Course Descriptions

Following are the courses offered in the undergraduate program. Not all courses listed are offered on both campuses nor are they necessarily offered every semester. Students should consult their faculty advisors and the course schedules prepared for each campus. Courses are listed alphabetically by discipline.

Two terms frequently encountered in course disciplines are “prerequisites” and “corequisites.” Whenever “prerequisite” is used, it means that the course identified as a prerequisite must be taken and successfully completed before the course for which it is a prerequisite. On the other hand, “corequisite” means that a course identified as corequisite must be taken at the same time as its corequisite.

Courses numbered 100 to 198 are usually prerequisites to more advanced courses, and the student should plan a program in order that intermediate courses, numbered 200 to 298, can be scheduled after completing introductory courses. Courses numbered 300 and above are generally taken only by third- and fourth-year students.

A hyphen separating two course numbers (e.g. 101-102) indicates that the course sequence must be taken in the order given. A comma separating course numbers (e.g. 101,102) indicates that the courses may be taken independently of one another in any order.

Recognizing that there are entering students who are not ready to do degree level work in one or more subjects, the University offers developmental level courses, numbered 011 to 099, which are designed to help students strengthen their preparation for learning at the college level. Students desiring such preparatory work may also enroll in the University summer session.

For course rotations, refer to the following codes: fall (F); spring (S); summer (SUM); Summer Session I (SUM I); Summer Session II (SUM II); alternate years (ALT); every other fall semester (F-ALT); every other spring semester (S-ALT); every third semester (THI); as arranged (AR); on demand (DEM); varies (VAR); odd years (O); even years (E); Albert A. Sheen Campus, (AAS); Orville E. Kean Campus (OEK).

ACCOUNTING (ACC)

ACC 100. CONCEPTS IN FINANCIAL ACCOUNTING. Designed as a mini-course for non-business majors, this course explores some of the major concepts in the financial accounting field. 1 credit

ACC 201. FINANCIAL ACCOUNTING. This course provides an introduction to the basic principles of financial accounting, the accounting cycle, the study of fundamental accounting concepts, and impact of the accounting treatment of business transactions on the income statement, balance sheet, and statement of cash flows. Prerequisite: Students must have successfully completed MAT 023 and 024 or received a satisfactory score on the mathematics or accounting placement exam. 3 credits

ACC 202. MANAGEMENT ACCOUNTING. This course provides an introduction to management accounting principles, cost-volume-profit, cost behavior, cost management, budgeting, responsibility accounting, capital budgeting, cost allocation, variable and absorption costing, and the use of relevant information in decision-making. Prerequisite: ACC 201. 3 credits

ACC 203. HOSPITALITY ACCOUNTING. Utilizing the Uniformed System of Accounts for hospitality operations (as approved by the American Hotel and Lodging Association), students will study revenue and expense accounting; inventory methodology; financial statement preparation; ratio analysis; accounting for intangible assets and payroll control. Prerequisite: ACC 201. 3 credits

ACC 301. INTERMEDIATE ACCOUNTING I. This course provides an in-depth study of the theoretical and conceptual foundations of accounting, the development of generally accepted accounting principles (GAAP), and the nature of accounting information. The course explores the application of GAAP and international financial reporting standards to the preparation of financial statements with particular treatment of components like cash, receivables, inventories, fixed assets and their expiration. Prerequisite: ACC 202. 3 credits

ACC 302. INTERMEDIATE FINANCIAL ACCOUNTING II. This course provides an in-depth study of the theory and practice surrounding accounting topics like tangible assets, short and long term liabilities, elements and structure of stockholders' equity and investments. The course exposes students to cases and real life situations that would facilitate application of GAAP and relevant International Financial Reporting Standards (IFRS) in accounting decision-making. Prerequisite: ACC 301. 3 credits

ACC 303. INTERMEDIATE ACCOUNTING III. This course provides an in-depth study of the theory and practice surrounding the accounting topics: revenue recognition, accounting for income taxes, pensions and post-retirement benefits, leases, changes and error analysis, statement of cash flows, and disclosure issues. Prerequisite: ACC 302. 3 Credits

ACC 310. GOVERNMENTAL AND NOT FOR PROFIT ACCOUNTING. This course provides an in-depth study of the principles of accounting and financial reporting for state and local governments. Not for profit accounting as well as coverage of accounting for colleges and universities and health care organizations is also covered. Prerequisite: ACC 202. 3 credits

ACC 315. FUNDAMENTALS OF INCOME TAX. This course provides an introduction to the U.S. income taxation concepts with an emphasis on business and personal tax planning strategies. This course exposes students to approaches and skills needed to prepare individual tax returns and understand tax administration. 3 Credits

ACC 320. ACCOUNTING INFORMATION SYSTEMS. This course examines the important role that accounting information systems play in the business environment. This course also emphasizes the accounting information system's function of collecting, recording, and storing business data in order to produce the information for sound business decisions.undamental concepts of accounting information systems emphasizing analysis, design and implementation of information systems, and internal controls are also examined. Prerequisite: ACC 201. 3 Credits

ACC 440. MANAGERIAL COST ACCOUNTING. This course explores the development and use of accounting data in managerial decision-making, planning and control. Topics covered include job, process and standard cost systems, cost volume-profit analysis, differential and incremental analysis, contribution margin analysis, and capital budgeting. Prerequisites: Two degree-credit courses in MAT, ACC 202. 3 Credits

ACC 442. AUDITING. This course introduces the concepts and procedures underlying contemporary auditing. The course also examines the roles, responsibilities and legal liabilities of internal and external auditors in the United States and their professional organizations. Topics developed include internal control systems and their evaluation; audit evidence and problems related to the audit of particular assets, liabilities, capital and income accounts. Nature of verification, audit evidence, testing, the elements of effective control structures, the use of statistical sampling, and evolution of external, internal and comprehensive auditing are also examined. Prerequisites: Two degree-credit courses in MAT, ACC 302. 3 credits

ACC 443. ADVANCED ACCOUNTING. This course explores the theory and application of accounting for branch operations, foreign operations, expansion by subsidiary companies, and various forms of consolidated statements. Also included are accounting for partnership formation; changes and liquidation; and accounting for estates and trusts. Prerequisites: Two degree-credit courses in MAT, ACC 302. 3 credits

ACC 445. ACCOUNTING SEMINAR. This course introduces current controversies and unsolved problems in accounting. The course includes recent and historical views presented in the leading accounting and business periodicals. Prerequisite: ACC 443 or 24 credits in ACC. 3 credits

ACC 446. FORENSIC ACCOUNTING. This course explores concepts and skills necessary for examining financial fraud. Content includes fraud schemes, prevention and detection of fraud, ethics, forensic

software tools, auditing techniques, and the law and regulations governing fraud cases. Coursework focuses on preparing students interested in earning the Certified Fraud Examiner (CFE) credential. Prerequisite: ACC 201 or equivalent. 3 credits

ACC 448. SELECTED TOPICS IN ACCOUNTING. This is an elective course designed for junior and senior undergraduate students in accounting. The course includes areas of special interest in business. Individual topics will be announced at the beginning of each semester. This course may be repeated for credit under varying topics. Prerequisites: To be announced with each topic. 3 credits

ACC 450. CMA EXAM PREPARATION FINANCIAL DECISION MAKING. This course prepares students to pass the Financial Decision Making section of the CMA exam. Topics covered are financial statement analysis, corporate finance, decision analysis, risk management, investment decisions and professional ethics. Prerequisite: ACC 302 or equivalent. 1.5 credits

ACC 451. CMA EXAM PREPARATION FINANCIAL REPORTING, PLANNING, PERFORMANCE AND CONTROL. This course prepares students to pass the Financial Reporting, Planning, Performance and Control section of the CMA exam. Topics covered are external financial reporting decisions, planning, budgeting, and forecasting, performance measurement, cost management and internal controls. Prerequisite: ACC 440. 1.5 credits

ACC 499. PROFESSIONAL RESEARCH FOR ACCOUNTANTS. This course examines professional research skills critical in the accounting profession. Students identify research problems and authoritative sources, develop search criteria, gather and evaluate data, and formulate conclusions using a real-world case study approach in the areas of financial accounting, tax, and audit. Students prepare a written report of their research and findings, and present recommendations. Prerequisite: ACC 302. 3 credits

AGRICULTURE (AGR)

AGR 101. INTRODUCTION TO AGRICULTURE. This course will examine the definition of agriculture, types of agricultural enterprises, and practices and factors regulating them, agricultural history and development in the Caribbean, influences of the environment and water cycle on agriculture, the nature of weather cycle and climate, the climates of the Caribbean area and their influences on agriculture. This course will also explore the adaptation of crops and live-stock, soils, and world agriculture. 3 credits

AGR 110. INTRODUCTION TO CARIBBEAN AND TROPICAL AQUACULTURE. This course will provide an overview of the aquaculture industry in the Caribbean, including requirements for the industry, factors that have influenced its development, main farmed species, markets, producing countries, planning for a development strategy considering biological, socioeconomic, ecological, and regulatory aspects, contribution of sustainable fish farming to food and nutrition security; and implementation of the development process for the aquaculture industry. Two lecture periods per week. 3 credits.

AGR 115. INTRODUCTION TO MARINE AND FRESHWATER AQUACULTURE PRODUCTION. This course will introduce students to the principles and practices applied in the aquaculture/mariculture production and its historical development worldwide. The course will present production methods of fish and shellfish, site selection, species selection, biological and environmental principles, harvesting and processing, marketing strategies, and principles underlying aquatic productivity and levels of management as demonstrated by present practices of aquaculture around the world. Methods related to daily routine and record keeping in an aquaculture facility, fish handling, incubation and early rearing of fish stocks, feed ration calculations, grow out projections, harvesting and transporting of fish will be developed during practical sessions. Two lectures per week. 3 credits

AGR 120. PLANT IDENTIFICATION. This course will provide a basic understanding of the classification, nomenclature, morphology, ecological relationships, associations and uses of common plant species specifically found in the US Virgin Islands and generally in the Caribbean. The course will concentrate on plants found on or close by the UVI Albert A. Sheen Campus. 3 credits

AGR 125. PLANT SCIENCE. This course provides an introduction to various aspects of plants including growth strategies, cellular makeup, genetics, and reproduction. This course will focus on the introduction to plant origin, classification, morphology, and basic plant growth processes. Emphasis will be on the various plant parts, functions, and reproductive structures. Basic principles will be illustrated by looking at both agronomic and horticulture crops. The relationship between plants and people, plant morphology, physiology, plant production, the environment, soil, and other related areas will also be evaluated. The

plant science laboratories will provide opportunities for hands-on application of concepts of plant science through the use of basic plant science research and production practices. Labs will entail plant growth and development of monocot and dicot plants; basic plant anatomy and growth stages; methods of plant reproduction and seed production; basic plant genetics and plant physiology; and identification of uses of crops grown in the Caribbean. 3 credits.

AGR 130. GENERAL HORTICULTURE. Introduction to principles and practices of horticulture with emphases on the botanical concepts, production and management practices, propagation, plant protection, and harvesting of fruits, vegetables, herbs, and flowers under indoor and outdoor conditions. This course also encompasses the new-age specialty horticultural systems, landscape management practices, and career opportunities in the horticultural industry. Two lectures, one laboratory period per week. 3 credits

AGR 135. LANDSCAPE DESIGN AND MANAGEMENT. Students will learn the importance of soil and its interaction with plants. The course will explore landscape site evaluation and cover technical topics of turfgrass selection and installation, installing landscape plants, proper pruning, irrigation, greenhouse management, pests and disease identification and control, and conclude with sustainable landscape design. 3 credits

AGR 140. INTRODUCTION TO SOIL SCIENCE. Students will gain an understanding of what soil is and the factors contributing to soil types and soil properties. The chemical, biological, and physical properties of natural soils and soil management will be evaluated. Topics will also include properties such as texture, structure, soil pH, and soil porosity. The relationship between crops and soils, conservation of soil and water resources, and the economic use of fertilizer will be discussed. 4 credits.

AGR 201. AGRICULTURAL ECONOMICS. This course will examine farming on a business enterprise basis, the production of agricultural commodities, and price income structure of the agriculture farm marketing system in the U.S. Virgin Islands. Three lectures, one laboratory period per week. Prerequisite: AGR 101.4 credits.

AGR 202. AGRONOMY. This course will examine crop plants in relation the environment, production, harvest practices, group classification. Discussion of soil sciences, properties and use, growth and structure of roots, water-use cropping practices, seedbed preparation will also be explored. Three lectures, one laboratory period per week. Prerequisites: AGR 101. 4 credits.

AGR 203. FARM MANAGEMENT AND PLANNING. This course will examine the principles of farm economics and accounting, analysis, planning, control of the farm business, economics of resource use, and farm enterprises. A farm plan project will be required. Three lectures and one laboratory period per week. Prerequisite: AGR 101. 4 credits.

AGR 204. TROPICAL HORTICULTURE. This course will examine how plant and man interact in the tropics. Types of tropical fruits, vegetables and ornamental plants will be explores with an emphasis on history, distribution, importance, adaptation and use. Production practices, marketing techniques and special problems will be discussed. Each student will be required to grow a garden. Three lectures, one laboratory period per week. Prerequisites: AGR 101 and BIO 142. 4 credits.

AGR 205. FOOD PRESERVATION AND UTILIZATION. This course will examine how foods are processed and stored for consumer use. Nutritional values of various food, preparation techniques affecting nutrition, effects of storage on nutrition, packaging procedures, food preservation and preservatives, and family food budgeting will be explored. Three lectures, one laboratory period per week. Prerequisites: AGR 101, CHE 152, BIO 142. 4 credits.

AGR 206. ANIMAL SCIENCE. This course will examine livestock production in warm climates, principles of animal breeding, anatomy and physiology of reproduction, principles of nutrition and livestock management. This course will provide an introduction to ichthyology, water quality parameters for salt and fresh water fisheries and fish culture. Three lectures, one laboratory period per week. Prerequisites: AGR 101 and BIO 142. 4 credits

AGR 207. EQUINE SCIENCE. This is an introductory and applied science course intended for students with an interest in equine sciences but with limited equine experience. Topics will include breeds, breeding and selection of high-quality horses, reproduction, evaluation, nutrition, and health management to ensure scientifically based management decisions. Three lecture periods per week. 3 credits

AGR 210. AGRICULTURAL COOPERATIVES. This course is an introduction to an in-depth examination of the agricultural cooperative. Students will gain a working knowledge of the concepts, principles, and terminology of agricultural cooperatives through reference materials, presentations by guest speakers and case study analyses. This course covers the basic principles of agricultural cooperatives including types of organizations, legal aspects, governance, membership relations, debt and equity financing, organizational and inter-cooperative problems, and distribution of earnings. This course is designed to introduce students to the agricultural cooperative business model and to encourage them to think critically about why co-ops emerge, the ways in which they differ from other forms of enterprise, and how the model can be used to address current social and economic issues. Two lecture periods per week. Prerequisite: AGR 101. 2 credits

AGR 220. SOIL SCIENCE. Students will be introduced to the ways soil is the foundation of all agricultural activity and terrestrial ecosystems. Soil itself will be defined, and the various physical, chemical, and biological aspects of soil will be introduced. The distribution of soil types geographically, the importance of soil ecology, and the status of soil as a nonrenewable resource will also be covered. The course consists of two hours of lecture and a three-hour field lab weekly. Prerequisite: CHEM 111 . 4 credits.

AGR 221. AQUACULTURE TECHNIQUES. This course is intended to provide an overview of the field of aquaculture, including water quality principles, fish nutrition, feed management, and fish diseases. This course provides instruction in determining the main water quality variables that affect the survival, reproduction, growth, or management of aquatic organisms, the interaction with feed nutrition and feed management, and the relation with disease and parasite problems. Laboratories include hands-on study of water quality monitoring, fish digestive anatomy, the calculation of feed rations, and fish diagnostics. The Aquaculture Practicum series addresses advanced methods in aquaculture, including fish handling, incubation and early rearing of fish stocks, feed ration calculations, grow out projections, and harvesting and shipping of fish. Two lectures, one laboratory period per week. 4 credits.

AGR 223. AGRICULTURAL POLICY AND REFORMS. This course presents an overview of agricultural policy issues internationally, within the United States, in the Caribbean region, and in the U.S. Virgin Islands. The course is designed to help students understand the agricultural policy framework of the U.S. Virgin Islands in a broader context, and to compare U.S. Virgin Islands agricultural policies to policies pursued by other Caribbean jurisdictions, developing countries, and the United States. Students will gain an understanding of how agricultural policymaking both fosters and constrains agricultural activity, and options for policy reform will be discussed. Three lectures per week. Prerequisite: AGR 101. 3 credits.

AGR 225. TROPICAL AGROECOLOGY. This course provides an overview of the science of agroecology as it relates to tropical regions, with emphasis on small island agroecology. This course will investigate both the science and social impact of agroecology in the tropics. The terms agroecology and sustainable agriculture will be explained in detail and defined, and applications of the agroecological perspective to the ecosystems and agriculture unique to the tropics will be discussed. This is an interdisciplinary course; a wide variety of topics and disciplines will be involved in the course material. Prerequisite: AGR 101. 3 credits

AGR 226. FUNDAMENTALS OF HATCHERY PRODUCTION. This course will familiarize students with the routine skills and husbandry procedures associated with working in a fish/shrimp/mollusc hatchery environment. Considerations related to safety standard procedures, biosecurity, brood-stock care, egg incubation, fry/larvae and fingerling rearing techniques, water quality, fish/shrimp/molluscs health, record husbandry data, and monitor the operation of the mechanical systems will be discussed. Experiential learning will be added to the course as possible. Two lectures. 3 credits.

AGR 230. INTEGRATED PEST MANAGEMENT. This course identifies and assesses the basic concepts, principles, and components including anticipation, prevention, observation, and intervention involved in integrated pest management in fields and greenhouses. It covers an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticide options will be discussed with timing and safe handling, storage, drift, safety, environment, residues on produce, legislation, and dose calculation. Hands-on activities will reinforce the theoretical principles taught in the classroom. 3 credits.

AGR 231. BEE KEEPING. This course describes the scientific principles underlying beekeeping as it is practiced today in the subtropical climates and conditions. It will provide students with a comprehensive

program relating to bees, starting a beekeeping program, and the means to maintaining bees in the tropics. Two lecture periods per week. 2 credits

AGR 232. LIVESTOCK PRODUCTION. The livestock production program provides a blend of animal science courses and practical application, ensuring a well-rounded agricultural education. This course is an introduction to farm animal industries, breeds, numbers, distribution, nutrition, heredity, reproduction, health and products. Emphasis is on selection, reproduction, nutrition, management, and marketing of livestock. Additional topics include genetic defects and current domestic and global trends in livestock production. Laboratory activities will reinforce scientific animal production and the importance of livestock and meat industries. 3 credits.

AGR 235. PLANT PROPAGATION. A study of the principles and practices of sexual and asexual propagation of plants used in horticulture. Propagation by seed as well as vegetative propagation including cutting, grafting, budding, layering, division, separation and tissue culture will be discussed. Impacts of environmental factors on plant propagation will also be explained. These principles will be reinforced through labs and field trips. Prerequisites: AGR 101. 3 credits.

AGR 240. VEGETABLE PRODUCTION. This course entails the production principles and cultural practices involved in the growing of vegetable crops. Principles of vegetable production with emphasis on sustainable production practices, market outlets, business aspects, and risk management. Topics will include crop classification and rotation; planting methods; crop climatic conditions, growth and development; soil, water, and pest management; cover cropping; season extension strategies; harvest and postharvest management and marketing. Involves visits to farmer's fields to observe/experience their production enterprises. Students will be engaged in vegetable production labs - hands-on training in the area of vegetable crop production. Prerequisite: AGR 101. 3 credits.

AGR 245. FRUIT PRODUCTION. This course will examine principles and practices of small fruit, tree fruit, and nut culture and production. Morphology, physiology of growth and development, plant establishment, pest management, pruning, training, harvesting, storage, and marketing of commercial temperate fruit and nut crops. Emphasis on sustainable practices. Participation in practical exercises and local field trips is required. Prerequisite: AGR 101. 3 credits

AGR 250. FOREST AND NURSERY MANAGEMENT. This course is an Introduction to tropical and temperate forest ecology and nursery management. Students will be introduced to basic tree biology and physiology. The course will cover the basics of forest and nursery management both temperate and tropical, with specific reference to tropical forest management in the Caribbean. Introduction to identifying Virgin Islands native trees will also be covered in this course. Three lectures per week. 3 credits.

AGR 255. AGRICULTURE INTERNSHIP. This course is designed to provide experiential hands-on, field-based work experiences in agriculture. Internships provide an opportunity for students to link theory with practice and help students network with professionals increasing their opportunities to receive full-time employment after graduation and provide resume worthy experience. The course introduces students to multiple professions within the broad field of agriculture, helping them to narrow down their specific areas of interest early on in their college experience. The internship experience can be paid or volunteer with a business, organization, or government agency and is individually arranged by the student in collaboration with an agriculture faculty member and a supervisor at the workplace. 3 credits

ANTHROPOLOGY (ANT)

ANT 225. INTRODUCTION TO CULTURAL AND PHYSICAL ANTHROPOLOGY. A thorough examination of the concept of culture, the evolution of man and culture, human races, primitive culture and society. (S). 3 credits

ANT 226. INTRODUCTION TO ETHNOLOGY. The comparative study of social systems as different ways of life; an analysis of modern societies in Africa, Asia, Australia, Europe, Oceania, America; examination of selected cultures in the Caribbean. Prerequisite: ANT 225. (DEM). 3 credits

ANT 255, 256. AFRICAN CIVILIZATION. Historical survey of the several major culture areas of continental Africa. Comprises a comparative study of the ways by which the several African peoples treated have handled the basic problems of human existence: origin, self-realization and destiny. (Also listed as HIS 255, 256 and SOC 255, 256.) (DEM). 3,3 credits

ANT 257, 258. THE BLACK EXPERIENCE IN THE NEW WORLD. A study of the slave trade, the conditions of slavery, and the process of Black acculturation in the New World since emancipation. ANT 256 is recommended as a preparatory course. (Also listed as HIS 257, 258 and SOC 257, 258.) (DEM).
3,3 credits

ANT 355, 356. CULTURAL HISTORY OF WEST AFRICA. Deals with the cultural history of West African Sudan - the area between 7 and 17 degrees north latitude and extending from the northwestern border of Nigeria to the Atlantic Ocean. The period covered extends from the 7th to the 19th centuries which permits a discussion of the rise and flowering of (Also listed as HIS 355, 356 and SOC 355, 356.) (DEM).
3,3 credits

ART (ART)

ART 117. BASIC DESIGN. Fundamentals of form, color, organization, structure, and visual perception in two dimensional design. 3 credits

ART 125. SURVEY OF WORLD ART. Survey of the underlying principles of art and the relationships among the arts by tracing the development of painting, architecture and sculpture from their beginnings to the present; cultivation of appreciation and understanding of various periods, artists and media. 3 credits

ART 126. SELECTED PROBLEMS IN WORLD ART. Focus is on some particular problem or approach, varying from semester to semester, such as Pre-Columbian, African, Caribbean, Modern, Contemporary Art, etc. 3 credits

ART 128. DRAWING 1. Develops visual awareness and perceptual acuity and explores expressive potential through the process of drawing. A variety of topics and media present multiple methods of working and of communicating ideas visually. Subject matter includes object study, still life, interior/exterior space, light, self-portrait and the figure. Graphite, charcoal, pastel and ink are explored in order to understand the relationship between means, material and concept. Critical thinking skills are developed through class critiques, presentation of and research into historical and contemporary drawing precedents. 3 credits

ART 150. PAINTING 1. Develops visual awareness and explores expressive potential through the use of color, value, form and creativity exercises. A variety of topics and techniques present multiple methods of working individually and collaboratively and of communicating visually. Areas of study include color theory, abstraction, landscape, still life, and preliminary portraiture. Opaque and transparent water-media on different grounds are explored in order to understand the relationship between means, material and concept. Critical thinking skills are developed through group critiques, a written critique of a local exhibition and oral presentation of an original final piece. Students should expect to spend extra time in the studio when needed. 3 credits

ART 217. DESIGN. Form, color, principles of composition, structure and visual perception in three-dimensional design. Prerequisite: ART 117. 3 credits

ART 218. Caribbean Art I. After a short history of Taino and Carib art and culture, Caribbean Art I will examine Caribbean art from pre-Hispanic times to the 1960s and will showcase the work of a range of native and transplanted artists from the Caribbean region and the Diaspora. The course includes Caribbean artists a) who work within the so-called popular or “high” culture; b) those characterized as either urban or rural, and c) those considered politically or religiously radical. The artists’ works explore Caribbean history, identity, and sociopolitical changes in terms of cultural encounters and convergences. 3 credits

ART 219. Caribbean Art II. Will examine Contemporary Caribbean Art from the 1970s to the present and will showcase the work of established as well as emerging artists. The course includes Caribbean artists a) who were born, live and work in the region as well as abroad; b) who forged a dynamic hybrid culture/art, neither entirely local nor imported, that is constantly transforming itself; c) who apply various strategies to seek out ways to transform and alter existing notions about the region; and d) artists whose work carries an underlying spiritualism antithetical to the Western world. The artists’ works show consciousness in their own unique expressions and awareness of the dynamism underlying their expressions. 3 credits

