester hours

SOCIOLOGY 355

Globalization

This course examines the phenomenon of globalization as an economic, political, and cultural reality. The focus of lecture and discussion will arise through consideration of treatment of the issue by current social theorists: e.g., Roland Robertson, Peter Berger, Immanuel Wallerstein, Mike Featherstone, Thomas Friedman. Critics of globalization will also be read and considered: e.g., Lourdes Beneira, John Cavanaugh, Joseph Stiglitz.
3 semester hours

SOCIOLOGY 399

Independent Study

For the student who wishes to specialize in advanced projects not covered by regular course offerings. Individual or small group conferences with designated advisor. Prerequisite: Permission of advisor and School Director.
1-6 semester hours

Spanish

SPANISH 101

Elementary Spanish I

Introduction to Spanish, stressing pronunciation, aural comprehension, and basic conversation. The fundamental principles of grammar. Training in reading comprehension and writing.
3 semester hours

SPANISH 102

Elementary Spanish II

Continuation of Spanish 101. Prerequisite: SPAN 101.
3 semester hours

SPANISH 103

Intermediate Spanish I

Conversation based on the reading of modern prose texts. Drill in written and oral self-expression. A review of the principles of grammar. Prerequisite: Spanish 102 or two years of high school Spanish.
3 semester hours

SPANISH 104

Intermediate Spanish II

Continuation of Spanish 103. Prerequisite: SPAN 103 or three years of high school Spanish.
3 semester hours

SPANISH 399

Individual Study

Special projects on topics not studied in detail in regular courses, or projects on topics included in regular courses when those courses are not available. Prerequisite: Permission of

Spanish • Theatre • World Religion

School Director.
1-6 semester hours

Theatre

THEATRE 103

Introduction to Theatre

The art of the theatre: its literature, structure, and aesthetics. Contributions of the playwright, actor, architect, director, designer, and producer are examined through lectures, presentations by visiting artists, class discussion, projects, and attendance at theatrical performances.

3 semester hours

THEATRE 233

Role Study and Characterization

The creative processes by which an actor may construct an interpretation are studied in theory and pursued in practice with heavy emphasis upon scenes.

3 semester hours

World Religion

WORLD RELIGION 102

Introduction to Eastern Religions

This course offers students a comparative and historical introduction to Hinduism, Buddhism, Confucianism, and Taoism. Attention is given to primary texts and rituals, historical and doctrinal development, socio-cultural setting and political impact.

3 semester hours

WORLD RELIGION 103

Introduction to Western Religions

This course offers students a comparative and historical introduction to Judaism, Christianity, and Islam. Attention is given to primary texts and rituals, historical and doctrinal development, socio-cultural setting and political impact.

3 semester hours

WORLD RELIGION 204

Hinduism

This course introduces students to the major textual, practical, communal, doctrinal, and philosophical features of Hinduism. Special attention is given to Hindu mythology, the Upanishads, and the Bhagavad-Gita.

3 semester hours

WORLD RELIGION 205

Buddhism

This course introduces students to the major textual, practical, communal, doctrinal, and philosophical features of Buddhism. Special attention is given to Theravada, Mahayana,

and Tantric texts.
3 semester hours

WORLD RELIGION 207

Judaism

This course introduces students to the major textual, practical, communal, doctrinal, and philosophical features of Judaism. Special attention is given to the Hebrew Bible (Tanakh) and the Holocaust. Differences among contemporary forms of Judaism (Orthodox, Reform, Conservative, and Reconstructionist) are studied in some detail.

3 semester hours

WORLD RELIGION 208

Christianity

This course introduces students to the major textual, practical, communal, doctrinal, and philosophical features of Christianity. Special attention is given to the New Testament. Differences among contemporary forms of Christian community (Roman Catholicism, Orthodoxy, and Protestantism) are studied in some detail.

3 semester hours

WORLD RELIGION 215

Unification Philosophy

This course intends to familiarize students with the unique nature of Unification Philosophy and invite reflection on the ways in which it relates to the Western philosophical tradition. Students will review key areas of inquiry in Western philosophy as well as practical applications of such inquiry. In the process, learners will examine the ways in which these areas of inquiry are addressed in Unification Thought texts and supporting literature. It is expected that the general framework and method of Unification Philosophy, with whatever its strengths and limitations, will become clear through the learning process and encourage speculation and critical discourse on its potential for further development.