ART 228. DRAWING 2. Fundamentals of drawing, employing mixed media and use of color with an introduction to drawing the human figure. Prerequisite: ART 128. 3 credits

ART 231-331. PAINTING STUDIO. An ongoing exploration of the techniques, problems and aesthetics of painting, the nuances of painting language, and the development of a personal direction. A variety of given and found problems will address color, composition, and the development of imagery, process, and both cultural and personal content. Students are required to improve in technical handling of paints and develop individualized modes of seeing, interpreting, and thinking for themselves in order to progress in the course at both the 200 and 300 levels. Prerequisite: ART 150. 3-3 credits

ART 275. TEACHING VISUAL ART TO CHILDREN AND ADOLESCENTS. Fundamentals of art educational methods through practice with: meaningful visual arts and crafts production, creative problem solving, critical thinking, writing skills, assessment processes, and use of visual media appropriate for school-aged children. For: art teachers, classrsoom teachers, and those using art-making methods for visual and tactile learners of any age. Suggested to education majors; open to any student as an elective. (Also listed as EDU 275). 3 credits

ART 324. DESKTOP PUBLISHING. Using industry-standard software, students will learn to use computers to design and produce print-based publications. The course offers an introduction to computer-assisted drawing and design, and photographic preparation. Students will study principles of typography, graphic design and color theory. The class culminates in a client-based portfolio project where students produce a substantive project on deadline, to the client's specifications, and within budget. Prerequisite: Grade "C" or better in COM/ENG 308. (Also listed as COM 324 and ENG 324). (F-ALT). 4 credits

BIOLOGY (BIO)

BIO 110. INTRODUCTION TO RESEARCH METHODS. Students will be introduced to scientific methods, conversions, pipetting, solutions, electrophoresis, maintenance of plant, fly, and cell cultures, and beginning microscopy in the context of designing and carrying out a research project. Prerequisites: completion of one introductory course in biology, chemistry, computer science, marine science, mathematics, nursing, psychology, or science. 2 credits

BIO 141-142. GENERAL BIOLOGY I-II. Basic principles of the life sciences providing the foundation for further study of biology. 3 lectures and 3 hours of laboratory weekly. Prerequisite: Successful completion of ENG 101/RCA 021 or satisfactory score on SAT for exemption. Corequisite: MAT 140 or MAT 143. BIO 141 (F-AAS; F, S-OEK). BIO 142 (S; SUM II-OEK). 4-4 credits

BIO 151-152. HUMAN ANATOMY AND PHYSIOLOGY I-II. An integrated study of human anatomy and physiology. 3 lectures and 3 hours of laboratory weekly. Not for credit toward the biology major. Prerequisite: Successful completion of ENG 101/RCA 021 or satisfactory score on SAT for exemption. BIO 151 (F). BIO 152 (S). 4-4 credits

BIO 210. RESEARCH METHODS I. Students will develop competence and comfort with biological and biochemical research techniques such as experimental design, pipetting, solutions, PCR agarose gel electrophoresis, starch gel electrophoresis, DNA and protein separation, DNA and protein extractions, microscopy, and cell culture. Prerequisites: BIO 245, CHE 151. 2 credits

BIO 220. MARINE INVERTEBRATE ZOOLOGY. The evolutionary relationships, classification and life histories of major groups of marine Metazoa. Methods of collection, preservation and identification will be stressed in the laboratory sessions. 3 lectures and 6 hours of laboratory weekly. Prerequisite: BIO 142. (Also listed as MBI 220.) (ALT-E-OEK). 5 credits

BIO 223. ECOLOGY. Modern concepts of ecology. Structure and function at various levels of organization in ecosystems will be emphasized. Field and laboratory studies utilize local environments. Three 50-minute lectures per week and 3 hours of laboratory per week. Prerequisite: BIO 142. Offered every spring. (S-OEK). 4 credits

BIO 224. POPULATION BIOLOGY. A detailed consideration of natural populations, from static or ecological, and dynamic or evolutionary, viewpoints. 2 lectures and 6 hours laboratory weekly. Prerequisite: BIO 223. Generally offered in alternate years. 4 credits

BIO 240. MICROBIOLOGY. Applied and medical microbiology, with emphasis on the bacteria, viruses, rickettsiae protozoa and fungi of particular significance to man. 3 lectures, 3 hours of laboratory and 1 hour of tutorials per week. Prerequisite: BIO 142 or BIO 152. Normally only offered on the Albert A. Sheen Campus. (F-AAS). 4 credits

BIO 245. PRINCIPLES OF GENETICS. An overview of the principles of plant and animal genetics including Mendelian and modern concepts of heredity. Developments in molecular genetics will be addressed through the chemistry and physiology of the gene and the nature of gene action in prokaryotic and eukaryotic cells. Three 50-minute lectures per week and 3 hours of laboratory per week. Prerequisites: BIO 142 and two semesters of college mathematics (MAT 143, MAT 153 or higher level) or equivalent. (F-OEK). 4 credits

BIO 261-262. HUMAN ANATOMY AND PHYSIOLOGY I-II. A comprehensive study of human anatomy and physiology with a special emphasis on medical relevance and applications. The course uses a systematic approach to the major anatomical systems from the biochemical level to the organismal level of each system. The lecture and laboratory are integrated and complementary. 3 hours of lecture, 1 tutorial, and one 3-hour laboratory weekly. Prerequisite: CHE 112 or CHE 152. BIO 261 (F-OEK). BIO 262 (S-OEK). 4-4 credits

BIO 295. RESPONSIBLE CONDUCT IN RESEARCH. Science and the conduct of scientific inquiry occur within a social structure that has evolved through trial and error. Responsible Conduct in Research uses case studies of practical circumstances where ethical issues arise to examine the social foundations of science. Recognizing and understanding ethical issues inherent in the conduct of research provides a context in which the role of social values shapes the questions we ask and the answers we seek. This course is open only to students majoring in biology, chemistry, computer sciences, marine sciences, mathematics, nursing and psychology. Prerequisites: Completion of one introductory course in biology, chemistry, computer science, marine science, mathematics, nursing, or psychology. (F, S-OEK; S-AAS). 1 credit

BIO 301. MICROBIOLOGY FOR THE HEALTH SCIENCES. The study of medically important microorganisms: their classification, morphological characteristics, physiology, life histories, diagnosis and control. In the latter part of the course, immunology, patterns of transmission and means of prevention of human infectious diseases will be emphasized, with particular attention to the problems of nosocomial infections and recent “new” diseases. 3 lectures and 3 hours of laboratory weekly. Prerequisites: CHE 112 or CHE 152 and BIO 142 or BIO 262. Normally offered on the Orville E. Kean Campus only. (F-OEK). 4 credits

BIO 310. RESEARCH METHODS II. In the context of a semester-long research project, students will master advanced biological and biochemical research techniques such as acrylamide gel separation of DNA and protein products, SDS page, ELISA, Western blots, tissue culture, cloning, UV-vis spectroscopy, IR spectroscopy, protein synthesis, immunology, intermediate microscopy, natural product characterization, and chromatography. Prerequisites: BIO 210, CHE 152, BIO 360. 2 credits

BIO 339. VERTEBRATE STRUCTURE. A survey of the development and comparative anatomy of vertebrates. Each organ system will be discussed in structural, functional and evolutionary terms. 3 lectures and 6 hours of laboratory weekly. Prerequisite: BIO 142. (ALT-E-OEK). 5 credits

BIO 342. ANIMAL PHYSIOLOGY. A comparative study of adaptive functions at molecular, cellular and systems levels with particular attention to ecological and evolutionary significance. Prerequisites: CHE 152 and BIO 360. (S-OEK). 4 credits

BIO 349. AQUATIC PLANT BIOLOGY. A comprehensive survey of aquatic plants with emphasis on marine algae. Classification, morphology, physiology and ecology of the major groups of algae and marine flowering plants are examined using local flora for selection of examples. 3 hours lecture and 3 hours field/laboratory per week. Prerequisite: BIO 142. (ALT-E-OEK). 4 credits

BIO 350. TERRESTRIAL PLANT BIOLOGY. An examination of plant life from fungi through angiosperms. Morphology, evolution, systematics and significant biological aspects of selected genera are emphasized, with examples taken from the local flora. 3 hours lecture and 3 hours field/laboratory per week. Prerequisite: BIO 142. (ALT-O-OEK). 4 credits

BIO 352. PLANT PHYSIOLOGY. Basic physiological processes of plants including photosynthesis, respiration, nutrition, growth, absorption and conduction. Three hours of lectures and 3 hours laboratory weekly. Offered in alternate years. Prerequisites: BIO 223 and CHE 152. (ALT-E-OEK). 4 credits

BIO 353. DEVELOPMENTAL BIOLOGY. An analysis of the component processes of development, growth, differentiation and morphogenesis, examined at both the cellular and organismal level. Early development of echinoderms and chordates included. 3 lectures weekly. Prerequisite: BIO 245. 3 credits

BIO 355-356. BIOLOGY OF MICROORGANISMS I-II. The functional, ecological and evolutionary relations of microorganisms. 3 hours of lecture and 3 hours of laboratory weekly. Prerequisites: BIO 245 and CHE 254. (ALT-O-OEK). 4-4 credits

BIO 360. CELL AND MOLECULAR BIOLOGY I. A detailed look at the structure and function of cells, and the molecular biology of cells and multicellular organism. The laboratory portion of the class will introduce students to the techniques of modern cell and molecular biology laboratories, as well as to the foundations of cell and molecular biology research, through both directed and independent projects. Prerequisite: BIO 245. (F-OEK). 4 credits

BIO 361. BIOINFORMATICS. In this interdisciplinary course, students learn a variety of computational techniques to distill information from biological data. Students apply these techniques to genome-scale data sets to investigate questions in biology. Three hours of lecture and three hours of lab per week. Prerequisites: All students must have passed BIO 141-142 and CSC 117-118 and MAT 143-153; in addition, all students must have passed either (BIO 223 and BIO 245) or (8 credits of 200-level CSC courses) or (MAT 233 and MAT 261). (Also listed as CSC 361 and MAT 361). (S-DEM). 4 credits

BIO 365. JUNIOR BIOLOGY SEMINAR. A twice-weekly seminar encompassing the biological sciences. Each student will present at least one seminar. Introduces basic strategies and techniques for locating and presenting scientific information. Students conduct bibliographic searches of scientific literature. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. One 50-minute and one 170-minute session per week. 2 credits

BIO 370. EVOLUTION. Concepts of organic evolution; evidence for, and implications. 3 lectures weekly. Prerequisite: BIO 245. Generally offered in alternate years. (ALT-O-OEK). 3 credits

BIO 397. JUNIOR SCIENCE SEMINAR I. Introduces basic strategies and techniques for locating and presenting scientific information. Students conduct bibliographic searches of scientific literature. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Two 50-minute sessions per week. Junior standing as a biology major; approved study plan on file with the biology program. (F-OEK). 1 credit

BIO 398. JUNIOR SCIENCE SEMINAR II. Students learn various methods for organizing materials for scientific presentation, such as preparing a poster based on a science journal article. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Two 50-minute sessions per week. Prerequisite: BIO 397 or equivalent. (S-OEK). 1 credit

BIO 430. CORAL REEF BIOLOGY. An in-depth study of corals and their biology, the coral reef community, evolution of coral reefs, and problems facing coral reefs today. Topics will include biological and geological structures of coral reef ecosystems; linkages between coral reefs and other ecosystems; anthropogenic impacts on coral reefs; and coral reef conservation and management. Prerquisites: BIO 223 Ecology and at least one of the following courses: BIO/MBI 220, MBI 222, BIO/MBI 349. (Also listed as MBI 430). 4 credits

BIO 460. CELL AND MOLECULAR BIOLOGY II. An examination of advanced topics in the function and interaction of cells and biomolecules. The molecular machinery of cells and control mechanisms will be addressed in depth. The laboratory portion will introduce students to more advanced and modern techniques through directed and independent projects. Prerequisites: BIO 360 and CHE 253. (ALT-O-OEK). 4 credits

BIO 465, 466. SELECTED TOPICS IN BIOLOGY. Electives in various biological fields, such as histology, entomology, plant pathology, biogeography and ichthyology. Prerequisite: To be announced with each topic. BIO 465 (ALT-O-OEK). BIO 466 (ALT-E-OEK). 1-4 credits

BIO 495. DIRECTED INDEPENDENT RESEARCH IN BIOLOGY. Provides an opportunity for students, under the guidance of a faculty supervisor, to pursue scholarly research or studies in areas associated with their academic fields but outside of prescribed courses. Student and the prospective supervisor should develop and submit, for approval, a proposal to the Dean at least one month prior to the start of the course. For each hour of academic credit to be awarded, the student must have three hours of lab or study per week and one hour of consultation per week with the supervisor. Student may register for repeated enrollment in this course up to the maximum of six credits. Proposals must also include an evaluation plan. Prerequisite: Students must have completed at least 20 credits in some combination of BIO, MBI, CHE, PHY, CSC, MAT with a minimum grade point average of 2.5. Corequisite: BIO 295. (DEM). 1-4 credits

BIO 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credits for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can qualify for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to a College committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and quality of the experience, with a maximum of four credits through repeated enrollment. Prerequisite: Students must have completed at least 20 credits of biology courses with a grade point average of 2.5. Corequisite: BIO 295. (DEM). 1-4 credits

BIO 497, 498. SENIOR SCIENCE SEMINAR I, II. A weekly seminar devoted to the exploration of current topics of interest in the various fields of science. Each student will present one seminar per semester. Two 50-minute sessions weekly. Required of all science seniors. Prerequisite: BIO 397, 398. BIO 497 (F-OEK). BIO 498 (S-OEK). 1,1 credits

BUSINESS ADMINISTRATION (BUS)

BUS 112. INTRODUCTION TO BUSINESS. Designed to prepare students for a career in business administration and broaden students' understanding of the vital role of business in our society. A study of the types of business ownership, a broad overview of business operations and examination of the major segments of business administration. Prerequisites: Successful completion of ENG 100/WAC 011 and ENG 101/RCA 021, or passing scores on the placement exams, or satisfactory SAT score for exemption. 3 credits

BUS 305. BUSINESS COMMUNICATION. (formerly BUS 224). Designed to give students a comprehensive view of business communication through study and application of the concepts of effective written and oral communication. Develops critical thinking, analytical, ethical and problem-solving skills. Students learn the importance of audience adaptation and concise written and oral expressions. Emphasis is on use of English language skills to effectively plan, organize, compose, evaluate, and edit business emails, letters, memoranda, reports and proposals. Additional emphasis is on verbal, non-verbal, and listening skills. The proficient use of word processing technology is required for document production. Prerequisites: COM 120, ENG 120, ENG 201. 3 credits

BUS 351. BUSINESS LAW. (formerly BUS 251). Rules of law as they relate to business transactions, court systems and procedures, law of contracts, law of agency, employee-employer relations, law of negotiable instruments, law of sales, law of property, bailments, insurance and business organizations. Prerequisite: BUS 112 or HOS 101. 3 credits

BUS 436. BUSINESS STRATEGY. A study of overall business strategy from the perspective of top management. Students will examine strategic goals, plans and actions of the business firm. Prerequisites: Senior standing and ACC 202 or HRM 234, MKT 301, MGT 301, FIN 301, and DSC 430. 3 credits

BUS 465, 466. SELECTED TOPICS IN BUSINESS. An elective course designed for junior and senior undergraduate students in business administration. Includes areas of special interest in business. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisites: To be announced with each topic. (AR). 1,1 credit

BUS 474. PROFESSIONAL DEVELOPMENT SEMINAR. Designed to prepare business students for their senior level work-study experience. Topics include resume preparation and application letters, job search skills, interviewing techniques, dressing for success, interpersonal relations and communication skills,

values and ethics, meeting the public in person and on the telephone, professionalism and workplace etiquette. Prerequisite: Junior or senior standing. 1 credit

BUS 475. UNDERGRADUATE INTERNSHIP IN BUSINESS. A work-study program arranged on an individual student basis with participating organizations. Students will submit periodic written and oral reports on their internship experience. Prerequisite: Senior standing and BUS 474. 2 credits

BUS 499. INDEPENDENT STUDY. Individually directed special projects for the advanced student of business administration. Attention may be concentrated on any facet of the contemporary business environment as it relates to the individual student's career objectives. Prerequisite: senior standing. 3 credits

CARIBBEAN STUDIES (CAR)

CAR 465. SELECTED TOPICS. Includes the study of areas relevant to Caribbean studies which do not warrant catalog inclusion on a long-term basis. Individual topics will be announced at the beginning of each semester. Prerequisite: To be announced with each topic. (DEM). 3 credits

CHEMISTRY (CHE)

For chemistry classes with labs, students enrolling in the class for the first time must take both the lecture component and the lab component concurrently. Subsequently, those students that have successfully completed one part of the course can register for the other part of the course.

CHE 111-112. PRINCIPLES OF CHEMISTRY FOR THE LIFE SCIENCES I-II. A survey of chemical principles with application to the life sciences and with special emphasis on organic chemistry and biochemistry. This course is not intended as a prerequisite for any other chemistry course. It will not satisfy the general education requirement for science. Four one-hour lectures per week in the first semester. The course consists of three 1-hour lectures per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisites: MAT 140 or MAT 143 (may be taken concurrently) and successful completion of ENG 101/RCA 021 or a satisfactory score on the placement exam, or satisfactory SAT score for exemption. Corequisite: CHE 112L, CHE 111 (F-OEK; VAR-AAS). CHE 112 (S-OEK; VAR-AAS). 4-3 credits

CHE 112L. PRINCIPLES OF CHEMISTRY FOR THE LIFE SCIENCES LABORATORY. This laboratory course is designed to complement and supplement the material presented in CHE 111 and CHE 112. The course consists of one three hour laboratory in the spring semester. First time registrants must be concurrently enrolled in CHE 112. Corequisite: CHE 112 1 credit

CHE 121. Fundamentals of Chemistry. This course is designed to provide an understanding of basic chemistry and is tailored for students with little or no science background who wish to enter the science or process technology program and enroll in CHE 151 or CHE 141, respectively. The course covers an introduction to the principles of chemistry, atomic structure, molecular structure, chemical bonding, ionic material, covalent materials, nomenclature, energy relationships in reaction, rates of chemical reactions, equilibrium, acids and bases, stoichiometry, periodic relations and relations to chemical properties. No laboratory. (F, S-OEK). 3 credits

CHE 141. INTRODUCTION TO CHEMISTRY. This course is designed to provide a fundamental understanding of basic chemistry and is tailored for student with little or no science background, more specifically for students who are enrolled in the two-year degree Process Technology Program. The material to be covered includes an introduction to the principles of chemistry, atomic structure, molecular structure, chemical bonding, ionic material, covalent materials, nomenclature, energy relationships in reaction, rates of chemical reactions, equilibrium, acids and bases, stoichiometry, periodic relations and relations to chemical properties. The course consists of four one hour lectures per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisites: ENG 101/WAC 011, ENG 101/RCA 021 and MAT 140. Corequisite: CHE 141L. (F, S-AAS). 4 credits

CHE 141L. INTRODUCTION TO CHEMISTRY LABORATORY. This laboratory course is designed to complement and supplement the material covered in CHE 141. The laboratories are specifically designed to aid in the understanding of laboratory techniques used by persons working in the chemical industry as a process technician. The course consists of one three hour laboratory period per week. First time registrants

must be concurrently enrolled in CHE 141. Corequisite: CHE 141. 1 credit

CHE 151-152. GENERAL CHEMISTRY I-II. An introduction to chemical principles emphasizing atomic and molecular structure. Topics include the principal states of matter, stoichiometry, thermochemistry, kinetics, chemical equilibrium, oxidation-reduction, electrochemistry and the chemistry of the representative and transition elements. The course consists of four hours of per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisites: Successful completion of CHE 121, a chemistry pretest or, under special circumstances, the approval of the chemistry coordinator; ENG 101/RCA 021 or a satisfactory score on SAT for exemption; and MAT 140 or MAT 143 which may be taken concurrently. Corequisite: CHE 151L-CHE 152L. CHE 151 (F-AAS; F, S-OEK). CHE 152 (S-AAS; F, S, Sum I-OEK). 4-4 credits

CHE 151L-152L. GENERAL CHEMISTRYLABORATORY I-II. An introduction to the laboratory techniques and principles that is required in an introductory chemistry course. The experiments are designed to complement and supplement the CHE 151-CHE 152 lecture courses. The course consists of one three hour laboratory per week. First time registrants must take both the lecture component and the lab component concurrently. Corequisite CHE 151-152. 1-1 credit

CHE 251. QUANTITATIVE ANALYSIS. A comprehensive course in the theory and application of chemical principles to analysis. Lecture topics include error analysis, gravimetric and volumetric methods, complex solution equilibria and electrochemistry. The course consists of two one hour lectures per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 152. Corequisite: CHE 251L. (F-O-OEK). 2 credits

CHE 251L. QUANTITATIVE ANALYSIS LABORATORY. A laboratory course where the lab experiments supplement and complement the material covered in CHE 251. Experiments include gravimetric, volumetric, complex ion chemistry, and electrochemistry. The course consists of two three hour laboratories per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 152. Corequisite: CHE 251. (F-O-OEK). 2 credits

CHE 252. INSTRUMENTAL ANALYSIS. Quantitative analysis using chemical instrumentation. Lectures cover major categories of instrumentation, including infrared, ultraviolet, and atomic absorption spectrophotometry, gas and high pressure liquid chromatography, nuclear magnetic resonance and mass spectrometry. The course consists of two one hour lectures per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 251. Corequisite: CHE 252L. (S-E-OEK). 2 credits

CHE 252L. INSTRUMENTAL ANALYSIS LABORATORY. A laboratory course where the lab experiments supplement and complement the material covered in CHE 252. The laboratory experiments include extensive experience with available instrumentation, sample preparation and error analysis. The course consists of two three-hour laboratories per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 152. Corequisite: CHE 252. (S-E-OEK). 2 credits

CHE 253-254. ORGANIC CHEMISTRY I-II. An introduction to organic chemistry. Topics will include the structure, nomenclature, physical and spectral properties of various classes of organic compounds and their chemical reactivity and syntheses. Organic reactions will be treated in a systematic manner, with emphasis placed on their mechanisms and energetics. The course will consist of four hours of lecture per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 152. Corequisite: CHE 253L-CHE 254L. CHE 253 (F-OEK). CHE 254 (S-OEK). 4-4 credits

CHE 253L-254L. ORGANIC CHEMISTRY I-II LABORATORY. This laboratory course will present laboratory techniques and experiments in organic chemistry. The lab work will include an introduction to synthesis, spectroscopic methods, and chromatographic techniques. The course will consist of one three-hour laboratory per week. First time registrants must take both the lecture component and the lab component concurrently. Corequisite: CHE 253-CHE 254. 1–1 credit

CHE 341-342. PHYSICAL CHEMISTRY I-II. Introduction to thermodynamics, atomic and molecular structures, chemical kinetics and elementary theory of chemical bonding. The course will consist of three hours of lecture per week. CHE 341 will be offered Fall semester even years and CHE 342 will be

offered Spring semester odd years. Prerequisites: CHE152, MAT 242, and PHY 241. Corequisite: CHE 241L-CHE 342L. CHE 341 (F-E-OEK). CHE 342 (S-O-OEK). 3-3 credits

CHE 341L-342L. PHYSICAL CHEMISTRY I-II LABORATORY. An introduction to laboratory techniques required for physical chemistry. The lab work will include an introduction to experimental data analysis, thermodynamics, kinetics, and spectroscopy. The course will consist of one three-hour laboratory per week. First time registrants must take both the lecture component and the lab component concurrently. Corequisite: CHE 341-CHE342. 1-1 Credit

CHE 348. BIOCHEMISTRY. The application of chemical properties to life processes. The structure, biosynthesis and metabolism of carbohydrates, lipid, proteins and other classes of compounds are discussed. The course will consist of four hours lecture per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisite: CHE 253 with concurrent enrollment in CHE 254. Corequisite: CHE 348L. (S-OEK). 4 credits

CHE 348L. BIOCHEMISTRY LABORATORY. The application of chemical properties to life processes. The structure, biosynthesis and metabolism of carbohydrates, lipid, proteins and other classes of compounds are discussed. The course will consist of three hours of laboratory work per week. First time registrants must take both the lecture component and the lab component concurrently. Corequisite: CHE 348. (S-OEK). 1 credit

CHE 397, 398. JUNIOR SCIENCE SEMINAR I, II. Topics of interest and importance to science majors will be presented by faculty, visiting scholars, and junior and senior science majors. An opportunity for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Prerequisite: Junior standing as a chemistry or chemistry/physics major. CHE 397 (F-OEK). CHE 398 (S-OEK). 1/2, 1/2 credit

CHE 432. INORGANIC CHEMISTRY. A survey of chemical properties of Main Group elements and the Transition Metals. Concepts developed in physical chemistry, such as bonding theory and thermodynamics are applied to the understanding of these properties. Coordination chemistry of the transition metals is emphasized and recent advances in this and other fields are discussed. Three hours lecture per week. First time registrants must take both the lecture component and the lab component concurrently. Prerequisites: CHE 254 and CHE 341 (CHE 341 may be taken concurrently.) Corequisite: CHE 432L. (F-E-OEK). 3 credits

CHE 432L. INORGANIC CHEMISTRY LABORATORY. An introduction to modern synthetic techniques used by inorganic chemists. Lab work will consist of synthetic techniques and spectroscopic analysis of the synthetic products. The course will consist of one three-hour laboratory per week. First time registrants must take both the lecture component and the lab component concurrently. (F-E-OEK). 1 credit

CHE 465, 466. SELECTED TOPICS IN CHEMISTRY. Topics to broaden the experience of chemistry majors intending to enter graduate school. Individual topics will be announced at the time of registration. May be repeated for credit under varying topics. Prerequisites: to be announced with each topic. 2-4 credits

CHE 495. DIRECTED INDEPENDENT RESEARCH IN CHEMISTRY. Provides an opportunity for students, under the guidance of a faculty supervisor, to pursue scholarly research or study in areas associated with their academic field but outside of prescribed courses. Student and the prospective supervisor should develop and submit for approval a proposal to the dean at least one month prior to the start of the course. For each hour of academic credit to be awarded, the student must have three hours of lab or study per week and one hour of consultation per week with the supervisor. Student may register for repeated enrollment in this course up to the maximum of six credits. Proposals must also include an evaluation plan. Prerequisite: CHE 254 with a minimum grade point average of 2.5. (DEM-OEK). 1-4 credits

CHE 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credit for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can qualify for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to a College committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and

quality of the experience, with a maximum of four credits through repeated enrollment. Prerequisite: CHE 254 with a grade point average of 2.5. (DEM-OEK). 1-4 credits

CHE 497, 498. SENIOR SCIENCE SEMINAR I, II. A weekly seminar devoted to the exploration of current topics of interest in the various fields of science. Each student will present one seminar per semester. Meets one hour weekly. Required of all science seniors. Prerequisites: CHE 397, 398. CHE 497 (F-OEK). CHE 498 (S-OEK). 1,1 credit

COMMUNICATION (COM)

COM 110. INTRODUCTION TO COMMUNICATION. An introductory course to acquaint the non-journalism student, as well as the journalism student, with the various media that communicate public information and mold public opinion. Newspapers, magazines, radio, television, trade publications, public relations and the motion picture field are surveyed. Considerable reading and analytical projects on these media are assigned. Prerequisite: Successful completion of ENG 100/WAC 011, or satisfactory score on the placement exam, or SAT exemption. (F). 3 credits

COM 119. INTERPERSONAL COMMUNICATION AND LEADERSHIP SKILLS. An introduction to interpersonal communication and to leadership skills basic to all disciplines. Specific areas include an examination of the communication process and the role that perception plays in the formation of verbal and nonverbal messages. Emphasis will be placed on demonstrating the relationship of interpersonal skills with basic communication skills central to promoting excellence in leadership. Prerequisites: ENG 100/WAC 011 and ENG 101/RCA 021 or SAT exemption. 3 credits

COM 120. PUBLIC SPEAKING. This course develops the communication skills required for effective public speaking. It involves the study of good presentational skills coupled with intensive study in researching topics, outlining and effective speech organization. The course will provide practical experiences in presenting both informative and persuasive public speeches. Prerequisite: COM 119. 3 credits

COM 200. JOURNALISM WORKSHOP. Staff members of UVI VOICE student newspaper receive credit for making a regular contribution to the paper for the semester, acting as writers, copy editors or photographers for each issue. Participants create a portfolio reflecting on their development during the semester. This course can be repeated to a total of 8 credits. Prerequisite: Grade of "C" or better in ENG 201. (Also listed as ENG 200.) (F, S). 1 credit (repeatable to 8 total credits)

COM 205. BROADCAST COMMUNICATION I. This course covers the fundamentals of broadcast media audio production. Topics include storyboarding, recording and editing. Students will be introduced to the tools of the trade: consoles, microphones, digital recorders, digital cameras and computer-based editing systems. Students will learn how to use both studio and portable equipment. Technical skills covered will include: recording, editing and dubbing. Production skills will include: directing, mixing, production and the use of music, sound and visual effects. (F-ALT). 4 credits

COM 211, 212, 213, 214. RADIO PRODUCTION. Students will plan, write, host and produce radio programming for WUVI radio station. They will be radio station operators, hosting talk shows, conducting field recordings and editing them for broadcast, interviewing visitors to the University and recording special events. Students will create, write and produce original radio drama, recitations and produce other original material. Students will be responsible for the daily operations and management of WUVI, on-the-air 12 hours per day – all year round. Students will be responsible for daily shifts on-air, weekly productions and a semester long major project, e.g. radio drama. The courses may be taken in 4 semesters in any sequence. Corequisite: COM 205. 3, 3, 3, 3 Credits

COM 221. ORAL INTERPRETATION OF LITERATURE. A study of the basic techniques of oral reading and presentation through projects designed to help the speaker use his or her voice and body effectively in expressing the ideas of others. Subject materials will include poetry, descriptive prose, dramatic literature and story telling. Prerequisite: COM 119. 3 credits

COM 223. CONFERENCE TECHNIQUES. A study of principles of conference leadership and discussion; methods of logical analysis and reflective thinking. Conference and discussions on current issues. Prerequisite: COM 120. 3 credits

COM 225. INTERCULTURAL COMMUNICATION. A study of the dynamics of intercultural communication

involving an examination of the many factors and problems that come into play when people with varying cultural backgrounds encounter each other. Prerequisite: COM 119. (S). 3 credits

COM 227. VOICE AND DICTION. A course designed to help students improve their speaking ability by examining factors related to respiration, phonation, resonation, articulation, pronunciation, and to explore ways in which they might incorporate the proper usage of these processes in their everyday speech. 3 credits

COM 230. COMPUTER-MEDIATED COMMUNICATION I. This is an introductory technical class focusing on major communication media that arise from computer-based sources. Students will learn how each medium works, how to make material in that form and what implications it has for our language, identity, relationships and communities. Prerequisite: COM 110. (F-ALT). 3 credits

COM 308. NEWSWRITING FOR MASS MEDIA I. An introduction to writing for print and web-based news media. This course covers the basic types of news stories. Introduction to Associated Press style. Introduction to ethical standards in the profession. Course culminates in a project where students develop critical skills evaluating comparative coverage of a news topic across media. Prerequisite: grade "C" or better in ENG 201. (Also listed as ENG 308.) (F). 3 credits

COM 310. NEWSWRITING FOR MASS MEDIA II. Intensive writing for print and web-based media, including in-depth newswriting and beat reporting. Introduction to libel law. Students also learn editing skills, including content, style, grammar, assignment-making, the publications production process, editing their work and that of others. Advanced AP style, exposure to editing in other styles. Prerequisite COM/ENG 308. (Also listed as ENG 310.) (S-ALT). 3 credits

COM 312. FEATURE WRITING. An advanced writing course focusing on feature writing and opinion/editorial. Students analyze award-winning feature stories, and research and write their own in-depth magazine-style features. Focus on refining an individual writing style. Prerequisite: COM/ENG 308. (Also listed as ENG 312.) (S-ALT). 3 credits

COM 315. INTRODUCTION TO PUBLIC RELATIONS. A survey of the public relations discipline, from the professional foundation of ethics, law and theory to the process, audiences and professional practice areas. The student will learn effective writing as it is applied in programmed communications for organizations in the private and public sectors as part of an overall public relations plan involving objectives, research, sound implementation and evaluation strategies. Prerequisite: COM/ENG 308. (S-ALT). 3 credits

COM 324. DESKTOP PUBLISHING. Using industry-standard software, students will learn to use computers to design and produce print-based publications. The course offers an introduction to computer-assisted drawing and design, and photographic preparation. Students will study principles of typography, graphic design and color theory. The class culminates in a client-based portfolio project where students produce a substantive project on deadline, to the client's specifications, and within budget. Prerequisite: Grade "C" or better in COM/ENG 308. (Also listed as ART 324 and ENG 324.) (F-ALT). 4 credits

COM 325. WEB PUBLISHING. A basic to intermediate level hands-on course that teaches the theory, design and creation of original content for publishing on the web. Using the most recommended online applications and current theories underlying computer-mediated communication effectiveness, students will learn to use computers and mobile devices to quickly design and produce websites and blogs. Using templates or designing from scratch, the end product will be anywhere from simple web pages to complex presentations and interactive multi-media including fully functional e-commerce sites. Students will gain competence with a range of current computer technologies related to online publishing including standard global web terminology, simplified textual messages, responsive design principles, orientation and navigation skills, manipulation of images, and computer and mobile device user testing. Students develop the ability to critique effective vs ineffective sites and user-friendly navigation. Marketing-related best practices are also taught including the significance of branding from domain name registration, site hosting options and social media platform integration. Prerequisite: COM 230. (S-ALT). 4 credits

COM 350. PUBLIC RELATIONS CAMPAIGN DEVELOPMENT. This course is designed to help students develop the essential research and analytical skills for the planning, execution and evaluation of action programs that address communication issues faced by organizations. Working in teams, students will

develop targeted public relations campaigns. They will also develop individual portfolios of their work suitable for presentation to future employers. 3 credits

COM 352. MASS MEDIA RESEARCH. This course is an introduction to quantitative and qualitative research methods and procedures used to study issues and problems in mass communication. It covers sampling, research design, observation and measurement, data analysis, documentation/reporting formats, and execution strategies and tools. Student teams will be responsible for conducting research that will result in the recommendation of media products to meet the requirements of the market. Prerequisites: MAT 235, COM 110, COM 308. 3 credits.

COM 360. COMMUNICATION THEORY. This course will examine the major theoretical schools of thought regarding interpersonal communication, mass communication, verbal, non-verbal and intercultural communication. The course will focus on the scientific effort to place all types of communication behavior into a scholarly context. Specifically, the course will seek overarching theories that encompass all aspects of communication. Prerequisites: COM 110, 225 and 230. (S-ALT). 3 credits

COM 401. ARGUMENTATION AND DEBATE. Focus is on the use of argumentative discourse in written and oral communication. Attention is given to structure or arguments in formal debate. Prerequisite: COM 120. 3 credits

COM 402. MASS COMMUNICATIONS LAW AND ETHICS. A course designed to examine the historical background of the concepts of freedom of speech and freedom of the press and the limitations that have been imposed on them by statute and by common law. The case study approach is used, but the emphasis is on the principles and the philosophy that underlie the landmark cases. Prerequisite: COM 110. (S-ALT). 3 credits

COM 403. RHETORICAL CRITICISM. A course designed to acquaint students with the art of rhetoric. They will explore classical and contemporary rhetorical theory and criticism. Prerequisite: PHI 200. 3 credits

COM 404. PROFESSIONAL INTERNSHIP IN MASS COMMUNICATIONS. Practical experience in journalism in a supervised professional setting for which the student does not receive salary. Students enrolled in the course receive credit for professional experience in advertising, news-editorial and radio-television-film. Supervision is provided by the employer offering the professional experience. Credit hours will be based on Satisfactory-Unsatisfactory basis. Limit of three hours of enrollment in a student's total course work. Prerequisites: Five communication courses. (F, S). 3 credits

COM 435. DIGITAL ENTREPRENEURSHIP. This course addresses the problem of how to use communication to take an idea no one knows about and turn it into something everyone is talking about. Students will organize and bring on-line a new business venture. Working in teams, they will choose or develop a product, create a web site for that product and create a digital communication campaign to promote their product. They will also use on-line systems for making sales, collecting money and delivering a product. Students will utilize state of the art communication tools and concepts to bring their new idea from "known-to-no-one" to "well known." They will learn how to use communication tools to raise awareness and make their idea "go viral." This is an intense study of the tools of digital communication and e-commerce. Business majors are also encouraged to take this class. Prerequisites: COM 230, COM 430. Corequisite: COM 325. 3 credits

COM 465, 466. SELECTED TOPICS. Includes the study of areas of special interest in speech communication. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. (AR). 3,3 credits

COM 475. DIRECTED STUDIES. Designed to allow directed study under a journalism professional and to enable a student to pursue special projects of production or research that are not a part of a regular course. Permission of the instructor is required before the student enrolls. Prerequisites: Five communication courses. (AR). 1-3 credits

COM 497, 498. SENIOR SEMINAR. This is the senior seminar for all communication majors. It is the capstone experience of the student's time as a communication major. Students will be expected to develop one major media production: television show, radio show, movie, book, artistic product etc. Students will demonstrate their understanding of the media convergence by developing all of the collateral media associated with a major media product: web site, social media, poster, brochures, press releases etc. The

student will showcase competence with the major media and all of the related media as if presenting the premiere of a new movie, new book, new radio series or new web site (or other product) to the world. Prerequisite: Senior student, completed all major course work (F, S) 3, 3 credits

COM 490. ADVANCED PRODUCTION PROJECT. In this capstone portfolio project, students with advanced experience in Communication skills areas like print, broadcast, and web will come together to produce a group project that highlights their skills while learning how to work in groups and produce complex projects on deadline under supervision. The project will differ from section to section, and will be determined by the skills and interests of the particular group of students, under supervision. The final product will be a substantive, original print, broadcast or web-based project. Prerequisite: Five or more 300-400 level communication courses. (S-ALT). 4 credits

COM 499. INDEPENDENT STUDY. Individual study and research under the direction of a member or members of the College. Students will have weekly conferences with their advisors and do such readings and papers as may be required. Prerequisite: Advanced standing. Students must have completed at least 20 credits of communication and/or theatre courses beyond the 200 level with a cumulative grade point average of 3.00. Students must secure consent of the dean and advisor. Written proposals must be approved prior to the end of the preceding semester. (DEM). 3 credits

COMPUTER INFORMATION SYSTEMS (CIS)

CIS 051. BASIC COMPUTING CONCEPTS AND SKILLS. This course addresses basic computer concepts and skills required for university classes. Classes take place in computer labs where students are given instructions and tasks for hands-on practice. Modules are included in the use of the desktop, word processing, e-mail, the Internet, and spreadsheets. Students must register for the entire course even if they have passed some, though not all, of the CLE modules, but need only attend the classes for modules which they have not passed. Each module concludes with administration of the corresponding CLE module test. 1 non-degree credit

CIS 101. BUSINESS SOFTWARE APPLICATIONS. Industry standard software including spreadsheets, database management systems, personal information management, the Internet, and word processing will be studied in depth. The capabilities, limitations and special features of operating systems are studied. Extensive out-of-class computer work is necessary. Format: 3 hours lecture and 1 hour tutorial. 3 credits

COMPUTER SCIENCE (CSC)

CSC 110: INTRODUCTORY PROGRAMMING AND PROBLEM SOLVING. This course provides students with fundamentals of problem solving using basic algebra, the use of spreadsheets, and a programming language. The problems involve using one or several equations, and include unit conversions. The language elements covered are variable and constant declarations, input and output, assignments, expression syntax, logical expressions, testing structures and conditional looping structures. This course is designed to help prepare students for the first introductory programming course, Introduction to Programming I. 3 credits.

CSC 111. USE OF COMPUTERS. This course provides an introduction to computer concepts and terminology, UVI computer resources, operating systems, e-mail, word processing, spreadsheets, database, graphics, Internet and computing ethics. It is appropriate for students with no previous background in computing who wish to apply microcomputer applications in their studies. Supervised labs provide students with (1) initial hands-on introduction to the UVI network and basic computer operations, (2) an overview of on-line resources, and (3) using e-mail. Students must complete additional lab assignments outside of class. (F, S). 1 credit

CSC 117. INTRODUCTION TO PROGRAMMING I. Students will learn problem solving strategies and create well designed, sequential algorithms in an object oriented programming language. While many students can succeed in this course having no previous programming background, for those students who require preparation in problem solving, logic, and programming, it is suggested they first take Introductory Programming and Problem Solving: CSC 110. Students will learn the use of a programming environment, which includes the program editor, libraries, and compiler. Students will learn the use of basic data types, statements, controls, and structures. A high-level computer programming language will be explored in the context of solving problems. Procedures and functions will be introduced while stressing the concepts of program modularity and top-down design. Students participating in this course must have acquired

the skills of sending and receiving attached documents by e-mail and they must be familiar with web browser navigation. Students are expected to access class resources on the Internet daily. It is strongly recommended that students have a computer with available access to the Internet. Three 50-minute lectures and 3 hours of laboratory weekly. Prerequisites: MAT 023, MAT 024 or satisfactory score on placement exam, or satisfactory SAT score for exemption. (F, S, SUM). 4 credits

CSC 118. INTRODUCTION TO PROGRAMMING II. This second course in programming represents a continuation of the basic language features and elementary problem solving of the course, Introduction to Programming I. Criteria for well-formed problem definitions are examined, and increasingly sophisticated problem solving strategies are explored as more advanced programming elements are introduced. Recursion is introduced and compared to iterative solutions in terms of program efficiency and program simplicity. Data files of more complex data types, the use of pointers, dynamic structures, and basic abstract data files are introduced. Top-down development of programming solutions, as well as concepts in program modularity, are further emphasized. The processes of program documentation, production, testing and maintenance are studied. This course establishes a foundation for professional programming and software engineering design skills. Three 50-minute lectures and 3 hours of laboratory weekly. Prerequisite: CSC 117. (S, SUM). 4 credits

CSC 119. COMPUTER GRAPHIC APPLICATIONS. This course assumes the ability to enter, edit and display text, and focuses on the production and manipulation of graphic images. The student develops skills in the use of software application for painting, desktop publishing, line drawing and animation. Students acquire a working familiarity with computer-based communication systems through the use of electronic mail and electronic conferencing for joint projects and tutorial support. Students participating in this course must have acquired the skills of sending and receiving attached documents by email and they must be familiar with web browser navigation. Students are expected to access class resources on the Internet daily. It is strongly recommended that students have a computer with available access to the Internet. (F, S, SUM). 1 credit

CSC 120. INTRODUCTION TO COMPUTER SCIENCE. Introduction to computer science and computing careers. An integrated overview of the wide range of knowledge and skills involved in the theory and practice of computer science is acquired through critical thinking and comparative analysis of computer science courses and the computer science program. The history and ongoing directions of development in computing, and the impact of this development on society, is interwoven with discussion of course topics. Required of all computer science majors and recommended for any student considering a degree or career in computer science. (S). 2 credits

CSC 210. GRAPHIC USER INTERFACE DESIGN AND IMPLEMENTATION. An Introduction to Graphic Computer interaction, the theory of user interfaces, and the application of user interface theory to software design and engineering. The course will give students the opportunity to develop and apply programming skills in an additional high level language and integrated development environment which is particularly focused on creation of graphic computer interfaces (GUI). The following topics are emphasized: input/output control objects, characteristics of user interfaces, human factors, programming tools for constructing user interfaces, and applications supporting web-based interfaces. Prerequisite: CSC 118. (S) 3 credits

CSC 220. INTRODUCTION TO CYBERSECURITY. This course investigates cybercrime, cyberterrorism, and cyberwarfare from a technical perspective. Analysis of case studies provide a framework to explore the roles of cyber-defender, cyber-attacker, the victim, and legal advocate. Prevention, detection, privacy, incident response, mitigation, and resilience interests are examined using social, economic, political, ethical, and legal criteria. In this context, students develop a working knowledge of interdisciplinary cybersecurity essentials, theory, and methods. Live demonstrations and virtual solutions in authentic scenarios provide students an opportunity to gain experience and competence with personal security measures. (F). 3 credits

CSC 230. DATA SCIENCE I. Data Science I provides students with an introduction to the concepts and basic skills needed to understand the role of data in today's world. The course explores the emergence of the field using the data science workflow as the unifying framework to illustrate the importance of each stage of the workflow, how it contributes to the final report, and how that new information is used. Topics include applications of data science; data ethics; data preparation; data stewardship; analysis, evaluation, communicating results, and best practices. The trade-offs among tools, algorithms, and visualizations are

discussed using both effective and ineffective examples. This is a hands-on course. Students work with datasets in a peer-peer and near-peer groups. Prerequisites: MAT 140 or MAT 143. (Also listed as SCI 230). 3 credits

CSC 235. ACS TECHNOLOGY VIRTUAL LAB. The Applied Computer Science Technology (ACS Tech) Certificate will require the student to implement select concepts from each ACS Tech course. This includes software (custom code, shell scripts, batch files), applications, hardware components, operating systems, and network infrastructure used routinely in a technical workplace. The student will engage in a hands-on orientation of features, functions, and resources used for virtual solutions to perfect knowledge, skills, and abilities (KSA) for successful completion of the program. Access to the ACS Tech virtual lab can be extended for students who wish to prepare for industry-recognized certifications such as the CompTIA Network+, Microsoft Certified Professional, Linux LPI Certification. (F). 1 credit

CSC 239. SCIENTIFIC COMPUTER APPLICATIONS. This course develops understanding and skills in the use of computer applications and software as a tool for scientific work. An ability to enter, edit and display text and numeric data is assumed and the course focuses on the analysis of numeric data, the exploration of numeric and logical relationships, and the integrated use of application software packages to create, maintain, and analyze databases. Monitoring of physical systems and acquisition of quantitative data through hardware interfaces is considered and exemplified. Students participating in this course must have acquired the skills of sending and receiving attached documents by email and they must be familiar with web browser navigation. Students are expected to access class resources on the Internet daily. It is strongly recommended that students have a computer with available access to the Internet. (F). 3 credits

CSC 241. INTRODUCTION TO COMPUTER ARCHITECTURE AND DIGITAL SYSTEMS. The representation and processing of data by logical circuits are developed from principles of Boolean logic and binary arithmetic. A basic model of a computer CPU is extended to alternative bus architectures and approaches to I/O and memory access. Execution cycle processes are developed and alternative instruction sets are compared. Parallel, multiprocessor and distributed processing approaches are explored. Corequisite: CSC 110 or CSC 117. (F). 4 credits

CSC 242. DATA STRUCTURES. An introduction to data structures, program specification and design emphasizing abstract data types and their implementation. Arrays, lists, queues, trees, and graphs will be examined along with their implementation for specific applications. Set operations involving abstract data types will be covered. A series of searching and sorting techniques using various data structures will be analyzed looking at efficiencies based on memory and runtime. Prerequisite: CSC 118 and either MAT 143 or MAT 140. (F). 4 credits

CSC 243. DIGITAL COMMUNICATIONS AND NETWORKS. This course establishes fundamental networking principles in connectivity, transmission, addressing and network management. Analysis and comparison of specific systems illustrates application of principles, and students acquire hands-on skills in the implementation, operation, and maintenance of networks. User interfaces and information resources available through the Internet are explored and societal implications of communications and networks considered. Corequisite: CSC 110 or CSC 117. (S). 4 credits

CSC 245. DATABASES AND INFORMATION RETRIEVAL. The physical storage mechanisms of disk and tape hardware are established and abstract data types applied in the exploration of approaches to logical level storage and retrieval. The organization and implementation of basic file structures are considered with respect to speed and efficient use of storage capacity. Databases are analyzed as organizations superimposed on data stored using basic file structures. Principles of query systems are applied do information systems design and implementation and the Standard Query Language, SQL, is introduced. Distributed data systems and search engines are considered. Prerequisites: CSC 241, CSC 242. (F). 3 credits

CSC 255. OPERATING SYSTEM DEPLOYMENT BEST PRACTICES. This course provides the student the means to integrate knowledge, skills, and abilities (KSA) from several computer science and technology disciplines using the features and functions of an operating system (OS). The student designs, installs, configures, and integrates hardware, software, and digital services to deploy and connect coherent, useful solutions. Course essentials are derived from current, industry-standard best practices to automate, maintain, and secure systems, ensuring stability and efficiency required of technology professionals in the workplace. Prerequisites: CSC 235 ACS Technology Virtual Lab, and CSC 241 or CSC 243. (S). 3 credits.

CSC 310. WEB APPLICATIONS DEVELOPMENT. This course introduces the development of Web applications. The course examines the major components and concepts of Web applications and provides practical hands-on experience necessary for deploying multi-tier web applications using recent Web technologies. Topics covered include Web architectures and models, technique, and development methods. A project-oriented approach provides in depth knowledge of the client and server-side development process of modern Web applications. Prerequisites: CSC 245. 3 Credits.