3 semester hours

WORLD RELIGION 216/PHILOSOPHY 216

Philosophy of World Religions

A comparison and analysis of the philosophical foundations of some of the world's major religions. Among the religions studied are: Judaism, Christianity, Islam, Hinduism, Buddhism, and Confucianism.

3 semester hours

WORLD RELIGION 229

Confucianism

An examination of the major figures, texts, and ideas of Confucianism. Attention is given to social setting and political influence.

3 semester hours

WORLD RELIGION 230

Taoism

An examination of the major figures, texts, and ideas of Taoism. Attention is given to the dialogue with Confucianism.

3 semester hours

WORLD RELIGION 278

Religion, Peace, and War

This course examines economic, political, and cultural aspects of religious conflict, and proposes a theory for conflict mediation that entails recognizing the key role played by religious institutions and 'cultural rationality' within society. Models of conflict mediation are studied. These theories are practiced in case studies and class models. The relationship of interreligious and conflict mediation is considered.

3 semester hours

WORLD RELIGION 301

World Scriptures

A Study of primary source readings in world religious literature. Attention is also given to critical research methods. In the course we will read from the Upanishads, Bhagavad-Gita, Dhammapada, Koran, Tanakh, New Testament, and the Analects.

3 semester hours

WORLD RELIGION 305*

Comparative Religious Ethics

A comparative study of Hindu, Buddhist, Christian, and Islamic accounts of human rights, ecology, family, violence, and economy. The possibility of developing a universal ethic is considered. Topics vary from semester to semester.

3 semester hours

WORLD RELIGION 348/SOCIOLOGY 348

Religion and Society

A sociological and anthropological analysis of religion as a universal social institution, with emphasis upon theories of the origins of religion, relationships of religion to other social institutions, study of selected Western and non-Western religions in their socio-cultural contexts, religion as a source of social equilibrium and conflict, and types of religious movements.

3 semester hours

WORLD RELIGION 373

Islam and Democracy

This course aims to address the following questions: Are Islam and democracy compatible? How is religious interest defined? How are Islamic images and institutions used? What is the historical relationship between Islam and politics? When and under what conditions

World Religion

is Islam publicized and politicized? Is Islam compatible with modernity? Is it possible to be modern and Muslim at the same time? How do Islamic scholars deal with the questions of “difference”, democracy, and science? The major task of this course will be to assess how religion makes an impact on politics, state and society and in turn is impacted upon and potentially transformed by society, politics and the state. Instructor’s permission may be required for this course.

3 semester hours

WORLD RELIGION 374

Religion and Politics in the Middle East

This course examines the intersection of religion and politics in the current landscape of the societies of the Middle East. While the West has emphasized separation of church and state, numerous nations and political parties in the Middle East emphasize the relationship between the two and the guiding role that religion is meant to play in political decision making. This course also examines the impact that secularization has had upon religion in the Middle East and it notes how this has played a key role in the development of Islamic militarism and the strengthening of some of the religiously based political parties of the region. Instructor’s permission may be required for this course.

3 semester hours

WORLD RELIGION 375

Religion and Genocide

This course examines religion and politics in the Middle East. Histories of Judaism, Christianity, and Islam, their shared and opposing religious and social ideas, are studied. Particular attention is paid to the state of Israel and the question of a Palestinian state. Topics also include the Six Day War, issues of sovereignty and land, terrorism, and geopolitics. Instructor’s permission may be required for this course.

3 semester hours

WORLD RELIGION 395

Senior Thesis Seminar

Instructor’s permission may be required for this course. Prerequisites: Senior standing, world religions major. Introduction to and preparation of a senior research thesis.

May be taken for 6 semester hours

WORLD RELIGION 428

Socio-Political Implications of Religion

Once considered an archaic force, destined to wither away as nations underwent rapid economic development, religion has instead

gained renewed interest as a factor in contemporary political life. However, this is not merely a course on comparative religion. It is a course that surveys and compares the role of religion in global politics, international relations, and domestic policy. It is clear that religion has and continues to play a major role in the politics of nation-states and the development of the international system. While the world seemed primarily focused on the recent role of political Islam, this course recognizes the role of the major religions (defined as those faiths with a “world-wide” presence) in the shaping of politics in the domestic contexts of nations and world politics. Instructor’s permission may be required for this course.

3 semester hours