CSC 317. PROGRAMMING III. Project oriented instruction in program development, using a professional development environment. Extensive programming practice is provided in both individual and team contexts for development of applications and systems. Design issues addressed include object-oriented programming systems, approaches to inter-operability and portability, design of module interfaces, and definition of system test beds. Prerequisite: CSC 242. (F). 3 credits

CSC 333. PROGRAMMING LANGUAGES. Meta-linguistics notations in syntax and semantics. Procedure/ infix/prefix and postfix notation. Global properties of languages including the scope of declarations, storage allocation, subprogram structures and binding. Includes analysis and comparison of a number of algorithmic, list processing, string manipulation, data description and simulation languages. Prerequisite: CSC 117. (S). 3 credits

CSC 343. INTRODUCTION TO DIGITAL FORENSICS. This course will review the history of computer, network, and mobile device forensics, incident handling, and malware analysis as they have evolved into the formal discipline of digital forensics, the science that enables a forensic investigator to detect and analyze hidden data or unauthorized activity on connected devices and systems. Students will study key terminology, digital storage techniques, new trends in tech-related crimes, the scope of investigation, the roles of forensic first responders and digital evidence specialists, the tasks to preserve the admissibility of evidence collected during a formal investigation, and the victim/client from a political, technological, economical, and criminal justice perspective. Students will develop relevant, hands-on proficiency via live demonstrations, directed practice, and virtual solutions that apply forensic principles and best practices in authentic scenarios. (S). 3 credits

CSC 352. ANALYSIS OF ALGORITHMS AND COMPLEX PROBLEMS. This course provides a theoretical treatment of complexity analysis of algorithms, complexity classes of problems, computability and undecideability, and an applied study of problem-solving strategies and search strategies. Parallel and distributed algorithms are considered, and the problems and methodologies of AI are introduced through study of problem state spaces, adaptive algorithms and heuristics, pattern recognition, and deduction and inference. Prerequisite: CSC 118. (S). 3 credits

CSC 355. SYSTEMS SECURITY. This course is designed to translate current data safety mandates into the practical knowledge, skills, and abilities (KSA) required to secure devices, systems, networks, and data in an efficient and cost-effective manner. Students will apply security concepts with best practices promoted by current industry standards in authentic scenarios using live interactive networked systems to reduce exposure and mitigate common threats. Instructional criteria and activities are framed and presented in a vendor-agnostic manner so that students can use what they learn on any system in any computing environment. A final capstone project affirms student competence and proof of concept for selected systems security measures with a penetration test performed to scale. Prerequisite: CSC 220; junior status or higher required. (F). 3 credits

CSC 361. BIOINFORMATICS. In this interdisciplinary course, students learn a variety of computational techniques to distill information from biological data. Students apply these techniques to genome-scale data sets to investigate questions in biology. Three hours of lecture and three hours of lab per week. Prerequisites: All students must have passed BIO 141-142 and CSC 117-118 and MAT 143-153; in addition, all students must have passed either (BIO 245 and BIO 223) or (8 credits of 200-level CSC courses) or (MAT 233 and MAT 261). (Also listed as BIO 361 and MAT 361.) (S-DEM). 4 credits

CSC 363. DOCUMENTATION AND TECHNICAL COMMUNICATIONS. Purpose and format of documentation accompanying software development, including user and reference manuals, on-line help, in-line program comments, training guides, RFPs, RFQs, testing plans and system specifications. Critical analysis of technical writing, development of appropriate and consistent style, and effective use of tools, such as word processors, grammar checkers, style guides, HTML editors and on-line help compilers. Prerequisites: ENG 201, CSC 118. (S). 3 credits

CSC 397, 398. JUNIOR SCIENCE SEMINAR I, II. Topics of interest and importance to science majors will be presented by faculty, visiting scholars, junior and senior science majors. An opportunity for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Prerequisite: Junior standing as a computer science major. CSC 397 (F). CSC 398 (S). 1/2, 1/2 credit

CSC 410. PRINCIPLES OF OPERATING SYSTEMS. This course serves as a capstone, integrating concepts from across the curriculum and demonstrating the application of theory and skills in the context of operating systems which create the interface between hardware and software. Key operating systems mechanisms are introduced, such as memory management, scheduling, resources allocation, process control and input-output operations and security. Case studies highlight modern operating systems issues related to multiprocessors and virtualization. The course emphasizes the design and implementation of essential micro-kernels components through programming activities and case studies. Prerequisites: CSC 241, CSC 242, CSC 243. 3 credits

CSC 420. SOFTWARE ENGINEERING. An introduction to the principles and practice of the production of computer software products. The software life cycle is analyzed in terms of product specification and design, implementation and production support systems, testing and quality control. Orderly management based on documentation of planning, interfaces, jobs, tasks and products is emphasized. Human factors in the organization and deployment of professional teams are considered. Prerequisite: CSC 310 (Web Applications Development). (S). 4 credits

CSC 430. KNOWLEDGE ENGINEERING AND EXPERT SYSTEMS. Theory and techniques in gathering and codification of knowledge. Logic programming, formula manipulation and predicate logic. Decision support systems. Deductive retrieval and natural language processing interfaces. Exampler systems from implementations of expert systems. (F). 3 credits

CSC 433. COMMUNICATIONS SYSTEMS AND NETWORKS. Application of communications abstractions in major network systems: Unix, Windows NT and Netware. Server and workstation configuration and system generation. Fault diagnosis and performance monitoring. Comparisons of strategies and products are made and opportunities for hands-on practice are provided. Prerequisite: CSC 243. (S). 3 credits

CSC 434. PROGRAMMING LANGUAGE TRANSLATION. An in-depth study of the principles and design of programming language translation software. The major components of a compiler are discussed: lexical analysis, syntactic analysis, type checking, code generation and optimization. Alternative parsing strategies are presented and compared with respect to space and time trade-offs. Emulation and the linguistic implementation of virtual machine interfaces are considered. Prerequisites: CSC 333, CSC 317. (S). 3 credits

CSC 435 DATA SCIENCE II. This course provides students with the core competencies in data science in preparation for graduate studies or an entry-level position in data science. The course builds on the fundamental concepts of data science with real-world examples that require advanced mathematical, statistical, programming and critical thinking skills. This is a hands-on course. Students will work with multiple datasets for their assignments. The course is suitable for upper-level undergraduate students in computer science and computational sciences, applied mathematics, business, and related analytical fields. (Also listed as IST 435 and SCI 435). Prerequisites: SCI/CSC 230 and MAT 235 or MAT 245 or DSC 325. 3 credits

CSC 465, 466. SELECTED TOPICS IN COMPUTER SCIENCE. Electives in various areas in computer science, affording an opportunity for exposure to evolving specialties in the discipline. Prerequisite: To be announced with each topic. 3-4 credits

CSC 471. ISSUES IN THE COMPUTER PROFESSION. The computer science profession is placed in an historical and social context. Privacy, security, ethics, and professional responsibility, definition and protection of intellectual property, communications legislation, technical risks, and liability are among the topics of current professional concern addressed in this course. Prerequisites: Senior Standing in the computer science BSC program as indicated by completion of all CSC courses at the 300 level and below. (S). 1 credit

CSC 495. DIRECTED INDEPENDENT RESEARCH IN COMPUTER SCIENCE. Provides an opportunity for students, under the guidance of a faculty supervisor, to pursue scholarly research or study in areas associated with their academic field but outside of prescribed courses. The student and the prospective

supervisor should develop and submit, for approval, a proposal to the Dean, at least one month prior to the start of the course. For each hour of academic credit to be awarded, the student must have three hours of lab or study per week and one hour of consultation per week with the supervisor. Students may register for repeated enrollment in this course up to the maximum of 6 credits. Proposals must include an evaluation plan. Prerequisite: Students must have completed at least 20 credits of computer science with a minimum grade point average of 2.5. (F, S, SUM). 1-4 credits

CSC 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credit for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can quality for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to a College committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and quality of the experience, with a maximum of 4 credits through repeated enrollment. Prerequisite: Students must have completed at least 20 credits of computer science courses. (F, S, SUM). 1-4 credits

CSC 497, 498. SENIOR SCIENCE SEMINAR I, II. A weekly seminar devoted to the exploration of current topics of interest in the various fields of science. Each student will present one seminar per semester. Meets one hour weekly. Required of all science seniors. Prerequisites: CSC 397, CSC 398, CSC 497 (F). CSC 498 (S). 1,1 credit

CONSTRUCTION TECHNOLOGY (CON)

CON 254. ARCHITECTURAL DRAWING. Development of a complete house plan, specifications, interior and exterior perspective. Two classes of three hours per week. Prerequisite: EGR 131. 2 credits

CRIMINAL JUSTICE (CJU)

CJU 110. INTRODUCTION TO CRIMINAL JUSTICE. This course provides an overview of the components and processes of the criminal justice system. Particular emphasis is placed on aspects of the system including the nature of crime, victim assistance, policing, courts and adjudication, punishment, sentencing and incarceration alternatives, and corrections. Class material will include an overview of career opportunities. Prerequisites: Satisfactory completion of ENG 100/ WAC 011 and ENG 101/RCA 021 or SAT exemption . A passing grade on the English and Reading placement exams. (F,S). 3 credits

CJU 120. INTRODUCTION TO LAW ENFORCEMENT. The philosophy and history of law enforcement agencies involved in the administration of criminal justice; processes of justice from detection of crime to parole of offender; evaluation of modern police services; survey of professional career opportunities. Prerequisites: A satisfactory grade on the English and Reading placement exams or the satisfactory completion of ENG 100/WAC 011 and ENG 101/RCA 021 or SAT exemption. (DEM). 3 credits

CJU 205. ADMINISTRATION OF JUSTICE. A review of court systems; procedures and agencies involved from incident of arrest to final disposition; principles of constitutional, federal, state, and local criminal and civil laws as they apply to and affect law enforcement; organization, procedures and techniques of law enforcement agencies and courts. Case histories will be used to create understanding of major problems of administering justice and rehabilitating criminal offenders. Prerequisite: CJU 110. (F,S). 3 credits

CJU 207. CRIMINAL LAW. Elements of criminal law with definitions and general penalties; laws of arrest, search and seizure; rights and duties of officers and citizens. Prerequisite: CJU 110. (S). 3 credits

CJU 220. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS. This multidisciplinary course will cover basic concepts of geographic information systems (GIS) and will combine an overview of the general principles of GIS with analytical use of spatial information. Students will learn GIS techniques to collect, organize, analyze and present data. Students will apply these techniques to conducting “spatial inquiry.” (Also listed as SCI 220 and SSC 220.) (S). 3 credits

CJU 222. LAW ENFORCEMENT-COMMUNITY RELATIONS. An examination of factors contributing to cooperation or friction between law enforcement personnel and the community, with emphasis on minority groups, political pressures and cultural problems. Citizen involvement in the criminal justice process, community organization and the social responsibility of law enforcement are examined. (F-O). 3 credits

CJU 223. JUVENILE DELINQUENCY/JUSTICE. Juvenile delinquency in relation to the general problem of crime. Analysis of factors underlying juvenile delinquency, treatment and prevention. The adjudication process for juveniles-philosophy and practice. (F-E). 3 credits

CJU 224. SECURITY CONCEPTS. The historical, philosophical and legal basis of security. The role of security and the security industry in modern society. Security as a major factor in criminal justice for the prevention of crime. The relationship between private security and public law enforcement. (S-O). 3 credits

CJU 240. CONSTITUTIONAL LAW. This course provides an analysis of the historical development of the relationship of the states and the U. S. Virgin Islands to the Bill of Rights. The effect of the due process clause of the Fourteenth Amendment on the application of the Bill of Rights is examined through a study of the leading Supreme Court decisions relating to criminal justice. This course will teach students basic areas of constitutional law such as separation of powers, federalism, and individual liberties. Prerequisites: CJU 110 and ENG 120. (F). 3 credits

CJU 250. CRIMINAL JUSTICE INTERNSHIP. The criminal justice internship is a cooperative effort between the criminal justice program at the University and public or private law enforcement agencies. The purpose of the internship is to give students the opportunity to apply their education to their interested field of study including law enforcement agencies, commercial security firms, correctional facilities, probation and parole offices and judicial, legal and political offices. The student works under the supervision of the criminal justice professional. Prerequisite: CJU 110 and Sophomore standing. (F, S). 3 credits

CJU 305. CRIMINAL INVESTIGATION. Fundamentals of investigation; techniques of crime scene recording and search; collection and preservation of physical evidence; modus operandi processes; sources of information; interview and interrogation; follow up and case preparation; principles, procedures and techniques of investigation of specific crimes; laws affecting law enforcement regarding gathering of evidence; actual crime scene investigation, including autopsy laboratory work. Prerequisites: CJU 110, CJU 207. (S). 3 credits

CJU 310. WOMEN, CRIME AND JUSTICE. A comprehensive examination of the research on gender as it relates to the criminal justice system, including girls and women as offenders, as victims of violence, and as female criminal justice professionals. Topics will include both Caribbean and U.S. mainland perspectives as they relate to the influence of gender in criminal justice, as well as a delineation of the necessary and effective changes demanded for the future by criminal justice personnel. (DEM). 3 credits

CJU 315. VICTIMOLOGY. This course focuses on the victim and will expose students to a new study within the criminal justice field, Victimology. Students will study different types of victimization, and roles of and ethics related to the criminal justice practitioner. Students will access sources of information regarding crime victims from the UCR and the NCVS. This course will also examine victim allocution and victim-impact statement. An analysis of the different types of punishment and justice will be discussed. Prerequisites: CJU 110, ENG 120. (Also listed as SOC 315.) (S-E). 3 credits

CJU 320. DRUGS AND CRIME. This course examines the historical and contemporary psychological, physiological, and sociological aspects of drug use and abuse, with considerable emphasis placed upon drug-related crimes and the criminal justice system, both in the Caribbean and on the U.S. mainland. This focus will include illicit drug trafficking and money laundering, as well as approaches to intervention, prevention, legislation, and public policy. (F-E) 3 credits

CJU 321. CONTEMPORARY CORRECTIONS. A study of the development of penal philosophies from revenge to rehabilitation. The structure of the American correctional system including probation, institutionalization and parole with consideration of current alternatives to incarceration. Survey of techniques, strategies and problems encountered in correctional counseling. Prerequisite: CJU 110. (Also listed as POL 321.) (F). 3 credits

CJU 325. POLICE ORGANIZATION AND ADMINISTRATION. The organization and administration of line, staff and auxiliary functions. A detailed examination of current command-level problems and trends in law enforcement organization and management; this includes the formulation of policy and procedure; rules and regulations, development; implementation of procedural and tactical planning; coordination and control of activity. Prerequisites: CJU 110, CJU 205. (F). 3 credits

CJU 328. CRIME PREVENTION AND DELINQUENCY CONTROL. Planning and administration of crime prevention methods; techniques of handling juvenile offenders and victims; prevention and repression of delinquency; diagnosis and referral; organization of community resources. Juvenile law and juvenile court procedures. Prerequisites: CJU 110, CJU 207. (S-E). 3 credits

CJU 333. CRIMINOLOGY. The study of criminal and delinquent behavior including its variations, ramifications, explanations and measures of prevention, control and treatment. (Also listed as SOC 333.) (F) 3 credits

CJU 345. FORENSIC SCIENCE. Forensic Science is concerned with the analysis of physical evidence associated with the crime scene, the victim(s) and/or the suspect(s). This course will introduce students to the concept of forensic science, forensic psychology in the court system, the investigation of crime scenes and the analysis of evidence, specifically the identification and characterization of biological fluids and stains, DNA, terrorism, and the federal rules of evidence which relate to the admissibility of evidence. Depending on the availability of guest lecturers who are considered experts in their area of specialty, other areas of forensic science to be discussed may include but are not limited to medicolegal investigation of death, entomology toxicology, odontology, trace evidence such as hair, fiber, glass paint or soils, fingerprints, impressions such as footwear and tire, firearms and tool marks, accident reconstruction, forensic psychology and/or psychiatry, and white-collar crime. Weekly laboratory exercises will provide students with a deeper understanding of the methods of analysis of evidence. Prerequisite: CJU 110. (Also listed as PSY 345.) (F). 4 credits

CJU 349. FORENSIC PSYCHOLOGY. This course provides a comprehensive introduction to the field of psychology and law, emphasizing how theory and research in psychological science is used to enhance the gathering and presentation of evidence, improve legal decision-making, prevent crime, rehabilitate criminals, and promote justice. Topics such as DNA and forensic identification, criminal profiling, lie detection, eyewitness testimony, the insanity defense, workplace law, and the death penalty will be considered. Prerequisites: PSY 120, CJU 345/PSY 345, PSY 203. (Also listed as PSY 349). (S-E). 3 credits

CJU 365. SELECTED TOPICS. This course is designed for Police Science and Administration students to further their knowledge in areas of special interest which may fall outside of their required program. Approved topics at this time are Biological Evidence in Forensic Science and Introduction to Forensic Sciences. Topics will be announced at the beginning of each semester. The course may be repeated for credit under various topics. (S-O). 3 credits

CJU 401. CRIMINAL JUSTICE RESEARCH METHODS. This course is concentrated on research methods with an emphasis on applying them to the field of criminal justice. Students will be provided with a sound understanding of the scientific method, the terminology of research, how to conduct research. An introduction to the basic methods used in analyzing data from criminal justice agencies, including crime patterns, crime rates, analyses of victim and offenders, recidivism rates, and offense typologies. Students will be provided with hands on experiences in interpreting and analyzing crime data from different sources like homicide reports, Department of Corrections, the Probation Departments, victim agencies/advocates, attitudinal surveys, and other relevant sources. Prerequisites: Sophomore standing or above and ENG 201, CJU 110, MAT 235 and SSC 327. (S). 4 credits

CJU 405. COMPARATIVE CRIMINAL JUSTICE SYSTEMS. This course is a study of the variations in patterns of corruption and political crimes as well as patterns of law enforcement and adjudication among political systems: democratic, communist and modernizing. This course introduces students to a global, comparative approach to the study of crime and penal sanctioning. Students will survey transnational crimes such as human trafficking and terrorism and learn how different countries respond. This course will cover a wide range of topics over a large number of countries. Prerequisites: ENG 120, CJU 110, POL 120. (Also listed as POL 405.) (F-O). 3 credits.

CJU 432. CRIMINAL PROCEDURE AND EVIDENCE. Constitutional and procedural considerations affecting arrest, search and seizure. A study of United States Supreme Court cases involving the fourth, fifth, sixth and fourteenth amendments to the U. S. Constitution specifically dealing with the law enforcement officers' investigative and police powers, and their limitations, in connection with obtaining evidence, confessions and identifications, and in making searches, seizures and arrests. The origin, development and philosophy of rules of evidence, evaluation of evidence and proof required,

competency and consideration of witnesses, tests of advisability and weight and value of types of evidence. Prerequisites: CJU 110, CJU 207, CJU 240. (S). 3 credits

DECISION SCIENCE (DSC)

DSC 325. STATISTICS FOR MANAGEMENT DECISIONS. (formerly BUS 325). A study of those areas of statistics which find widest application in problems of management. Students develop basic statistical theory and apply that theory to decision-making situations by means of examples and problems. Topics include graphical appreciation, index number theory, probability and hypothesis testing, analysis of variance, sampling techniques, regression theory, decision theory and forecasting. Prerequisites: MAT 232 and IST 210. 3 credits

DSC 410. QUANTITATIVE METHODS. Provides students with a conceptual understanding of the role of quantitative methods in decision analysis and decision making. Students will be exposed to several quantitative problem solving techniques in an application-based environment to help sharpen their analytical skills and problem solving abilities. Prerequisite: DSC 325. 3 credits

DSC 430. PRODUCTION/OPERATIONS MANAGEMENT (formerly BUS 330). The functions of management as related to the production of goods and services; plant layout; quality control; raw materials, from supply through the finished product. Prerequisites: MGT 301 and DSC 325. 3 credits

ECONOMICS (ECO)

ECO 221. INTRODUCTION TO MACRO-ECONOMICS. Examines the major problems of economic stability, growth, unemployment, and the role of the government in controlling and regulating economic activity with particular focus upon fiscal and monetary policies. Prerequisite: MAT 153 or 232 or 235. (F, S, SUM). 3 credits

ECO 222. INTRODUCTION TO MICRO-ECONOMICS. A thorough examination of price determination and how the market mechanism operates in allocating resources among alternative uses. Public policy in relation to business and labor. Prerequisite: MAT 153 or 232 or 235. (F, S, SUM). 3 credits

ECO 225. MONEY AND BANKING. Analyzes the basic financial institutions, their functions and interrelationships. Emphasizes the central banking system and the impact of money aggregates and policy on interest rates and macro-economic behavior. Includes Caribbean systems and financial dualism. Prerequisites: ECO 221, ECO 222. (F). 3 credits

ECO 321. INTERMEDIATE MACRO-ECONOMIC ANALYSIS. Examines the major problems of economic growth and stability; develops major macro-economic models for analysis of the above problems. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 322. INTERMEDIATE MICRO-ECONOMIC ANALYSIS. Develops the economic efficiency model of resource allocation in the market system; covers all the major market structures; perfect competition, monopolistic competition, oligopoly, and monopoly. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 324. COMPARATIVE ECONOMIC SYSTEMS. A comparative analysis of the systems utilized to allocate resources with particular emphasis on the capitalistic and communistic systems. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 341. INTERNATIONAL ECONOMICS. Develops the theoretical tools for analyzing open economics: classical and modern trade and tariff models, balance of payments theory and the international monetary system. Special topics include West Indian migration, the multinational corporation, export dependence and CARICOM. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 360. ECONOMIC DEVELOPMENT. An introduction to the nature of the economic development process and the characteristics of underdeveloped societies. Includes analysis of the problems of structural transformation and the role of the public sector. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 401. PUBLIC SECTOR ECONOMICS. Focuses on the theory and policy of the public finance of the public sector. Essentially, the subject may be viewed as the micro-economic and macroeconomic

rationale of government revenues and expenditures. Much of the thrust of the subject will be keyed to an understanding and evaluation of the public sector's budgetary process, controls, and implementation of expenditure policies; analyses of various types of tax structures, public debt and public sector accountability will all be analyzed. Emphasis will be on the Caribbean public finance structures. Prerequisites: ECO 321, ECO 322. (DEM). 3 credits

ECO 461. CARIBBEAN ECONOMIC PROBLEMS. A comparative analysis of contemporary Caribbean economics, emphasizing the resource and policy problems of development. Prerequisites: ECO 221, ECO 222. (DEM). 3 credits

ECO 465, 466. SELECTED TOPICS. An elective course designed for all social science students. Includes areas of special interest in economics. Individual topics will be announced at the beginning of the semester. Prerequisite: ECO 221. (DEM). 3,3 credits

ECO 496. PRACTICUM IN ECONOMIC RESEARCH. Provides supervised experience in applying the tools of economic analysis to contemporary development problems and policy issues on both the micro and macro levels of economic behaviors. A comprehensive program must be submitted to the Dean no later than the sixth week of the semester prior to the semester in which the field work is to be undertaken. Prerequisites: Senior standing with Economics concentration, ECO 321 and ECO 322. (DEM). 3 credits

EDUCATION (EDU)

Non-education undergraduate majors may take education courses if they have satisfied the same general education requirements and have the required prerequisite(s) for the selected course.

EDU 101. INTRODUCTION TO INCLUSIVE EARLY CHILDHOOD EDUCATION (IECE) IN THE U.S., CARIBBEAN AND GLOBAL CONTEXTS. This course is designed to introduce inclusive early childhood education practices with emphasis on historical perspectives, theories, current trends and developments in a global society. The course engages adult learners in espousing the knowledge, skills and dispositions necessary to promote global-minded providers of early care and education, using developmentally appropriate learning experiences. A 10-hour field experience requirement is added to this course. Prerequisites: Successful completion of ENG 101/RCA 021 or satisfactory score on SAT for exemption. Corequisite: EDU 110. 3 credits

EDU 110. EARLY CHILDHOOD DEVELOPMENT and INCLUSIVE ENVIRONMENTS I. (formerly EDU 108, EDU 109) This course focuses on the variability in patterns of child development from conception through the toddler stages of life, the major influences on development, and ensuring developmentally appropriate inclusive environments. Students will gain thorough knowledge and skills in the development of children, pre-natal to age three years, through the study of developmental domains and the holistic nature of development. The course provides a core foundation of knowledge essential to students' understanding of work with all young children, including children with and without disabilities. Corequisite: Successful completion of ENG 101/RCA 021 or satisfactory score on SAT for exemption. Corequisite: EDU 101. 3 credits

EDU 111. EARLY CHILDHOOD DEVELOPMENT AND INCLUSIVE ENVIRONMENTS II. (formerly, EDU 113, EDU 114). This course provides the student with an in-depth understanding of the developmental domains, variability in patterns of child development from three years to eight years, the major influences on development, as well as the concept of developmentally appropriate inclusive environments. It provides a core foundation of knowledge essential to students' understanding of work with young children, with and without disabilities. Prerequisite: EDU 101, EDU 110. 3 credits

EDU 214. FAMILY AND COMMUNITY RELATIONSHIPS. This course provides the basis for understanding patterns of family dynamics and for building partnerships, effective communication, and collaboration skills with all families, including families who have children with disabilities. Supporting the family's primary role in their young child's early development and education is a primary focus of this course. Prerequisites: Successful completion of ENG 101/RCA 021 or satisfactory score on SAT for exemption. (F, ALT SUM). 3 credits

EDU 215. PROMOTING POSITIVE SOCIO-EMOTIONAL FOUNDATIONS OF EARLY LEARNING. This course introduces the student to methods of child guidance and group management that foster the

development of self-esteem, self-control, and self-discipline/self-regulation in children in a developmentally appropriate context. Prerequisites: EDU 110 3 credits

EDU 216. INCLUSIVE EARLY CHILDHOOD CURRICULA and ASSESSMENT. In this course the student will learn how to plan, implement and monitor children's progress in developmentally and individually appropriate play and learning activities in a variety of inclusive settings. Content will focus on curriculum development and integration curriculum areas such as language and literacy, mathematics and prwoblem-solving, science, social studies, health, safety, and nutrition, art, music and movement education. Prerequisite: EDU 114. (F, S). 3 credits

EDU 217. ETHICAL AND LEGAL ISSUES IN EARLY CHILDHOOD EDUCATION. This course provides a basis for understanding the legal and socio-ethical considerations relevant to inclusive early childhood education. (No longer required as a separate course). Prerequisite: Successful completion of ENG 101/ RCA 021 or satisfactory score on SAT for exemption. (S, ALT SUM). 3 credits

EDU 219. PROMOTING LANGUAGE AND LITERACY IN EARLY CHILDHOOD. This course provides students with the research-based principles and practices for providing children through the age of five with a strong foundation in receptive and expressive language early reading and writing within a developmentally appropriate approach. Prerequisite: EDU 113 or EDU 230. (F, S). 3 credits

EDU 221. FOUNDATIONS OF EDUCATION. This course is essentially an historical study of the role of education in the United States and the U.S. Virgin Islands. It is designed to assist the student with a variety of significant education literature and provide an opportunity to examine the basic ideas (philosophical, sociological and psychological) which have tended to give form and purpose to educational thought and practice in the United States and the U.S. Virgin Islands. Prerequisite: Sophomore standing. (F, SUM I). 3 credits

EDU 222. SUPERVISED FIELD EXPERIENCE IN INCLUSIVE EARLY CHILDHOOD ENVIRONMENTS I. This course has two components, a seminar and a field experience. The seminar component provides weekly opportunities for discussion and interaction focused on developmentally appropriate methods and strategies for working with young children from infancy to age 3 in inclusive environments. The field experience provides the student with opportunities to observe, develop, and implement developmentally appropriate methods, best practices and services under the supervision of qualified professionals in a variety of settings in which young children and their families are served. Students are expected to complete 35 hours of unpaid field experience per week. Pre-requisites: EDU 214, EDU 215. (DEM). 5 credits

EDU 223. SUPERVISED FIELD EXPERIENCE IN DESIGNING AND IMPLEMENTING INCLUSIVE EARLY CHILDHOOD PROGRAMS II. (formerly EDU 218, EDU 220). This course includes two components: A weekly seminar and field-based learning. The seminar component will provide opportunities for reflection and discussion based on field experience activities. The field-based learning component is designed to complement the seminar as it also promotes reflective practice. Students are required to spend four hours daily for the duration of the semester, engaging in community interactions with schools/early childhood facilities and carrying out classroom responsibilities under the supervision of early care and education providers and university personnel. These professionals comprise the Instructional Leadership Team. The field experience will occur in a variety of inclusive natural environments and programs in which young children, with and without disabilities, and their families are served. Prerequisites: EDU 214, EDU 215, EDU 216, EDU 219. (DEM). 5 credits

EDU 230. EDUCATIONAL PSYCHOLOGY. An introduction to the ways in which psychological principles and theories of development apply to educational practice. The focus will be on the basic processes of development — cognitive, social and personality, moral, emotional, physical, language — from infancy through adolescence with special reference to their relationship to learning and instruction. The psychology of learning, motivation and social factors in education will also be considered. Prerequisites: Sophomore standing and PSY 120. (F, S). 3 credits

EDU 246. CURRICULUM AND TEACHING IN EARLY CHILDHOOD EDUCATION. This course covers the curriculum and teaching methods in early childhood education. It also studies the sociocultural and psychological factors relevant to curriculum development for young children ages 3 to 8. 3 credits

EDU 250. CURRICULUM DEVELOPMENT AND INSTRUCTION. A study of the theoretical bases of curriculum planning and design, and of the influences of learner, society and knowledge sources on the

process of curriculum development and classroom instruction. Emphasis will be placed on the selection, planning and implementation of teaching strategies, methodologies and instructional materials appropriate for individualized and group instruction. Prerequisites: EDU 221, EDU 230 and admission to the School of Education. (F, S). 3 credits

EDU 257. MATHEMATICS AND THE ELEMENTARY TEACHER. This course is a joint offering of the Mathematics and Teacher Education Programs. The mathematics portion (3 hours per week) is a detailed examination of the mathematical content that is prerequisite for teaching elementary school mathematics. The development of methods and materials for the teaching of elementary school mathematics (1 hour per week) will be conducted by the Teacher Education faculty for a total of 4 hours of instruction per week. Demonstration teaching and student teaching experiences are important aspects of all segments of this course. During the semester, concurrent field experiences under the auspices of the School of Education will consist of two hours weekly in a public elementary school with instruction in mathematics. Prerequisites: EDU 250 and admission to the School of Education. (Also listed as MAT 257.) (F). 5 credits

EDU 275. TEACHING VISUAL ARTS TO CHILDREN AND ADOLESCENTS. Fundamentals of art educational methods through practice with: meaningful visual arts and crafts production, creative problem solving, critical thinking, writing skills, assessment processes, and use of visual media appropriate for school-aged children. For: art teachers, classroom teachers, and those using art-making methods for visual and tactile learners of any age. Suggested to education majors; open to any student as an elective. (Also listed as ART 275.) 3 credits

EDU 302. INTRODUCTION TO SPECIAL EDUCATION. This is an introductory course designed to expose enrollees to children with exceptionalities. It will focus on the various categories of disabilities, the associated characteristics, etiology, prevalence, causes, and academic interventions based on the nature of the disability. The legal framework for services for students with disabilities as well as litigation that impacted legislation in the area will be explored. The foundation of special education along with current issues in special education will form a part of the course. Embedded in this course is 10 hours of classroom field work . Students will be required to work with or observe children with disabilities in preschool and/or elementary settings, offering direct exposure to and interaction with students with disabilities. (DEM). 3 credits

EDU 304. TEACHING READING AND LITERACY IN INCLUSIVE EARLY CHILDHOOD EDUCATION. The reading course is designed to provide inclusive early childhood majors with an understanding of the reading process, as well as a detailed view of research-based principles of effective literacy instruction from kindergarten to third grade for all children, including children with disabilities. A field experience of two hours weekly is required, in addition to two contact hours of classroom time. Prerequisites: EDU 219 and 221. 3 credits

EDU 305. TEACHING MATHEMATICS IN INCLUSIVE EARLY CHILDHOOD EDUCATION. The foundation for children's mathematical development is laid in the earliest years. Consequently, teachers of young children birth through age eight should build on the curiosity and enthusiasm of children. As a result, this course is designed to connect the world of children to new experiences that would challenge them to explore ideas related to patterns, shapes, numbers, measurement and space with increasing difficulty and sophistication. In this course, students will learn how to apply broad and varied concepts that will help young children learn mathematics with understanding, actively building new knowledge from experience and from prior knowledge. Prerequisites: EDU 221 and EDU 302. 3 credits

EDU 306. CREATIVE ARTS AND EXPRESSION IN INCLUSIVE EARLY CHILDHOOD EDUCATION. This course is designed to provide the student with knowledge, strategies and skills needed to encourage children to learn in, through and about creative arts while actively engaging in quality, developmentally appropriate and meaningful experiences expressed through play and reflecting their own cultures. Students will learn how to facilitate creative expression through movement and dance, music, drama, and visual arts in inclusive settings. Prerequisites: EDU 221 and EDU 302. 3 credits

EDU 307. TEACHING SCIENCE IN INCLUSIVE EARLY CHILDHOOD EDUCATION. This course prepares inclusive early childhood education teachers to plan, integrate, and implement science concepts for children from birth to eight years of age. The course includes developing an inquiry-based science program for young children that promotes exploration, discovery, development of a hypotheses, description, and analyses to promote science learning. Prerequisites: EDU 221 and EDU 302. 3 credits

EDU 308. INTEGRATING AND ADAPTING CURRICULUM ACROSS THE CONTENT AREAS IN INCLUSIVE EARLY CHILDHOOD EDUCATION. This course is designed to assist inclusive early childhood educators in developing the ability to link their knowledge in specific content areas to the broader picture of managing the classroom environment, implementing an integrated curriculum across content areas, and applying philosophical principles to effective instruction of diverse young learners. This course is designed to prepare teachers to work with children of diverse learning needs and interests in a variety of inclusive educational settings. Teachers are prepared to integrate and link the different content areas (social studies, mathematics, science, language/literacy, creative arts and expression) to create a more meaningful curriculum. Prerequisites: EDU 304, 305, 306, and 307. 3 credits

EDU 309 TEACHING STEM IN INCLUSIVE EARLY CHILDHOOD EDUCATION. This course is designed with an interdisciplinary curriculum approach in the areas of science, technology, engineering and math (STEM). It explores the sociopolitical context of schooling and impact on STEM education and uses Paul Gorski's Equity Literacy framework to develop knowledgeable and skillful equity-literate STEM educators. Course offerings include two components: A weekly seminar and Field-based learning. The seminar component is taught in an integrated manner. Field-based learning is designed to promote reflective practice. Students are required to engage in community interactions with schools/early childhood facilities once a week under the guidance of public school teachers, early care and education providers and university personnel that comprise the Instructional Leadership Team. This engagement includes class observation and attendance at a professional learning community (PLC) meeting. Prerequisites: EDU 221 and EDU 302 3 credits

EDU 320. THE USE OF COMPUTERS IN ESL CURRICULUM AND INSTRUCTION. This course prepares students to infuse technology into ESL curriculum and instruction. Additionally, students will develop technology skills and knowledge based on sound pedagogical principles that reflect research and theory in Second Language Acquisition and will apply this knowledge to K-12 ESL instruction. Prerequisite: None. 3 credits

EDU 324. SECOND LANGUAGE ACQUISITION. This course provides students with knowledge of first and second language acquisition, including the interaction of a bilingual's two languages, with implications for the classroom. Research on different theories of bilingualism, the effects it has on the brain as well as on the cognitive and linguistic achievements of bilingual children will be examined. Further, the course will expose students to knowledge about the consequences of bilingualism for children's cognitive development, school achievement, and linguistic processing. Prerequisite: None. 3 credits

EDU 326. THE READING PROCESS FOR SECOND LANGUAGE LEARNERS. This course is designed to provide students with the knowledge that they need to analyze theories underlying the teaching of reading to second language learners, as well as to identify specific approaches, methods, and strategies used in teaching reading in the ESL classroom. Additionally, this course will provide students with the ability to identify and select assessments appropriate to measure the comprehension of second language readers. Prerequisite: EDU 324. 3 credits

EDU 330. LINGUISTICS FOR ESL TEACHERS. This course provides students with an overview of key concepts, issues, insights, and pedagogical implications of current research on issues related to ESL and applied linguistics (phonology, morphology, syntax and semantics). Linguistic issues that will be examined are the use of phonics and phonemic awareness in learning to read, factors in teaching oral communication in social contexts, irregularities in English orthography and implications for teaching, word formation in vocabulary development and writing, and language proficiency in ESL. Prerequisite: EDU 326. 3 credits

EDU 335. CURRICULUM DEVELOPMENT AND LANGUAGE LEARNING IN THE ESL CLASSROOM. This course examines the development of curriculum for ESL classrooms. Students must apply their knowledge and understandings of language learning and learning environments to real life language-learning situations in the classroom as they develop curriculum. Specifically, the course will focus on the selection, planning, and implementation of teaching methodologies, strategies and materials specific to instruction of second language learners. Prerequisite: EDU 330. 3 credits

EDU 340. CLASSROOM-BASED ASSESSMENT FOR THE ESL CLASSROOM. This course provides teachers students with the opportunity to examine the organization of curriculum for second language learners with a special focus on testing and evaluation procedures appropriate for ESL classrooms; study of formal and informal assessment of language proficiency for instructional purposes and use of standardized and teacher-made achievement tests. Prerequisite: EDU 335. 3 credits

EDU 349. METHODS OF TEACHING ENGLISH AS A SECOND LANGUAGE. This course is designed to develop a background in phonology, applied linguistics, and to develop audio-lingual and oral teaching methods for the teaching of listening, speaking, reading and writing skills in English as a second language with emphasis on teaching the Spanish-dominant student. Prerequisite: EDU 230. (SUM I). 3 credits

EDU 350. INSTRUCTIONAL DESIGN AND TECHNOLOGY. Practice application of audiovisual methods and materials for instruction including the operation of equipment, computer uses and the planning and effective use of instructional technology with special emphasis on the development and use of training aids. Prerequisite: Admission to the School. (F). 2 credits

EDU 351. CLASSROOM MANAGEMENT. Principles and practices for managing classroom behavior including preventive strategies, group and individual techniques, and social, cultural and psychological concerns. Emphasis is on the development of a personal philosophy and approach to effective classroom management. Prerequisites: EDU 250 (may be taken concurrently) and admission to the School. (S). 2 credits

EDU 353, 354. TEACHING THE LANGUAGE ARTS. Designed to instruct learners in the utilization of methods and materials for teaching reading and other language arts on levels K-8. It will also deal with the interrelatedness of the language arts skills (reading, writing, speaking, listening, study skills), reading in the content areas, grouping for instruction, informal diagnosis in the classroom, programmed reading research and demonstration techniques, developmental and remedial reading techniques, and components of a sound children's literature program. An entire semester will be devoted specifically to the teaching of reading. During one semester, concurrent field experiences will consist of two hours weekly in a public elementary school with instruction in the language arts. Prerequisites: EDU 250 and admission to the School of Education. EDU 353 (F). EDU 354 (S). 3,4 credits

EDU 360. SCIENCE AND THE ELEMENTARY TEACHER. This course, a joint offering of the Science and Teacher Education programs, is designed for elementary education majors. It will give students an opportunity to actively participate in the construction of scientific knowledge by engaging them in critical thinking and original research projects in the natural sciences. Additionally, the course will expose students to science teaching reform, standards in science teaching, and the theories of teaching and learning in science. During the semester, concurrent field experiences under the supervision of the School of Education in conjunction with the College of Science and Mathematics will consist of two hours weekly. Prerequisites: EDU 250 and admission to the School of Education. (Also listed as SCI 360). (F-ALT). 5 credits

EDU 365. TEACHING SOCIAL STUDIES IN ELEMENTARY SCHOOLS. The course exposes students to the major principles, content, and components of social studies and dynamic social studies instruction. It provides an opportunity for small group interaction as a means of exploring social studies topics, programs, strategies and best instructional practices suitable for teaching in grades K– 6. Prerequisites: EDU 250 and admission to the School of Education. (S-ALT). 3 credits

EDU 403. ASSESSMENT FOR EFFECTIVE TEACHING IN INCLUSIVE EARLY CHILDHOOD EDUCATION. Students will develop a basic understanding of the assessment process and learn how the results of assessment are linked to teaching and guiding young children from birth to eight years of age. Students will practice assessment techniques with children that are developmentally appropriate, family-centered, culturally and linguistically competent. Students will learn how to share assessment results with parents and other professionals. Prerequisites: EDU 304, 305, 306, and 307. 3 credits

EDU 404. ADMINISTRATION AND SUPERVISION OF INCLUSIVE EARLY CHILDHOOD EDUCATION. This course is designed to examine the multi-dimensional role of the early childhood program director/ administrator and to investigate the administrative styles, management tools and interpersonal skills that contribute to effective leadership. Prerequisites: EDU 304, 305, 306 and 307. 3 credits

EDU 405. COLLABORATION AND CONSULTATION IN INCLUSIVE EARLY CHILDHOOD EDUCATION. This course is designed to provide the inclusive early childhood educator with consultative, collaborative, and teamwork skills. Students will be required to observe and critique experiences in the field with professionals who serve as consultants to general education teachers. It involves sharing expertise and concerns, as well as planning and working with parents and other professionals to identify students' unique needs, thus enabling the implementation of programs that facilitate learning and achievement within inclusive educational settings. Prerequisite: EDU 308. 3 credits

EDU 408. STUDENT TEACHING IN INCLUSIVE EARLY CHILDHOOD EDUCATION. (formerly EDU 406, EDU 407). Student teaching is the culminating experience in the inclusive early childhood education program. It provides the opportunity for the student teacher to put theory into practice under the guidance of a certified teacher and a university supervisor, allowing the gradual induction into the role of a professional teacher. Feedback and assessment are given in terms of growth in the understanding and abilities needed to assume the responsibilities of a beginning teacher. Emphasis is placed on helping the student teacher become a reflective professional. Cooperation among the classroom teacher, university supervisor and administrators is essential. The inclusive early childhood education program provides students with the opportunity to participate in multicultural and inclusive sites. Student teachers will be required to spend a full-day per day at their sites and to participate in a weekly seminar. It is strongly recommended that no other courses be taken during the student's teaching semester. Prerequisites: EDU 214, EDU 215, EDU 216, EDU 308, EDU 309, EDU 350, EDU 403. (DEM). 6 credits

EDU 450. MEASUREMENT AND EVALUATION IN EDUCATION. Study of measurement and evaluation techniques appropriate to the assessment of classroom instruction. Emphasis will be placed on test construction, criterion-referenced and norm-referenced testing, and on alternative evaluative procedures used to measure and report student progress. Prerequisites: EDU 250 and admission to the School of Education. (S). 2 credits

EDU 452. STUDENT TEACHING IN THE ELEMENTARY SCHOOL. Designed to develop high level teaching competence through observation, participation, direct full-day unpaid teaching experience, and related conferences. Guidance towards the development of specified competencies will be provided by selected faculty of local public schools and the University supervisor. Problems and successes encountered during the practical experiences will be addressed in a weekly seminar conducted by the University supervisor. Prerequisites: Successful completion of all other required education courses with a minimum of grade "C". (DEM). 9 credits

EDU 469. STUDENT TEACHING IN THE SECONDARY SCHOOL. Designed to develop high level teaching competence through observation, participation, actual teaching of a total class and related conferences, this course requires involvement of a full school day under the joint supervision of selected public school faculty and the University supervisor. In addition, the student teaching/school internship is an unpaid experience. The course must be taken in conjunction with EDU 497. Prerequisites: Successful completion of all other required education courses with a minimum grade of "C". (DEM). 6 credits

EDU 470. INTERNSHIP FOR PRACTICING TEACHERS. This course, designed for practicing elementary and secondary teachers who are employed full-time in Virgin Islands schools, but lack a course in student teaching or school internship, exposes students to research-based instructional practices and builds competence in teaching procedures and methodologies, classroom management, teacher-student relations, professional relationships, and oral and written communication. It provides students an opportunity to practice sound pedagogy within their own classrooms under the supervision of a university instructor. Prerequisites: A practicing teacher of three or more years with a bachelor's degree and completion of pedagogy courses identified by the VI Board of Education as needed for certification. 6 credits

EDU 497. SEMINAR IN SECONDARY TEACHING. A consideration of problems encountered in junior and senior secondary schools, and of strategies for teaching various subjects at this level. In-depth study and individual projects will relate to specific disciplines being taught concurrently and to major concepts connected with the practice of teaching at the secondary level. The seminar will be conducted by the supervisor of the student teaching experience and by visiting master teachers in relevant disciplines. The course must be taken in conjunction with EDU 469. Prerequisites: Successful completion of all other required education courses with a minimum grade of "C". (DEM). 2 credits

EDU 499. INDEPENDENT STUDY. This course is designed to offer an opportunity and challenge for self-directed study aimed at developing the individual's ability as an independent student. It is intended to allow the advanced student, under the guidance of a full-time faculty member, to read, research and report in an area in which appropriate courses are not offered. Approval of a study outline by the faculty member and number of credits by the chair is required prior to enrollment. (DEM). 1-4 credits

ENGINEERING (EGR)

EGR 110. INTRODUCTION TO ENGINEERING. A study of engineering, curricula, branches of engineering, basic concepts of engineering, professional ethics, and the engineer in society. This course provides the student with an introduction to: the engineering problem solving process; engineering analysis and design techniques; engineering calculations; statistical analysis; three-dimensional vectors; moments; equilibrium; work and energy; and DC circuit analysis. Three hours of lecture per week. Prerequisites: MAT 143 and MAT 153. 3 credits

EGR 131. ENGINEERING DRAWING. Elements of mechanical drawing; orthographic projection; isometric and oblique sketching and drawing, primary and secondary auxiliary views, dimensioning detail and assembly drawings, graphic computations, plotting experimental data and empirical equations, graphic statics. One hour lecture and 6 hours laboratory per week. 3 credits

EGR 132. ENGINEERING GRAPHICS. Fundamental principles of descriptive geometry involving lines, surfaces and intersections, with application of these principles to engineering problems. One hour lecture and 6 hours laboratory per week. Prerequisite: EGR 131. 3 credits

EGR 141. PLANE SURVEYING. Measurement of distance, directions and elevations; care, adjustment and use of surveying instruments; methods of plane and geodetic surveys; field practice; calculations and mapping; triangulations; precise leveling; area and earthwork; circular curves; stadia, plane table and topographic surveys, and public land surveys. Three hours lecture and 3 hours field work per week. Prerequisites: EGR 131 and MAT 153. 4 credits

EGR 211. STATICS. A study of forces and force systems and their external effect on bodies, principally the condition of equilibrium of particles and rigid bodies. Includes a study of distributed forces, centroids and center of gravity, moments of inertia, analysis of simple structures and machines, and various types of friction. The techniques of vector mathematics are employed and the rigor of physical analysis is emphasized. Three hours of lecture per week. Prerequisite: EGR 110 or PHY 241. Corequisite: MAT 242. 3 credits

EGR 212. DYNAMICS. A study of the kinematics of particles and rigid bodies, kinetics of particles with emphasis on Newton's second law, energy and momentum methods for the solution of problems, and applications of plane motion of rigid bodies. Techniques of vector mathematics are employed. 3 hours of lecture per week. Prerequisite: EGR 211. 3 credits

EGR 213. CIRCUIT ANALYSIS. A study of resistive circuits; Kirchoff's Laws; independent and dependent sources; nodal and mesh analysis; superposition; Thevenin's and Norton's theorems; maximum power transfer; natural response of RC, RL and RLC circuits; operational amplifiers; sinusoidal analysis and phasors. Three hours of lecture per week. Prerequisiste: EGR 110. Corequisites: PHY 242, MAT 346. 3 credits

ENGLISH (ENG)

ENG 051. FUNCTIONAL WRITING. The course addresses several heuristics for the writing process, but the main focus is on writing products. It satisfies the English Proficiency Examination requirement for graduation. The portfolio-based course is open to students who have taken the freshman level sequence or the equivalent and need further practice in examination writing. 3 non-degree credits

ENG 100/WAC 011. WRITING ACROSS THE CURRICULUM: AN INTRODUCTION. Explores the fundamentals of writing in an interdisciplinary context. Emphasizes grammar, punctuation, and mechanics in the context of active learning. Students write for instructors not only in the humanities, but in the other colleges and schools as well. (Students may test out at placement or with appropriate SAT scores.) 3 non-degree credits and 1 credit

ENG 101/RCA 021. READING IN CONTENT AREAS: AN INTRODUCTION. Content Area Reading 021/ ENG 101 offers a comprehensive program of reading and vocabulary in the content areas. It is linked to General Education I - The Caribbean: Social Dimension (SSC 100) and General Education II - The Natural World: The Caribbean (SCI 100). Literal and critical reading skills, conceptual vocabulary enrichment, and validated reading and study strategies are stressed. The course requires that students develop a portfolio of materials demonstrating mastery of the course's objectives. 3 non-degree credits and 1 credit

ENG 108. EXPLORATION OF VIRGIN ISLANDS LITERATURE. An introductory survey of Virgin Islands creative writing in the context of a description of Virgin Islands culture. Students will investigate, through bibliographic research and critical reading, Virgin Islands literature in its socio-historical context. 3 credits

ENG 120. ENGLISH COMPOSITION. English Composition is the intermediate writing course in the University's composition offerings. It develops critical thinking, investigative research and coherent ideas through the writing of analytical, literary and critical essays and the close reading of texts. Prerequisites: ENG 100/WAC 011 and ENG 101/RCA 021, or passing scores on the placement exams, or satisfactory SAT or ACT scores, for exemption. 3 credits

ENG 191. HONORS COMPOSITION. A course in expository writing for students who demonstrate considerable skill in English grammar and the fundamentals of essay organization and development. Students will develop and refine rhetorical style in the sentence, paragraph and essay, focusing upon the same essay types examined in ENG 120. This course may substitute for ENG 120 as a general education requirement. Prerequisites: A score of 530 or above on the SAT Writing test, or 21 on the ACT English or English/Writing test, or a superior score on the objective English placement exam and recommendation by placement exam essay readers. (F). 3 credits

ENG 192. HONORS COMPOSITION. A course in persuasive and argumentative writing for students who demonstrate considerable ability in ENG 120 or ENG 191. Students will examine, analyze and evaluate persuasive and argumentative writings, study basic methods of research and apply these to a paper based on original research. This course may substitute for ENG 201 as a general education requirement. Prerequisite: "A" average in ENG 120, or successful completion of ENG 191. (S). 3 credits

ENG 200. JOURNALISM WORKSHOP. Staff members of UVI VOICE student newspaper receive credit for making a regular contribution to the paper for the semester, serving as writers, copy editors or photographers for each issue. Participants create a portfolio reflecting on their development during the semester. This course can be repeated to a total of 8 credits. Prerequisite: Grade of "C" or better in ENG 201. (Also listed as COM 200.) (F, S). 1 credit (repeatable to 8)

ENG 201. RESEARCH AND APPLIED WRITING. ENG 201 is the capstone course in the University-wide writing requirements. It is designed to ensure student competency with the principles and practice of effective writing. This course will prepare students to achieve proficiency in the use of standard writing formats for communication in the various disciplines offered in the University, including research, report writing, argumentation, technical writing, critical writing and other professional-level writing skills. Students will also be able to meet the qualifications for writing in graduate education. Prerequisite: ENG 120. 3 credits

ENG 261. WORLD LITERATURE PART I. An interdisciplinary exploration of the short story and novel from a global perspective, the terminology of literary analysis, different critical approaches, and selected criticism leading to the production of aesthetic and critical analyses of works of fiction. Prerequisite: ENG 201. 3 credits

ENG 262. WORLD LITERATURE PART II. An interdisciplinary exploration of poetry and drama from a global perspective, the terminology of poetry and drama, interdisciplinary critical approaches, and selected works of criticism leading to the production of aesthetic and critical analyses of works of poetry and drama. Prerequisite: ENG 201. 3 credits

ENG 300. SCIENTIFIC WRITING. An advanced writing course in the University's composition offerings. Because it introduces student to the fundamentals of effective scientific writing, it is team-taught by an English instructor and a computational, natural or social science instructor. It develops critical thinking, scientific research, and scientific reasoning and communication through the writing of analytical, argumentative, and critical essays and the close reading of texts. Prerequisites: ENG 201 and one semester of biology, chemistry or physics. (S) 3 credits

ENG 301. INTRODUCTION TO CREATIVE WRITING. This course is an introduction to creative writing in the genres of poetry, fiction, and drama. Students will learn basic techniques and principles of creative writing and will complete several original works in poetry, fiction, and drama. (S) 3 credits

ENG 302. INTERMEDIATE FICTION WRITING. This workshop course is designed for students who have mastered the basic forms and techniques of fiction writing and wish to further develop their skills in the

craft. The workshop will use commentary and critical analysis from the instructor and the students to encourage the interchange of ideas about the focus and aesthetics of fiction, the methods of the creative process, and revision. Prerequisites: ENG 301. (F-O) 3 credits

ENG 303. INTERMEDIATE VERSE WRITING. This workshop course is designed for students who have mastered the basic forms and techniques of verse writing and wish to further develop their skills in the craft. The workshop will use commentary and critical analysis from the instructor and the students to encourage the interchange of ideas about the focus and aesthetics of poetry, the methods of the creative process, and revision. Prerequisites: ENG 301. (S-E) 3 credits

ENG 308. NEWSWRITING I. An introduction to writing for print and web-based news media. This course covers the basic types of news stories. Introduction to Associated Press style. Introduction to ethical standards in the profession. Course culminates in a project where students develop critical skills evaluating comparative coverage of a news topic across media. Prerequisite: grade "C" or better in ENG 201. (Also listed as COM 308.) (F). 3 credits

ENG 310. NEWSWRITING II / EDITING. Intensive writing for print and web-based media, including in-depth newswriting and beat reporting. Introduction to libel law. Students also learn editing skills, including content, style, grammar, assignment-making, the publications production process, editing their work and that of others. Advanced AP style, exposure to editing in other styles. Prerequisite ENG 308. (Also listed as COM 310.) (S-ALT). 3 credits

ENG 312. FEATURE WRITING. An advanced writing course focusing on feature writing and opinion/editorial. Students analyze award-winning feature stories, and research and write their own in-depth magazine-style features. Focus on refining an individual writing style. Prerequisite: ENG 308. (Also listed as COM 312.) (S-ALT). 3 credits

ENG 321. BRITISH LITERATURE. A survey of British literature through the eighteenth century, often presented thematically, and including a study of Old and Middle English language and literature, the Elizabethan writers, the metaphysical poets and the eighteenth century satirists. Prerequisites: ENG 261-262. (F-O). 3 credits

ENG 322. BRITISH LITERATURE. A survey of British literature of the nineteenth and twentieth centuries, often presented thematically, with particular emphasis on Romantic, Victorian and modern poetry, fiction and essays. Prerequisites: ENG 261-262. (S-E). 3 credits

ENG 324. DESKTOP PUBLISHING. Using industry-standard software, students will learn to use computers to design and produce print-based publications. The course offers an introduction to computer-assisted drawing and design, and photographic preparation. Students will study principles of typography, graphic design and color theory. The class culminates in a client-based portfolio project where students produce a substantive project on deadline, to the client's specifications, and within budget. Prerequisite: Grade "C" or better in ENG 308. (Also listed as ART 324 and COM 324.) (F-ALT). 4 credits

ENG 343. LANGUAGE THEORY. Covers a study of English grammars and an introduction to linguistics. Prerequisite: ENG 201. (AR, DEM). 3 credits

ENG 344. ADVANCED WRITING. Covers expository writing, with particular attention to formal report writing. Prerequisite: ENG 201. (S-O). 3 credits

ENG 345. HISTORY OF THE ENGLISH LANGUAGE. This course covers the structure, history, and development of the English language from its beginnings to the present day, with a particular focus on the use of the language in literature. Analysis of the linguistic aspects of literary texts will form the basis of the course. Prerequisites: ENG 261-262. (F-O). 3 credits

ENG 350.THE BIBLE AS LITERATURE. This course is a study of the Bible as literature. It will introduce students to the three types of writings in the Bible -- exposition, history and literature. It will also expose students to the literary artistry of the Bible as seen in the pattern or design, theme or central focus, organic unity, coherence, balance, contrast, symmetry, repetition and unified progression. In addition, it will enable students to study the resources of the language, such as metaphor, simile, pun, allusion, paradox, irony and rhetorical patterns that define the Bible as a literary book. This course will in no way be influenced by

any religious or denominational persuasion. It will be taught only for its literary value. Prerequisites: ENG 261-262. (F-O). 3 credits

ENG 361. AMERICAN LITERATURE. A representative survey of American literary achievement from the colonial days to the present. Prerequisites: ENG 261-262. (F-O). 3 credits

ENG 362. MAJOR AMERICAN WRITING. An in-depth study of selected major works of American literature. Prerequisite: ENG 261-262. (S-O). 3 credits

ENG 363. BLACK AMERICAN LITERATURE. A study of the literary contributions of black writers from the early slave narratives through contemporary writing. Prerequisites: ENG 261-262. (F-E). 3 credits

ENG 371. CARIBBEAN LITERATURE I. A study of representative works from the oral tradition, poetry and drama of the Caribbean area. Prerequisites: ENG 261-262. (S-O). 3 credits

ENG 372. CARIBBEAN LITERATURE II. A study of representative works of prose fiction and literary criticism by Caribbean writers. Prerequisites: ENG 261-262. (S-E). 3 credits

ENG 381. MODERN AFRICAN LITERATURE. This course will introduce students to the riches in modern African literature in various genres from various countries throughout the continent, and to the diverse cultures from which they come. The course will focus on the modern African novel, but will also cover modern African poetry, drama and non-fiction prose. Prerequisites: ENG 261-262. (F-E). 3 credits

ENG 401. ADVANCED CREATIVE WRITING. This workshop course is designed for students who have mastered the basic forms and techniques of creative writing and wish to further develop their skills in producing creative non-fiction, fiction, and poetry. The workshop will use commentary and critical analysis from the instructor and the students to encourage the interchange of ideas about the forms and aesthetics of creative non-fiction, fiction, and poetry; the methods of the creative process and revision. Prerequisites: ENG 301 and either ENG 302 or ENG 303. (S-O). 3 credits

ENG 404. PROFESSIONAL INTERNSHIP IN JOURNALISM/WRITING AND PUBLISHING. Qualified students receive academic credit for supervised, non-classroom writing and/or publishing experience in an employment setting, such as a newspaper, magazine or public relations firm. Students work with faculty adviser to plan the semester and provide a portfolio of work at the end of the semester. Prerequisites: At least two newswriting/journalism courses or permission of the adviser. (F, S). 1-3 credits (up to 3)

ENG 415. LITERARY CRITICISM. This course covers some of the major statements in literary theory from Aristotle to Henry Louis Gates, Jr. The course will combine the close study of critical principles with the application of those principles to a variety of literary genres: drama, poetry and fiction. These principles include the construction of cultural canons and the way they are influenced by racial, sexual, socioeconomic and national identities. Prerequisites: ENG 261-262. (F-E). 3 credits

ENG 421. ORAL TRADITIONAL LITERATURE OF AFRICA. This course will be a study of oral traditional literature in various North, Central, South, East and West African cultures, and of the techniques and conventions of oral traditional literatures throughout the African continent. Prerequisites: ENG 261-262. (S-E). 3 credits

ENG 423. WOMEN'S LITERATURE OF THE AFRICAN DIASPORA. This course will be a study of contemporary literature written by African women, African-American women and Afro-Caribbean women. Relevant historical background and information on feminist/womanist theory will be included. Prerequisites: ENG 261-262. (F-O). 3 credits

ENG 431. MAJOR AMERICAN AUTHOR. This course will be an in-depth study of the works of one major American author, including his or her historical and biographical context. Authors covered will vary, but will include Nobel Laureates Toni Morrison and William Faulkner as well as Herman Melville, Edgar Allan Poe, Richard Wright, Ernest Hemingway, Alice Walker and others who have made significant literary contributions. The course may be repeated for credit with a change in topic. Prerequisites: ENG 261-262. (S-E). 3 credits

ENG 432. MAJOR BRITISH AUTHOR. This course will be an in-depth study of the works of one major British author, including his or her historical and biographical context and any necessary language

study. Authors covered will vary, but will include such figures as Chaucer, Shakespeare, Milton, Charles Dickens, Jane Austen and James Joyce. The course may be repeated for credit with a change in topic. Prerequisites: ENG 261-262. (S-O). 3 credits

ENG 433. MAJOR CARIBBEAN AUTHOR. This course will be an in-depth study of the works of one major Caribbean author, including his or her historical and biographical context. Authors covered will vary, but will include Nobel Laureates Derek Walcott and V.S. Naipaul as well as George Lamming, Jamaica Kincaid, Wilson Harris, Olive Senior and others who have made significant literary contributions. The course may be repeated for credit with a change in topic. Prerequisites: ENG 261-262. (F-E). 3 credits

ENG 465, 466. SELECTED TOPICS. Includes the study of areas of special interest in language and literature. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. (VAR). 3,3 credits

ENG 499. INDEPENDENT STUDY. Individual study and research under the direction of a member or members of the College. Students will have a weekly conference with their advisors and do such readings and papers as may be required. Prerequisites: Students must have completed at least 20 credits in the subject area in question with a cumulative grade point average of 3.00. Students must secure consent of the dean and advisor and the approval of a written proposal for projects prior to the end of the preceding semester. 3 credits

ENGLISH AS SECOND LANGUAGE (ESL)

ESL 100. ENGLISH AS SECOND LANGUAGE I. Designed for students who already have some competence in English, but who need additional ESL preparation. Focuses on the mastery of basic sentence patterns and the essentials of English grammar. Emphasizes the writing process. Students compose short expressive paragraphs. 3 credits

ESL 101. ENGLISH AS SECOND LANGUAGE II. This course will utilize ESL techniques to help students examine and apply the rules of English grammar to various oral and written assignments. Students will learn to produce different types of essays and make presentations at the university level. 3 credits

ESL 102. ENGLISH AS A SECOND LANGUAGE: WRITING. ESL Writing focuses on writing expository essays and research papers using sentence structure in coherent, well-developed paragraphs. It emphasizes the development and organization of ideas in writing. It also expands critical thinking skills, particularly those used in writing of argumentative and persuasive essays. Emphasis is on the review of complex grammatical structures, paragraph relationships, and patterns of essay organization. Areas of study include the expansion of students' understanding of American culture through selected literature, video cassettes and cassette tapes, and other supplementary material to improve their skills in listening comprehension, reading and writing. Prerequisite ESL 101. 3 credits

ENTREPRENEURSHIP (ENT)

ENT 205 INNOVATION AND ENTREPRENEURSHIP. Introduction to Innovation & Entrepreneurship (I&E) is designed for all undergraduate students, including non-business students, who wish to learn about role and practice of entrepreneurship and innovation in society. This is an introductory course intended to expand your perspective of innovation and entrepreneurship. I&E is approached as a mindset and skillset that can be applied to virtually any organization: the large corporation, a new startup, a for-profit business, a non-profit venture, as well as the organization of 'you'. Entrepreneurship is an integrative field of study. As a result, foundational elements of business—accounting, finance, marketing, strategy, and management—will be introduced and referenced throughout the course. This course mixes theory with practice, and the students will be challenged to apply principles, concepts and frameworks to real world situations. Prerequisites: ENG 100/WAC 011 and ENG 101/RCA 021 or passing scores on the placement exams, or satisfactory SAT score for exemption. 3 credits

ENT 300. FOUNDATIONS OF ENTREPRENEURSHIP I: BUSINESS DISCOVERY AND ASSESSMENT. This course focuses on the foundations of discovering a viable new business or new line of business in an existing enterprise. Any viable new business must have a market or industry opening that is aligned with the capabilities of the organization. The venture must be able to create value in the marketplace. The entrepreneurial firm must then be able to capture a significant portion of that created value. And finally the

venture must be financeable. An iterative process of business discovery and assessment that satisfies all four of these elements will be the focus of this course. This applied course will leverage both case studies and student-initiated projects. The final deliverable for this course will be a business feasibility study. The course will be helpful for both business students with a desire to become serial entrepreneurs as well as non-business students seeking innovative means to create a living from their chosen field of study. Prerequisites: ENT 205. 3 credits

ENT 301. FOUNDATIONS OF ENTREPRENEURSHIP II: PLANNING AND RESOURCING THE NEW VENTURE. Entrepreneurship is about overcoming ambiguity, risk and failure; embracing it, and learning from it. While ENT 300 is focused on discovering a viable new business, this course is focused on how you will actualize a previously identified new business. A broad range of topics essential to planning and launching entrepreneurial ventures will be covered, including: identifying sources of capital that are in alignment with your proposed venture, strategies for raising capital, crafting go-to-market strategies, scenario-based financial modeling, attracting a capable team, creating a corporate culture, and preparing for growth. The major thrust of the course is a semester-long team project that entails researching and developing a complete business plan and investor presentation for a differentiated startup business concept. Prerequisites: ENT 205. 3 credits

ENT 304. ENTREPRENEURIAL MARKETING. This course clarifies key marketing concepts, methods, and strategic issues relevant for start-ups, growing entrepreneurial firms, and small to medium sized enterprises (SMEs). The course focuses on the issues of growing the sales of the resource-limited firm, particularly the constraints of cash and time. Entrepreneurs face the challenging task of developing and launching new products and services. Once created, these products and services must be quickly and inexpensively marketed and sold to targeted customers. This course is designed to acclimatize entrepreneurs with the essential tools of entrepreneurial marketing. Prerequisites: MKT 100 or MKT 301. 3 credits

ENT 306. ENTREPRENEURIAL FINANCE. The focus of this course is on financing startup and early-stage firms. The course additionally introduces private equity finance including leveraged buyout deals, workouts, and recapitalizations. The course is taught from a “middle of the table” perspective, viewing the issues from both the financier’s and the entrepreneur’s perspectives. For new and early-stage firms, the course presents both equity and non-equity financing options. On the equity side, the course covers the fundamentals of both venture capital and private equity finance. Four main aspects of venture capital are covered: valuation, deal structuring, governance, and harvesting. Case studies are used to demonstrate the practical, hands-on application of techniques following their development in class. Prerequisites: ACC 100 or ACC 201, FIN 100 or FIN 301. 3 credits

ENT 308 . BUSINESS GROWTH AND RENEWAL STRATEGIES. New entrepreneurial ventures, once successfully past the formation stage, encounter problems caused by their rapid growth. New employees and external support groups (bankers, attorneys, accountants, and investors) need to be integrated with the firm. Primary demands on the entrepreneur will shift from innovator to delegator, communicator and organizer. Previously innovative and differentiated products will be commoditized, eroding margins. Crafting growth and renewal strategies that address these profound changes is the focus of this course. Prerequisites: ENT 205, MGT 100 or MGT 301. 3 credits

ENT 310. ENTREPRENEURSHIP THROUGHOUT THE CARIBBEAN. In this course students will look at entrepreneurship in a Caribbean context. Specific focus will be on the types of businesses that are associated with our island paradise and the opportunities they provide for future entrepreneurs. Students will investigate the Caribbean market place, private industry and governmental data, and potential sources of funding for potential new businesses. Students will interview entrepreneurs and learn how to evaluate business opportunities (not merely ideas). Classroom material will be supplemented with guest speakers, videos, and software simulation. Students will complete a number of feasibility studies identifying business opportunities in the Eastern Caribbean. Prerequisite: ENT 300. 3 credits

ENT 410. MANAGING A GROWING BUSINESS. This course concentrates on successfully managing a new venture after the startup phase. The course explores the challenges of managing the operation of an on-going fledgling enterprise. Several issues including the managerial work of growing the business, identifying additional funding sources, and organizational development are explored and discussed. The task of building an organization capable of managing and sustaining the business as market and competitive conditions change is a central component of long-term success. Entrepreneurs must expand their focus and capacity for managerial flexibility to adapt to changes in the external environment. Issues for the ongoing businesses include recruiting and keeping the right people, providing leadership and

vision, learning how to delegate, managing cash flow, operating with limited resources, establishing and communicating organizational culture, and maintaining innovation are just some of the many challenges that must be overcome. Prerequisite: ENT 301. 3 credits

ENT 420. ENTREPRENEURSHIP FIELD SEMINAR. This course explores entrepreneurship in action. The course will require field work from the student to investigate various types of business opportunities. Students will conduct interviews with entrepreneurs and summarize these findings into a portfolio of potential opportunities. One opportunity will be further developed based on the individual interest of each student who will present their findings to classmates. External readings, current events in business trends, and the viability and profitability of various business opportunities will be explored. As an alternative to this course students have the option of taking a course co-developed with their college or school that focuses on the role and opportunities of entrepreneurship within their major field of study. Prerequisites: ENT 301, ENT 310. 3 credits

ENVIRONMENTAL SCIENCE (ENV)

ENV 200. INTRODUCTION TO ENVIRONMENTAL SCIENCE AND POLICY. A survey course designed as an introduction to the natural environment, human interactions impacting these systems, and the environmental policies that govern those interactions. The course will cover issues at local, regional, and global scales. Major topics include: human population growth, energy, climate change, agriculture, ecosystems, economics, US environmental policy, among others. Prerequisites: SCI 100, ENG 101/RCA 021, MAT 024 or satisfactory scores on SAT exemption. 3 credits

ENV 365, 366. TOPICS IN ENVIRONMENTAL SCIENCE. A project-based laboratory course designed to give students more in-depth experience working on environmental issues of regional relevance with local partners. Students will be involved in designing the course project, determining an appropriate course of action and achievable goals, and executing project deliverables. Projects will combine natural science and social science content areas and/or research methodologies. Prerequisite: ENV 200. 4 credits

FINANCE (FIN)

FIN 100. CONCEPTS IN FINANCE. This course is designed as a mini-course for non-business majors. The course explores some of the major concepts in the finance field. 1 credit

FIN 301. FUNDAMENTALS OF FINANCE. (formerly BUS 321). An introduction to theory and technique for optimal investment of the capital resources of the firm under conditions of uncertainty. Topics include rate of return analysis, cost of capital theory and measurement, capital structure, dividend policy, promotion and reorganization. Prerequisites: Two degree-credit courses in MAT, ACC 202 or HRM 234, and ECO 221, ECO 222. 3 credits

FIN 323. INVESTMENT ANALYSIS (formerly BUS 323). A study of investment policy for the individual and institutional investor. Topics include security analysis, theories of valuation, securities markets, sources of investment information, investment timing and portfolio management. Corequisite: FIN 301. 3 credits

FIN 324. FINANCIAL MARKETS AND INSTITUTIONS (formerly BUS 324). An examination of principles, function, and operations of the monetary and banking system, the structural relationship of major financial institutions, the flow of funds and determinants of interest rates. Corequisite: FIN 301. 3 credits

FIN 355. PRINCIPLES OF RISK MANAGEMENT (formerly BUS 255). The purpose of this course is to equip students with a general framework for understanding the effects of risk and provide them with a broad knowledge of risk management and insurance. The course includes an examination of the specific applications of alternative methods of treating risks with regard to life, health, property andcasualty, and liability insurance. Prerequisite: BUS 351. 3 credits

FIN 425. FINANCIAL POLICY AND STRATEGY (formerly BUS 425). Application of financial theory and principles to formulate financial policies for a firm and the development of strategies for its implementation. The case method will be emphasized. Topics included are: mergers and acquisitions, divestitures, financial restructuring, venture capital, financial syndication, investment banking, international finance and financial innovations. Corequisite: FIN 323. 3 credits

FIN 430. INTERNATIONAL FINANCE. Explores the global financial markets that facilitate international business, explain the key economic linkages among them and exchange rates and those factors that affect rates. Describes the challenges for companies created by changes in exchange rates and discusses how firms should manage their exposure to currency fluctuations. The course will explore areas of international corporate finance including capital budgeting and financing from the perspective of multinational companies. Prerequisite: FIN 324. 3 credits

FRENCH (FRE)

FRE 131. FUNCTIONAL ELEMENTARY FRENCH I. This course is designed to develop a basic level of competence in understanding and an acceptable level of competence in communicating in standard French. Its learning activities draw upon the broad range of state-of-the-art facilities and techniques, including videos, computer-assisted language practice and multi-media supported activities. This first course lays the foundation in phonology, vocabulary and grammar for effective command of the other two in this sequence. (F, S). 4 credits

FRE 132. FUNCTIONAL ELEMENTARY FRENCH II. This course is designed to develop a higher elementary level of understanding and speaking and writing standard French. The learning program is based on state-of-the-art videos, computer-assisted language activities and practice provided by multi-media resources. This second course builds upon the foundation laid by the introductory elementary course and continues to develop phonology, vocabulary and grammar in preparation for the intermediate and more advanced stages of the language. The development of language functions moves from ritualistic expressions to more complex usages in conversation. Prerequisite: FRE 131 or successful completion of the appropriate placement test. (F, S). 4 credits

FRE 231. INTERMEDIATE FRENCH. Grammar reviews, drills in translation, intensive practice in hearing and in speaking French. Practical vocabulary and conversation will be stressed. Prerequisite: FRE 132 or successful completion of the appropriate placement test. (F, S). 4 credits

FRE 305. ORAL FRENCH. Intensive oral practice; pronunciation, vocabulary, reading, comprehension, conversation, short speeches and group discussions. 3 credits

FRE 306. ADVANCED CONVERSATION. Conducted entirely in French and designed to develop fluency and correctness in the spoken language by means of prepared and impromptu discussions on topics of cultural and current interest. Prerequisite: FRE 231 or successful completion of the appropriate placement test. 3 credits

FRE 311. ROMANCE LINGUISTICS. A groundwork is laid for studies in the development of the Romance languages. Some essential and practical concepts and applications of descriptive linguistics are studied. Methodologies for recording and analyzing languages are explored. Readings and reports are initiated on the history of the French language. Prerequisite: FRE 231 or successful completion of the appropriate placement test. 3 credits

FRE 312. ROMANCE LINGUISTICS. The development of grammatical structures and lexicons of French out of the Latin language is the subject of detailed study. The roles of sociolinguistics contact phenomena are also brought into perspective, as agents of language change. Theories on language origins and language change are evaluated, particularly in the light of creole developments. Prerequisite: FRE 311. 3 credits

FRESHMAN STUDIES

FDS 100. FRESHMAN DEVELOPMENT SEMINAR. This course will provide an introduction to the nature of university education and an orientation to University functions and resources. It is designed to assist students in obtaining skills necessary for the attainment of their educational objectives. Group process will be emphasized. 1 credit

SCI 100. THE NATURAL WORLD: THE CARIBBEAN. A topical examination of the natural world of the Caribbean. Included will be considerations of elements of Caribbean life associated with the natural world, with emphasis on their roots in the natural sciences. The approach is interdisciplinary, with a variety of learning strategies employed. Two hours of lecture and 3 hours of lab. Corequisite: ENG 100/WAC 011, ENG 101/RCA 021, unless exempted by SAT or placement tests. 3 credits

SSC 100. AN INTRODUCTION TO THE SOCIAL SCIENCES: A CARIBBEAN FOCUS. A topical examination of the social dimensions of Caribbean cultures from the origins of human habitation to the present. Its interdisciplinary approach will emphasize the perspectives of the various social sciences, with attention also given to the arts of the Caribbean. A variety of teaching and learning strategies will be utilized. Two hours of lecture and 2 hours-workshop. Corequisites: ENG 100/WAC 011 and ENG 101/RCA 021, unless exempted by SAT or placement tests. 3 credits

ENG 100/WAC 011. WRITING ACROSS THE CURRICULUM: AN INTRODUCTION. Explores the fundamentals of writing in an interdisciplinary context. Emphasizes grammar, punctuation and mechanics in the context of active learning. Students write for instructors not only in the Humanities, but in the other colleges and schools as well. (Students may test out at placement or with appropriate SAT scores.) Four hours of lecture a week. 1 credit and 3 non-degree credits

ENG 101/RCA 021. READING IN CONTENT AREAS: AN INTRODUCTION: Offers a comprehensive program of reading and vocabulary. It is linked to An Introduction to the Social Sciences: A Caribbean Focus (SSC 100) and The Natural World: The Caribbean (SCI 100). Literal and critical reading skills, conceptual vocabulary enrichment, and validated reading and study strategies are stressed. The course requires that students develop a portfolio of materials demonstrating mastery of the course's objectives. (Students may test out at placement or with appropriate SAT scores.) Four hours of lecture per week. 1 credit and 3 non-degree credits

GEOGRAPHY (GOG)

GOG 121. PHYSICAL GEOGRAPHY. A systematic study of the more important characteristics of the earth's surface, including the elements of climate, world climatic types and their distribution, landforms and the seas, the resources of the earth, water, natural vegetation and animal life, soils, mineral fuels and ores. (F). 3 credits

GOG 122. CULTURAL GEOGRAPHY. Man and his environment: homeland and early migrations; modern migrations; present population distribution and problems; types of physical environment and man's adaptation to them; cultural diffusion; the spread of ideas, cultivated plants and the development of agriculture; the domestication and utilization of animals; the development of technology. (S). 3 credits

GOG 131. ECONOMIC GEOGRAPHY. A general survey of the world distribution of productive occupations, emphasizing its relationship to physical factors and economic conditions; the theory of industrial location and localization; world patterns of trade and communication. (DEM). 3 credits

GOG 232. GEOGRAPHY OF THE CARIBBEAN. A comprehensive geographical survey of the Caribbean lands: similarities and diversities in the region; factors of physical and historical geography underlying political fragmentation; economic geography, with emphasis upon land use; current Caribbean problems; population, industrialization, selected regional studies. (F). 3 credits

HEALTH SCIENCES (HSC)

HSC 100. MEDICAL TERMINOLOGY. This course is designed to include the basic structure of medical words, including prefixes, suffixes, roots, combination forms and plurals. Pronunciation, spelling and definitions of medical and pathophysiological terms related to all body systems are emphasized. (F, S-OEK/AAS). 1 credit

HSC 310. INTRODUCTION TO RACIAL AND ETHNIC HEALTH DISPARITIES IN HEALTH CARE. This course will address areas of study of interest in nursing, other health care professions and the social sciences, including health policy, management of care, health care delivery and other topics related to client needs and responses to care. This course satisfies the required social science electives in the BSN paradigm. Prerequisite: ENG 201. (Also listed as SOC 310, SWK 310 and PSY 310). (F,S). 3 credits

HISTORY (HIS)

HIS 181, 182. WORLD CIVILIZATIONS. A survey of the history of humankind from a global perspective, tracing its origins and development through neolithic settlements and the subsequent early civilizations into modern times. Attention is given to the origins of human culture and to the complex political,

economic, social, religious and intellectual institutions as they coalesced and crystallized into civilizations in various regions of the planet. Among those are the proto-civilizations of the Near East and Africa, the subsequent civilizations of Europe, the East, Africa, the Western Hemisphere and the global system that has emerged in modern times. Prerequisite: Successful exemption or completion of ENG 101/RCA 021. (F, S, SUM). 3,3 credits

HIS 255, 256. AFRICAN CIVILIZATION. Historical survey of the several major culture areas of continental Africa. Comprises a comparative study of the ways by which the several African peoples treated have handled the basic problems of human existence: origin, survival, self-realization and destiny. (Also listed as ANT 255, 256 and SOC 255, 256.) (DEM). 3,3 credits

HIS 257, 258. THE BLACK EXPERIENCE IN THE NEW WORLD. A study of the slave trade, the conditions of slavery, and the process of Black acculturation in the New World since emancipation. HIS 256 is recommended as a preparatory course. (Also listed as ANT 257, 258 and SOC 257, 258.) (DEM). 3,3 credits

HIS 261. AN INTRODUCTION TO THE HISTORY OF CARNIVAL AND CARIBBEAN CULTURE. This course introduces students to the history and development of the Trinidad-style Carnival, a brief history of the carnivals in other Caribbean islands, the circumstances whereby the carnivals reached North American and European cities and the laws, regulations and other social circumstances that affected the music, dance and the many accompanying masquerades which today comprise the festivals. Students will, through lectures, readings, workshops, research, class discussions, and visits to Carnival social sites, improve their skills of critical thinking and expression in relation to examining Caribbean carnival and culture. Prerequisite: SSC 100 or an introductory course in any of the Social Sciences. (DEM). 3 credits

HIS 320. HISTORY OF THE UNITED STATES. A study of the political, social and economic developments in the United States from the early colonial period to the present. (F). 3 credits

HIS 323. HISTORY OF RUSSIA. Origins and early history of Russia. Establishment of relations between Russia and Western European countries and Russia's expansion in Asia. The emergence of czarist Russia as a European and world power; Russia on the eve of revolution; the revolutions of 1917 and their impact upon Russian government, industry, agriculture, society and culture, Russian foreign policy since 1917. (DEM). 3 credits

HIS 324. HISTORY OF ASIA. History of the major countries of Asia from early times to the present day. Emphasis on changes in their internal social, political and economic conditions with an examination of Asia's contribution to world history; relations between Asia and Europe; Asia under European influence; the growth of nationalism and the establishment of independence; Asian domestic and foreign policies since independence. (DEM). 3 credits

HIS 330. UNITED STATES-CARIBBEAN RELATIONS. An examination of the historical relationship between the United States and the Caribbean from the colonial period. Emphasis will be placed on American policies toward the region and the ways in which those policies have affected American involvement in the internal affairs of Caribbean territories. The impact of the Caribbean on economic and social changes in the United States will also be examined. Various methodological approaches will be explored. (F-E). 3 credits

HIS 341. CARIBBEAN HISTORY. The history of the Caribbean area up to the present, with particular emphasis on the development of social, political and economic institutions important for understanding the contemporary Caribbean. (S). 3 credits

HIS 342. HISTORY OF THE VIRGIN ISLANDS. The history of the Virgin Islands up to the present, with particular emphasis on the development of social, political and economic institutions important for understanding the contemporary Virgin Islands. (F, S, SUM). 3 credits

HIS 350. LATIN AMERICA SINCE INDEPENDENCE. An analytical study of the main political, economic and social developments in Latin America since the beginning of the period of national independence. (DEM). 3 credits

HIS 355, 356. CULTURAL HISTORY OF WEST AFRICA. Deals with the cultural history of the West African Sudan: the area between 7 and 17 degrees north latitude and extending from the northwestern border of Nigeria to the Atlantic Ocean. The period covered extends from the 7th to the 19th centuries

which permits a discussion of the rise and flowering of the various peoples involved: Ghana, Mali, Sosso, Songhay, Wolof-Serer and the Fulani. (Also listed as ANT 355, 356 and SOC 355, 356.) (DEM).
3,3 credits

HIS 380. EUROPEAN EXPANSION AND IMPERIALISM. Deals with the conditions which led Europeans overseas, with the activities of Europeans in their own colonies and in independent countries, and with the effect of European expansion upon the societies outside Europe and upon Europe itself. The period covered extends from about 1400 to the present Europe and the overseas territories to each other. (DEM).
3 credits

HONORS PROGRAM (HON)

HON 101. HONORS INTRODUCTORY SEMINAR. This interdisciplinary seminar is a writing-intensive course designed to develop exceptional scholars and citizens in the context of the complex issues and challenges involved in applying knowledge and learning to personal and public lives. This broad context includes the meaning of life and personal identity, the place of sports in developing countries, the role of technology and its effect on communication, education systems of various cultures, ways of knowing and belief systems, politics in a global society, ways we relate to each other and the world, and the place of the arts in society. Within this context students explore how knowledge is generated, criticized and verified in the various academic disciplines and paradigms; how knowledge derived from one discipline and paradigm compares and contrasts with knowledge derived from other disciplines and paradigms; how to be critical consumers of research and knowledge. This course requires a written paper. Required of participants in the UVI Honors Program, this course is also open to other students on a space-available and instructor-approved basis. (This course may be taken in partial satisfaction of the general education requirements in humanities). 3 credits

HON 201. HONORS RESEARCH THEORY AND METHODS. This interdisciplinary seminar explores approaches to scholarly investigations. It examines practical methods for finding and using currently available knowledge, and reviews the theoretical basis for research methods that reveal new knowledge. This course requires a written paper and an oral presentation. Required of participants in the UVI Honors Program, this course is also open to other students on a space-available and instructor-approved basis. (This course takes the place of the general education requirement in humanities). 3 credits

HON 301. DEVELOPMENT, ANALYSIS AND COMMUNICATION OF ETHICAL POSITIONS. A seminar series which introduces students to frameworks of ethical/moral behavior and judgments, provides practice in applying these frameworks to personal choices/decisions and to issues in society, establishes an awareness of ethical issues and implications in a wide variety of personal, professional and social contexts, develops the ability to analyze, articulate and defend ethical arguments, and encourages students to adopt a personal set of ethical guidelines and standards to guide their actions. Case studies analyzing personal and private choices, decisions and directions from an ethical point of view are emphasized and students are encouraged to examine critically the positions taken by public figures and by their student colleagues. Required of participants in the UVI Honors Program, this course is also open to other students on a space-available and instructor-approved basis. (This course may be taken in partial satisfaction of the general education requirements in humanities). 3 credits

HON 401, 402. HONORS THESIS/PROJECT. The Honors Thesis/Project is the capstone experience for all Honors Program students. Students are expected to investigate a significant issue, organization, movement, event or art form and to formally report in written (or via other appropriate modalities) and oral forms on their discoveries/creations. Students will be expected to ground their investigation theoretically and to justify selected methodologies used during their discovery process. The thesis/project will be approved in advance by the thesis/project advisor, the end product of which must be appropriate to the student's respective discipline. Students will be expected to display mastery of the content and delivery of the material in an oral defense of the thesis/project in front of the Honors Council and other students in the Honors Program. Required of participants in the UVI Honors Program, normally taken in two consecutive semesters. 3,3 credits

HOSPITALITY (HOS)

HOS 101. INTRODUCTION TO THE HOSPITALITY INDUSTRY. This course provides an overview of the general hospitality industry, its history, extent, obstacles, and career opportunities. The various

segments of the industry will be explored; hotels and resorts, food and beverage establishments, travel and tourism. Students will develop the skills and applications needed to recognize opportunities in this dynamic industry. 3 credits

HOS 120. FOOD PRODUCTION AND SAFETY. This course provides the student with the fundamental culinary skills and kitchen management techniques necessary for a professional hospitality manager. Proper kitchen terminology and cooking techniques will be emphasized. Students will learn the principles of food-borne illness, sanitation, safety, personal hygiene, rodent and insect control, regulations, and equipment affecting safe food handling in all operations. The course provides an overview of the requirements of local, state, and national certification exams. Prerequisite: HOS 101. 3 credits

HOS 205. CUSTOMER SERVICE MANAGEMENT. This course outlines the basics of customer service in the hospitality industry. Topics include anticipation of guests' needs, understanding guests from different cultures, proactive service, and handling customer complaints. Prerequisite: HOS 101. 3 credits

HOS 210. HOSPITALITY LODGING OPERATIONS. The student will examine operational procedures associated with the management of a hotel front office, the reservations office, concierge function, bell stand, housekeeping, engineering, security, and loss prevention. Revenue management techniques will also be explored. Basic functions of property management system software will be taught. Prerequisite: HOS 101. 3 credits

HOS 220. FOOD AND BEVERAGE COST CONTROL. The control of costs in food and beverage operations will be studied. Students will gain an understanding of the planning and control process focusing on products, labor, materials, and sales income, and learn to implement effective cost-control procedures. Sanitation management and strategies for avoiding food contamination and spoilage will be addressed. Prerequisites: HOS 101, HOS 120, ACC 201. 3 credits

HOS 230. HOSPITALITY INTERNSHIP I. This semester-long course will take place on-site at a working hospitality operation where the student works as an intern for no less than 300 hours. Students will rotate through at least four departments and learn the essential skills in each. Students must complete a rotation in each of the following: Rooms Division, Front-of-the-House; Rooms Division, Back-of-the-House; Food and Beverage Division, Front-of-the-House; Food and Beverage Division, Back-of-the-House. Prerequisites: HOS 120, HOS 205, HOS 210. 4 credits

HOS 301. RESORT MANAGEMENT. This course describes resort operations with an emphasis on recreation and activities. When attempting to seize business opportunities, resort organizations confront a number of dynamic challenges triggered by the change in global and domestic demand. These challenges include maintaining the quality of the product, coping with rapid changes in tastes and preferences, and overcoming market volatility that affect the resort industry. Prerequisites: HOS 205, HOS 210. 3 credits

HOS 305. TOURISM. The course will provide students with an understanding of the fundamentals of the purposes and needs of tourism. The size and scope of tourism will be discussed in conjunction with shifts in the production and consumption of tourist products over time, and the interrelationships among the global, regional and local levels of the tourist industries sectors. The course will identify theories that may be applied within the context of tourism management using the analyses of several case studies. Prerequisites: HOS 101, MKT 301. 3 credits

HOS 310. CRUISE LINE OPERATIONS MANAGEMENT. This course will provide the student with an overview of the cruise industry: its history and evolutions, operating and marketing procedures, career opportunities, ship profiles, itineraries, and ports of call. Guest speakers and optional field trip will be included. Prerequisite: HOS 205. 3 credits

HOS 401. FOOD AND BEVERAGE MANAGEMENT. Students will study advanced food and beverage management in the context of running a resort or similar multi-unit operation. Topics include dining service operations, facility design, point-of-sale systems, catering/banquets, working with vendors, and menu development. Prerequisites: HOS 220, HOS 230. 3 credits

HOS 410. TOURISM DEVELOPMENT. This course will familiarize the student with those aspects of tourism planning necessary to develop a destination. Students will investigate both the challenges and opportunities associated with tourism development patterns. Researching past similar projects will be

emphasized. The role of destination management organizations (DMOs) will also be explored. Prerequisite: HOS 305. 3 credits

HOS 430. HOSPITALITY INTERNSHIP II. This advanced, semester-long course will take place on-site at a working hospitality operation. The student and on-site supervisor will agree on an in-depth work experience, usually in one department where the student works as an intern for no less than 300 hours. Students will be exposed to management functions in the operation. The student will also complete a management study in the department and write a paper on the study. Prerequisite: HOS 230. 4 credits

HOS 435. HOSPITALITY STRATEGY. This capstone course will introduce the student to senior level policy making techniques. Goal setting, tactical analysis, and implementation strategies will all be examined. The case study method will be employed to encourage critical thinking and hone students' decision making skills. Prerequisites: ACC 203, MGT 301, MKT 301, FIN 301, DSC 430 and at least 90 earned credits (senior status). 3 credits

HUMAN SERVICES

HMS 310. INTRODUCTION TO HUMAN SERVICES. This course is one of two dedicated courses that will be offered concurrently to concentrators in Human Services. Combined with its sister course, a practical field placement and seminar, this course will teach basic counseling skills and agency based intervention principles and techniques to neophyte human service workers and counselors. The theoretical underpinnings of the discipline, as well as opportunities for experiential learning both in interactive and field settings will be stressed. Prerequisites: SOC 224, PSY 203. Corequisite: HMS 375. 3 credits

HMS 375. FIELD PLACEMENT AND SEMINAR. The course consists of a required placement for the student in a local agency providing human or social intervention, under appropriate supervision, and with opportunities for group and individual supervision as the student is developing basic skills in assessing problems, developing goals, and learning techniques for intervention. Corequisite: HMS 310. 3 credits

HUMANITIES (HUM)

HUM 115. INTRODUCTION TO HUMANITIES. This interdisciplinary course provides students with exposure to seven fields within Caribbean arts and humanities: music, dance, verse, oralty, heater, visual arts and film. Students will gain exposure to the breadth of values carried in artistic and other traditional media. This course is participatory and includes performance, discussion, lecture and demonstration. (F, S, SUM). 3 credits

HUM 210. VIRGIN ISLANDS CULTURE. A humanities-based interdisciplinary course, designed to develop in each student a fundamental understanding of the cultural history of the Virgin Islands, the context in which it developed and the challenges presently dictating its destiny. The primary content is the evolving cultural development of the people of the U.S. Virgin Islands, focusing on linguistic factors, narrative phenomena, the media, education, art, music, religion and ethics. Prerequisite: ENG 201. 3 credits

HUM 497-498. SENIOR HUMANITIES SEMINAR. A weekly seminar devoted to the exploration of current topics of interest in various fields of the humanities. Also includes preparation of a major senior project or research paper. Meets one hour weekly. Required of all majors in the humanities. Prerequisite: Senior standing in the humanities. HUM 497 (F). HUM 498 (S). 1-1 credits

INFORMATION SYSTEMS AND TECHNOLOGY (IST)

IST 201. INTRODUCTION TO PROGRAMMING LOGIC. In this course, students will learn the use of a programming environment, basic data types, statements, controls, and structure of a contemporary high-level programming language. Procedures and functions will be introduced while focusing on program modularity. This course does not require previous programming experience. Students may enroll in CSC 117 to satisfy course requirement. 3 credits

IST 205. ELECTRONIC COMMERCE. This course examines issues related to e-Commerce/e-Business and the internet and is designed to provide students a fundamental understanding of the impact of Internet technology, the World Wide Web, and developing technologies (e.g. wireless, media convergence) on business strategies, business models, and business competitive capabilities. 3 credits

IST 210. BUSINESS INFORMATION SYSTEMS. An introductory course that provides the skills and knowledge required for managing information systems in contemporary business environments. Students will learn how hardware, software, data, people and processes are combined to produce information supporting business goals and objectives. Extensive out-of-class computer work is necessary for mastery of industry standard software. Format: 3 hours lecture/lab. 3 credits

IST 301. SYSTEMS ANALYSIS AND DESIGN. This course focuses on the development life cycle of business information systems with an emphasis on analysis and design tools and methodology. The course will provide students with concepts and skills needed to analyze and design contemporary information systems. Prerequisite: IST 201. 3 credits

IST 305. DATABASE DESIGN AND IMPLEMENTATION. This course prepares students to develop a physical database based on a logical data model within the context of a commercial Database Management Software (DBMS). This course introduces database technology and provides hands-on experience in designing and developing databases to meet organizational goals. Prerequisite: IST 201. 3 credits

IST 315. DATA COMMUNICATIONS AND NETWORK MANAGEMENT. This course is designed to provide students with a foundation in the principles of data communications and networking requirements, including appropriate technologies. Students will learn to evaluate, select, and implement different communications options within an organization. Emphasis is placed on the analysis and design of networking applications in organizations. Prerequisite: IST 201. 3 credits

IST 320. WEB AND MULTIMEDIA DESIGN. This course covers the technology, design, production and delivery of web and multimedia based products. Students will be engaged in web design and production at a professional level through the use of industry-standard web and multimedia development tools. 3 credits

IST 325. ENTERPRISE INFORMATION SYSTEMS. This course is designed to provide students with a comprehensive understanding of Enterprise Information Systems (EIS) and how they achieve organizational information and process integration. Implications on organizational structure, processes, and practices are discussed and hands-on experience with an EIS is provided. Prerequisite: IST 210. 3 credits

IST 401. MOBILE APPLICATION DEVELOPMENT. This laboratory course develops understanding of the fundamental principles of usability as they apply to mobile commerce applications. Aspects of website evaluation are examined. Course will also cover the design of usable mobile applications using current tools and techniques. Prerequisite: IST 201. 3 credits

IST 410. TECHNOLOGY CERTIFICATION. This course is designed to prepare students for an industry-standard certification examination in the field of Information Systems and Technology. Examination topics will be covered within the course. Students are encouraged to register for and complete the focal examination as a course requirement. Prerequisite: IST 201. 3 credits

IST 415. INFORMATION SECURITY MANAGEMENT. This course focuses on the management of information security problems including attack methods, detection and prevention techniques, cryptography, firewalls and intrusion detection systems, security policies and risk management, and incident response. Prerequisite: IST 201. 3 credits

IST 420. IS PROJECT MANAGEMENT AND DEVELOPMENT I. This laboratory course focuses on models used in a software development project, including tools that improve project productivity. Students will gain experience working in a small project team to design and analyze an actual computer-based information system provided by a local business, organization, or governmental agency. Part one of a two-semester sequence. Prerequisite: IST 301 and senior standing. Corequisite: BUS 474. 3 credits

IST 425. IS PROJECT MANAGEMENT AND DEVELOPMENT II. This course provides student teams with experience in the design and implementation of a usable information system for a client. The client may be affiliated with the University or a local business, organization, or governmental agency. Projects will be supervised by the instructor and client and may include on-site work. Part two of a two-semester sequence. Prerequisites: IST 420 and senior standing. 3 credits

IST 435. DATA SCIENCE II. This course provides students with the core competencies in data science in preparation for graduate studies or an entry-level position in data science. The course builds on the fundamental concepts of data science with real-world examples that require advanced mathematical, statistical, programming and critical thinking skills. This is a hands-on course. Students will work with multiple datasets for their assignments. The course is suitable for upper-level undergraduate students in computer science and computational sciences, applied mathematics, business, and related analytical fields. (Also listed as CSC 435 and SCI 435). Prerequisites: CSC/SCI 230, and MAT 235 or MAT 245 or DSC 325. 3 credits

IST 465, 466. SELECTED TOPICS IN INFORMATION SYSTEMS AND TECHNOLOGY. An elective course in information systems and technology, providing an opportunity for exposure to industry-specific, developing or cutting-edge trends in the discipline. Topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. 3,3 credits

MANAGEMENT (MGT)

MGT 100. CONCEPTS IN MANAGEMENT. Designed as a mini-course for non-business majors, this course explores some of the major concepts in the management field. 1 credit

MGT 301. PRINCIPLES OF MANAGEMENT (formerly BUS 241). This course examines the basic principles of business management emphasizing the decision-making approach; planning, organizing, directing, and control in the business enterprise. Provides a history of the study of business management. Prerequisite: BUS 112 or HOS 101 or ENT 200. 3 credits

MGT 313. SMALL BUSINESS MANAGEMENT (formerly BUS 213). This course examines the administrative organization and management of small business with attention to sources of success and failure, records and credits, managing to sell, and aspects of taxation and accounting. Prerequisite: BUS 112 or HOS 101 or ENT 200. 3 credits

MGT 342. HUMAN RESOURCE MANAGEMENT (formerly BUS 242). This course explores personnel management principles and practices; the role of the personnel department and its program; the role of the operating supervisor and executives within the program; and the role of behavioral sciences in the functional areas of personnel management. Prerequisite: MGT 301. 3 credits

MGT 410. LABOR MANAGEMENT RELATIONS (formerly BUS 336). This course examines the historical development of labor management relations in the American economy, with emphasis on problems relating to management and unions, industrial conflicts, collective bargaining, and the legal environment. Particular stress will be placed on cases drawn from experience in the U.S. Virgin Islands. Prerequisite: MGT 342. 3 credits

MGT 429. ORGANIZATIONAL BEHAVIOR (formerly BUS 429). This course examines human behavior in an organizational context with emphasis upon the role of leadership, varieties of status systems, motivation and job design, group behavior, and analyses of organizational development change. Prerequisite: MGT 301. 3 credits

MGT 434. PUBLIC POLICY TOWARD BUSINESS (formerly BUS 434). This course will examine the emergent patterns of state and federal legislation and the contemporary significance of changing public policies which affect business enterprise together with an identification and analysis from the historical and legal point of view of the rights and responsibilities of management, labor and the public. Prerequisites: senior standing and BUS 351. 3 credits

MGT 436. INTERNATIONAL BUSINESS MANAGEMENT. This course is designed to examine the principles, theories and concepts of international business management. The course will cover foreign market potential assessment, analysis of country risk, international business planning process, methods of entering foreign markets, export and import procedures, human resource management and marketing in international business operations, the training of personnel for foreign assignments, compensation of expatriate managers, personal adjustment to living abroad, and financial management in international business operations. Students will also learn how to apply theories, concepts and models covered in the course to case studies. Prerequisites: MGT 301, MGT 213, and MKT 301. 3 Credits

MGT 437. EMOTIONAL INTELLIGENCE. This course engages students to study, learn, and apply the emerging science of emotional intelligence (EI). Students compare, contrast and critique various EI-themed research literature, concepts, knowledge, skills, assessments and applications. The course will also challenge students to critique the various EI definitions, emergent and divergent themes and issues in the literature, conceptual and methodological problems. This course will engage students to apply and reflect upon some of the EI assessment methods and practical hands-on EI activities and exercises. Finally, the course will survey many of the strategies and leadership approaches that enable leaders to manage others to develop and sustain EI organizational cultures. 3 Credits

MGT 438. HUMAN RESOURCE PLANNING. This course is designed to focus on human resource planning and forecasting from strategic planning and decision-making perspectives. It will equip students with vital knowledge and skills necessary for human resource planning and forecasting in local and global business environments. The course will also address indicators of efficiency, productivity measurement, human resource cost ratios, human resource policies, succession planning, identification of training needs and effectiveness, and forecasting of human resource costs. Students will also learn how to apply theories, concepts and models covered in the course to case studies. Prerequisites: MGT 301 and MGT 342. 3 Credits

MGT 439. ORGANIZATIONAL CHANGE AND DEVELOPMENT. This course provides students an understanding of the organization's ability to assess its current functioning and ability to achieve goals. This course examines organization development as a system wide application of behavioral science to the planned development, improvement, and reinforcement of the strategies, structures, and processes that lead to organization effectiveness. Students will develop the ability to implement tools of intervention to effectively bring about major change in a way that gains support of organization members. Prerequisites: ACC 202, MKT 301, MGT 301, and DSC 430. 3 Credits

MARINE BIOLOGY (MBI)

MBI 220. MARINE INVERTEBRATE ZOOLOGY. The evolutionary relationships, classification and life histories of major groups of marine Metazoa. Methods of collection, preservation and identification will be stressed in the laboratory sessions. Three lectures and six hours of laboratory weekly. Prerequisites: BIO 141-142. (Also listed as BIO 220.) (ALT-E-OEK). 5 credits

MBI 222. ICHTHYOLOGY. The systematics, evolution and ecology of fishes with emphasis on tropical inshore coral reef fauna. Three lectures, one laboratory period per week. Prerequisites: BIO 141-142. (ALT-O-OEK). 4 credits

MBI 365. JUNIOR BIOLOGY SEMINAR. A twice-weekly seminar encompassing the biological sciences. Each student will present at least one seminar. Introduces basic strategies and techniques for locating and presenting scientific information. Students conduct bibliographic searches of scientific literature. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. One 50-minute and one 170-minute session per week. 2 credits

MBI 397. JUNIOR SCIENCE SEMINAR I. Introduces basic strategies and techniques for locating and presenting scientific information. Students conduct bibliographic searches of scientific literature. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Two 50-minute sessions per week. Junior standing as a marine biology major; approved study plan on file with the biology program. (F-OEK). 1 credit

MBI 398. JUNIOR SCIENCE SEMINAR II. Students Learn various methods for organizing materials for scientific presentation, such as preparing a poster based on a science journal article. Students are required to attend selected presentations by faculty, visiting scholars and science majors. This course presents opportunities for exposure to scientific topics not normally covered in class and for the development of scientific thinking. Two 50-minute sessions per week. Prerequisite: MBI 397 or equivalent. (S-OEK). 1 credit

MBI 424. MARINE ECOLOGY. Principles and procedures utilized in marine ecological research. Emphasis will be placed on the levels of organization and the interactions seen within and among marine ecosystems. Three lectures per week and three hours of laboratory which may take form of scheduled field trips.

Prerequisites: BIO 223 and at least one of the following courses MBI 220, MSC 239, BIO 349 or MBI 222. (ALT-O-OEK). 4 credits

MBI 430. CORAL REEF BIOLOGY. An in-depth study of corals and their biology, the coral reef community, evolution of coral reefs, and problems facing coral reefs today. Topics will include biological and geological structures of coral reef ecosystems; linkages between coral reefs and other ecosystems; anthropogenic impacts on coral reefs; and coral reef conservation and management. Prerquisites: BIO 223 Ecology and at least one of the following courses: BIO/MBI 220, MBI 222, BIO/MBI 349. (Also listed as BIO 430). 4 credits

MBI 465, 466. SELECTED TOPICS IN MARINE BIOLOGY. Selection may include marine biochemistry, ichthyology, phycology, microbiology, pollution ecology, fisheries biology, etc. Prerequisite: 16 hours of laboratory science. Specific prerequisites (depending on the topic), along with a course description, will be announced prior to preregistration time. MBI 465 (ALT-O-OEK). MBI 466 (ALT-E-OEK). 4,4 credits

MBI 495. DIRECTED INDEPENDENT RESEARCH IN MARINE BIOLOGY. Provides an opportunity for students, under the guidance of a faculty supervisor, to pursue scholarly research or study in areas associated with their academic field but outside of prescribed courses. Student and the prospective supervisor should develop and submit for approval a proposal to the Dean at least one month prior to the start of the course. For each hour of academic credit to be awarded, the student must have three hours of lab or study per week and one hour of consultation per week with the supervisor. Student may register for repeated enrollment in this course up to the maximum of six credits. Proposals must also include an evaluation plan. Prerequisite: Students must have completed at least 20 credits in some combination of BIO, MBI, CHE, PHY, CSC, and MAT with a minimum grade point average of 2.5. Corequisite: BIO 295. (DEM-OEK). 1-4 credits

MBI 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credit for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can qualify for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to a College committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and quality of the experience, with a maximum of four credits through repeated enrollment. Prerequisite: Students must have completed at least 20 credits of BIO or MBI courses with a grade point average of 2.5. (DEM-OEK). 1-4 credits

MBI 497, 498. SENIOR SCIENCE SEMINAR I, II. A weekly seminar devoted to the exploration of current topics of interest in the various fields of science. Each student will present one seminar per semester. Two 50-minute sessions per week. Required of all science seniors. Prerequisites: MBI 397, 398, MBI 497 (F-OEK), MBI 498 (S-OEK). 1,1 credit

MARINE SCIENCE (MSC)

MSC 111. OPEN WATER SCIENTIFIC DIVING. A study of the fundamentals of the use of SCUBA for access to shallow marine coastal environments and for the study of marine organisms and ecosystems. One lecture and one three-hour training session weekly. Corequisite: A science course that satisfies the general education requirement. Prerequisites: satisfactory completion of a medical examination designed for divers and demonstration of adequate swimming capabilities. This course is designed primarily for science majors; non-science majors must have College dean's approval before registration. (F, S-QTT). 1 credit

MSC 211. RESEARCH DIVING. Designed to give the student the fundamentals of underwater navigation, surveying, search and light salvage techniques, underwater photography, and biological sampling techniques. One lecture and one three-hour field session per week. Prerequisites: BIO 142, MSC 111 (or previous open-water certification, with at least 10 logged SCUBA dives, and successful completion of both a swim test and a SCUBA proficiency test), certification of adequate medical health for SCUBA diving. (S-OEK). 2 credits

MSC 239. OCEANOGRAPHY. An introduction to physical, chemical, biological and geological oceanography. Major topics include properties of ocean water, instruments and observational methods, chemistry of sea water, ocean currents, surface and internal waves, fisheries biology, marine ecology, bathymetry and marine geology, beach processes, pollution problems and management of marine

resources. Three lectures and one laboratory session per week, field trips. Prerequisites: BIO 141-142. (ALT-E-OEK). 4 credits

MSC 465, 466. SELECTED TOPICS. An elective course on topics in the marine science field, designed primarily (1) to educate undergraduates with junior or senior standing in areas of special interest, and (2) to meet regional needs. Selections may include marine technology, pollution problems, marine resource management and marine affairs. May be repeated for credit provided different topic is selected. Prerequisites: To be announced with each topic. 1-4 credits

MARKETING (MKT)

MKT 100. CONCEPTS IN MARKETING. Designed as a mini-course for non-business majors, this course explores some of the major concepts in the marketing field. 1 credit

MKT 301. PRINCIPLES OF MARKETING (formerly BUS 231). Introduction to marketing management and analysis; distribution, promotion, pricing, product development, consumer motivation, and market research; case problems. Prerequisite: BUS 112 or HOS 101 or ENT 200. 3 credits

MKT 334. ADVERTISING AND PROMOTIONAL STRATEGY (formerly BUS 234). An examination of those advertising and promotional strategies directed toward the consumers of goods and services, with emphasis on planning and executing an effective campaign to achieve meaningful goals. Prerequisite: MKT 301. 3 credits

MKT 416. PRINCIPLES OF MERCHANDISING (formerly BUS 326). Examines the organization, management, and operation of wholesale and retail enterprises; problems associated with store location and layout, buying, receiving, inventory and stock control, pricing and merchandising. Prerequisite: MKT 301. 3 credits

MKT 422. INTERNATIONAL MARKETING (formerly BUS 422). Examines marketing techniques and programs developed and implemented on an international scale; tariffs, social and cultural restrictions, economic and political environments, and legal restrictions; the international distribution system, international decisions and international market research. Prerequisite: MKT 301. 3 credits

MKT 426. MARKETING RESEARCH (formerly BUS 426). An introduction to the basic steps of research procedure as they would be applied in the field of marketing. Preparation and execution of an original field investigation; interpretation of the results and their application to a business situation. Prerequisites: MKT 301 and DSC 325. 3 credits

MKT 427. PERSONAL SELLING AND SALES MANAGEMENT. This course is designed to present and examine the principles, theories and concepts of sales management and direct marketing. It will cover the nature of personal selling, the role of the sales force, designing sales force strategies and structure, recruiting and selecting salespeople, training salespeople, compensation methods, sales force supervision, sales force performance evaluation, the personal selling process, direct marketing models, public policy and ethical issues in direct marketing. Students will also learn how to apply theories, concepts and models covered in the course to case studies. Prerequisites: MGT 301, MKT 301 and MKT 334. 3 Credits

MKT 428. CONSUMER BEHAVIOR. This course will enable students to learn and examine the principles, concepts and theories of consumer behavior. The course will cover consumer behavior models in marketing, factors affecting consumer behavior, types of buying decision behavior, the consumer buying decision process, business markets and buying behavior, marketing to business consumers, stages of the business buying decision process, consumer misbehavior and marketing ethics. Prerequisites: MGT 301, MKT 301 and MKT 334. 3 Credits

MKT 429. SERVICES MARKETING. This course is designed to examine the concepts, principles and theories for the marketing of services as against the marketing of tangible products. This course will cover the nature and role of services marketing, importance of services marketing, key components of service delivery, characteristics of services, service encounter, marketing mix strategies for marketing services, service quality and satisfaction, formulation and implementation of marketing strategies for services in organizations, managing customer service, customer service relationship, and the evaluation of contemporary issues in services marketing. Prerequisites: MGT 301, MKT 301, MKT 334 and MKT 426. 3 Credits

MKT 430. STRATEGIC MARKETING. This course is designed to provide a systematic approach to the strategic marketing formulation and implementation process. It will also cover market demand analysis and forecasting, environmental market analysis and vision, market segmentation and positioning, marketing strategies, planning for new products, pricing strategy, promotion and advertising strategy, sales force and direct marketing strategy, implementation of marketing strategies, control and evaluation. Participants will also learn how to apply strategic marketing theories, concepts and models covered in the course to case studies. Prerequites: MGT 301, MKT 301, MKT 334 and MKT 426. 3 Credits

MATHEMATICS (MAT)

MAT 023-024. These two courses are designed to provide the basic skills necessary to succeed in university-level mathematics and mathematics dependent courses. They are intended only for students who have inadequate pre-university preparation in mathematics. Students whose college entrance examinations scores indicate possible weakness will take a mathematics diagnostic test on the first day of class to determine whether one or both of these courses will be required. Incoming students are encouraged to review their mathematics skills and knowledge so that they can demonstrate their preparedness for a mathematics course for credit towards a degree.

MAT 023. INTRODUCTION TO ALGEBRA CONCEPTS AND SKILLS, PART I. Conceptual understanding of numerical concepts and operations (signed numbers, fractions, decimals, percents); variables; equations; the geometric concepts of length, area, and volume. Elementary understanding of the function concept using numerical tables and graphs. Solution of first degree equations in one variable. Integer exponents; scientific notation; operations on polynomials. Emphasis is on conceptual understanding and problem solving in applications in context. (F, S, SUM). 4 non-degree credits

MAT 024. INTRODUCTION TO ALGEBRA CONCEPTS AND SKILLS, PART 2. Elementary study of linear and quadratic functions; integer and rational exponents and radicals; solutions of equations and inequalities. Emphasis is on conceptual understanding and problem solving in applications in context. Graphical, numerical, and algebraic approaches are used throughout and skills are used both as problem solving tools and as a source of problems. (F, S, SUM). 4 non-degree credits

MAT 140. COLLEGE ALGEBRA WITH APPLICATIONS. Students will be introduced to some of the basic ideas of Algebra and will apply these ideas through various projects based in industry, education, society, government, and to the natural and physical models of the world and its human environment. Logic and systematic approaches to problem solving will be emphasized including verbal, written, and symbolic descriptions of problems, approaches, and outcomes. Use of appropriate technology (e.g. Graphics Calculator) will be included within lectures and student assignments. Topics will include linear, quadratic, polynomial, discrete, exponential and logarithmic functions, reading and creating graphs, geometry, and applications of these topics. Prerequisite: Successful completion of Eng 101/RCA 021, MAT 023 and MAT 024 (or MAT 021 and MAT 022) a 490 or above SAT Math score or a satisfactory score on the mathematics diagnostic examination. (F, S, SUM). 4 credits

MAT 143. PRECALCULUS ALGEBRA. Fundamental concepts of college algebra and a preparation for calculus. Topics will include factoring, integer and rational exponents, simplifying algebraic expressions, solving equations and inequalities, the function notation, polynomial and rational functions, exponential and logarithmic functions, graphs of functions and applications. This course is designed for students majoring in science, engineering, and mathematics or intending to take MAT 241-242. While topics are the same as for MAT 140, there is more theoretical coverage and emphasis, a greater depth of understanding is required, and additional material on applications is included. Prerequisite: Successful completion of MAT 023 and MAT 024 (or MAT 021 and MAT 022) or a 490 or above SAT Math score or a satisfactory score on the mathematics diagnostic examination. (F, S; SUM I-OEK). 4 credits

MAT 153. COLLEGE TRIGONOMETRY. Fundamental concepts of trigonometry and a preparation for calculus. Topics will include angle measurement, the circular functions and their graphs, laws of sines and cosines, solution of triangles, solution of trigonometric equations, and inverse trigonometric functions, qxa} ications to vectors and complex numbers. Prerequisite: MAT 143. (S, SUM II; F-OEK). 4 credits

MAT 215. INTRODUCTION TO NUMBER THEORY. Topics covered will include mathematical induction, divisibility, prime numbers, congruences, some Diophantine equations and number-theoretic functions. Prerequisite: MAT 140 or MAT 143. (S). 3 credits

MAT 232. CALCULUS FOR BUSINESS AND SOCIAL SCIENCES. A calculus course with emphasis on techniques, graphs and applications rather than theory. Topics include functions; limits, continuity and rates of change; the derivative; exponential and logarithmic functions; anti-differentiation; the definite integral; and functions of several variables. Prerequisite: MAT 140 or MAT 143. (F, S, SUM II). 4 credits

MAT 233. DISCRETE MATHEMATICS. Introduction to the basic concepts and applications of number systems; sets, mappings, and relations; logical deduction and mathematical induction; elementary counting principles; Boolean algebra; graphs and digraphs. Prerequisite: MAT 140 or MAT 143. (F). 3 credits

MAT 235. INTRODUCTORY STATISTICS WITH APPLICATIONS. Students will be introduced to statistical concepts and will be required to interpret and communicate the results of statistical analyses. They will apply these concepts through projects based in local industry, education, government, society, and natural and physical models of the world and its human environment. Topics include, but will not be limited to: introduction to technology for statistical analysis; graphical and descriptive techniques for summarizing data; measures of center; measures of spread; correlation; probability; design of experiments; sampling; analyzing relationships; statistical models; and hypothesis testing. Prerequisite: Successful completion of MAT 140 or 143 or satisfactory scores on department diagnostic examinations. (F, S, SUM II). 4 credits

MAT 241-242. INTRODUCTION TO CALCULUS AND ANALYTICAL GEOMETRY I-II. These courses cover multiple topics, to include rates of change, derivatives, integration, transcendental functions, techniques of integration, determinants and linear equations, plane analytic geometry, hyperbolic functions, polar coordinates, vectors and parametric equations. Prerequisites: MAT 143, MAT 153. MAT 241 (F;S, SUM I-OEK), MAT 242 (S; F, SUM II-OEK). 4-4 credits

MAT 245. STATISTICS FOR THE LIFE SCIENCES. This course is an introduction to applied data analysis, designed to enable students to effectively collect data, describe data, and make appropriate inferences from data. Students are expected to communicate effectively about statistical results and to use a statistical software package for data analysis. Prerequisite: Successful completion of MAT 143 or satisfactory scores on the mathematics department's placement examinations. 4 credits

MAT 257. MATHEMATICS AND THE ELEMENTARY TEACHER. This course is a joint offering of the Mathematics and Education Programs. The mathematics portion (3 hours per week) is a detailed examination of the mathematical content that is prerequisite for teaching elementary school mathematics. The development of methods and materials for the teaching of elementary school mathematics (1 hour per week) will be conducted by the School of Education faculty. Demonstration teaching and student teaching experiences are important aspects of all segments of this course. During the semester, concurrent field experiences under the auspices of the School of Education will consist of one two-hour session per week assisting selected faculty in a public elementary school with instruction in mathematics. Prerequisites: Mathematics general education requirement and EDU 250. (Also listed as EDU 257). (F-OEK). 5 credits

MAT 261. LINEAR ALGEBRA. A study of systems of linear equations, echelon matrices and Gaussian elimination; matrix operations, inverses and determinants; vector spaces, subspaces, linear independence, basis and dimension, orthonormal bases; linear transformations, kernel and image, matrix representations, change of basis, eigenvalues, eigenvectors and diagonalization of symmetric matrices; applications. Prerequisite: MAT 241 (May be taken concurrently.) (F). 4 credits

MAT 301. MODERN GEOMETRY. A rigorous treatment of the basic concepts of Euclidean and non-Euclidean geometry including Euclid's axioms, Hilbert's axioms, hyperbolic geometry, Riemannian geometry, models, and the historical and philosophical implications of the study of non-Euclidean geometry. Prerequisite: MAT 242. (F-E). 3 credits

MAT 325. NUMERICAL ANALYSIS. Representation of numbers and rounding error; numerical solution of equations; quadrature; polynomial and spline interpolation; numerical approximation of functions; numerical solution of initial and boundary value problems. Prerequisites: MAT 261 (previously or concurrently) and knowledge of a programming language. (F). 3 credits

MAT 332. MATHEMATICAL STATISTICS. A mathematically rigorous treatment of statistics. Topics will include probability distributions for discrete and continuous random variables, expected values, point and interval estimators, hypothesis testing, least-squares estimators and nonparametric tests. Prerequisite: MAT 242. (S-E). 3 credits

MAT 341-342. INTERMEDIATE CALCULUS I. Polar coordinates, conic sections, indeterminate forms, improper integrals, Taylor's formula with remainder, sequences and series, vectors and analytic geometry in two and three dimensions, partial differentiation, directional derivatives, gradients, extrema, line integrals, multiple integration and applications. Prerequisite: MAT 242. MAT 341 (F). MAT 342 (S). 3-3 credits

MAT 344. PROBABILITY. Probabilities of events on discrete and continuous sample spaces; random variable and probability distributions; expectations; transformations; simplest kind of law of large numbers and central limit theorem. The theory is applied to problems in physical and biological sciences. Prerequisite: MAT 242. (F-O) 3 credits

MAT 346. DIFFERENTIAL EQUATIONS. Solutions of ordinary differential equations; LaPlace transforms. Prerequisite: MAT 342 (may be taken concurrently). (S). 4 credits

MAT 348. COMPLEX VARIABLES. This course serves as an introduction to the theory of complex variables, covering the beginning topics considered standard for the subject. Topics include the algebra of complex numbers, geometry of the complex plane, elementary functions, Taylor and Laurent series, residue calculus, and conformal mapping. Corequisite: MAT 341. (S-O). 3 credits

MAT 352. MATHEMATICAL MODELING. Mathematical modeling of physical systems with examples drawn from diverse disciplines such as traffic flow, biology. Prerequisite: MAT 261. (F-O). 3 credits

MAT 361. BIOINFORMATICS. In this interdisciplinary course, students learn a variety of computational techniques to distill information from biological data. Students apply these techniques to genome-scale data sets to investigate questions in biology. Three hours of lecture and three hours of lab per week. Prerequisites: All students must have passed BIO 141-142 and CSC 117-118 and MAT 143-153; in addition, all students must have passed either (BIO 245 and BIO 223) or (8 credits of 200-level CSC courses) or (MAT 233 and MAT 261). (Also listed as BIO 361 and CSC 361.) (S-DEM). 4 credits

MAT 362. ABSTRACT ALGEBRA I. A study of the elementary properties of groups, rings and fields. Definitions, properties and proofs will be emphasized. Prerequisites: MAT 261 and MAT 215 or MAT 233. 3 credits. (F-O).

MAT 386. HISTORY AND PHILOSOPHY OF MATHEMATICS. A survey of mathematics in its historical and cultural milieux. Prerequisites: MAT 241-242. (S-O). 3 credits

MAT 397, 398. JUNIOR MATHEMATICS SEMINAR I, II. Topics of interest and importance to mathematics majors will be presented by faculty, visiting scholars, senior mathematics majors, and junior mathematics majors. An opportunity for exposure to mathematics not normally covered in class and for the development of mathematical thinking. Prerequisite: Junior mathematics major. Corequisite: MAT 341. 1/2, 1/2 credits

MAT 441. INTRODUCTORY ANALYSIS I. An introduction to mathematical analysis. Rigorous treatment of limits, continuity, and differentiation analysis. Prerequisite: MAT 341. (S-O). 3 credits

MAT 442. INTRODUCTORY ANALYSIS II. A continuation of Mat 441. Rigorous treatment of integration, infinite series, and function sequences. Prerequisite: MAT 441. (F-O). 3 credits

MAT 458. TOPOLOGY. Sets, closed sets, open sets, homeomorphisms and continuous map-pings, connectedness, compactness. An introduction to homology theory. Corequisite: MAT 341. (F-E). 3 credits

MAT 461. ABSTRACT ALGEBRA II. Selected topics in algebra, including groups, integral domains, fields, field extensions and module theory. Prerequisite: MAT 362. (S-E). 3 credits
MAT 465, 466. SELECTED TOPICS. Dependent upon the needs and interests of the students and faculty. Topics may include advanced study in linear algebra, complex analysis, geometry, real analysis, mathematical probability, statistics, or mathematical education. Prerequisite: To be announced with each topic. 3,3 credits

MAT 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credit for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can qualify for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to

a College committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and quality of the experience, with a maximum of four credits through repeated enrollment. Prerequisite: MAT 341 with a cumulative grade point average of 2.5. 1-4 credits

MAT 497, 498. SENIOR MATHEMATICS SEMINAR I, II. Topics of interest and importance to mathematics majors; an oppoppunity for development of independent skills. Prerequisites: MAT 397, MAT 398 and senior mathematics major. Corequisite: MAT 441. 1,1 credit

MAT 499. INDEPENDENT STUDY. Reading and problem-solving in a non-elementary area of mathematics not otherwise available for the student. May be repeated for credit provided different topics are studied, but a student may not accumulate more than five credits. A written proposal must be submitted by the student. Prerequisites: Permission of a full-time faculty member and approval of the mathematics coordinator. 1-3 credits

MILITARY SCIENCE AND LEADERSHIP (MSL)

MSL 101. FOUNDATIONS OF OFFICERSHIP. Introduces students to issues and competencies that are central to a commissioned officer's responsibilities. Establishes framework for understanding officership, leadership, and Army values followed and "life skills" such as physical fitness and time management. (F). 1 credit

MSL 102. BASIC LEADERSHIP. Establishes foundation of basic leadership fundamentals such as problem solving, communications, briefings and effective writing, goal setting, techniques for improving listening and speaking skills and an introduction to counseling. Prerequisite: MSL 101. (S). 1 credit

MSL 201. INDIVIDUAL LEADERSHIP STUDIES. Students identify successful leadership characteristics through observation of others and self through experiential learning exercises. Students record observed traits (good and bad) in a dimensional leadership journal and discuss observations in small group settings. Prerequisite: MSL 102. (F). 2 credits

MSL 202. LEADERSHIP AND TEAMWORK. Students examine how to build successful teams, various methods for influencing action, effective communication in setting and achieving goals, the importance of timing the decision, creativity in the problem solving process, and obtaining team buy-in through immediate feedback. Prerequisite: MSL 201. (S). 2 credits

MSL 301. LEADERSHIP AND PROBLEM SOLVING. Students conduct self-assessment of leadership style, develop personal fitness regimen, and learn to plan and conduct individual/small unit tactical training while testing reasoning and problem-solving techniques. Students receive direct feedback on leadership abilities. Prerequisite: MSL 202 or previous military experience in the Army or in the National Guard or successful completion of the 28-day training camp in Fort Knox, Kentucky. (F). 3 credits

MSL 302. LEADERSHIP AND ETHICS. Examines the role communications, values, and ethics play in effective leadership. Topics include ethical decision-making, consideration of others, spirituality in the military, and survey Army leadership doctrine. Emphasis on improving oral and written communication abilities. Prerequisite: MSL 301. 3 credits

MSL 401. LEADERSHIP AND MANAGEMENT. Develops student proficiency in planning and executing complex operations, functioning as a member of a staff, and mentoring subordinates. Students explore training management, methods of effective staff collaboration, and developmental counseling techniques. Prerequisite: MSL 302. (F). 3 credits

MSL 402. OFFICERSHIP. Study includes case study analysis of military law and practical exercises on establishing an ethical command climate. Students must complete a Senior Leadership Project that requires them to plan, organize, collaborate, analyze, and demonstrate their leadership skills. Prerequisite: MSL 401. 3 credits

MUSIC (MUS)

Music Theory

MUS 101-102. SIGHT SINGING/EAR TRAINING I-II. The study of basic sight singing/ear training/diction

of isolated rhythms, intervals, single melodic lines, and melodic rhythmic passages for three and four part harmonies. Prerequisite: The successful completion of the Music Theory Entrance Examination or MUS 124. Corequisites: MUS 103-104. 1-1 credits

MUS 103-104. MUSIC THEORY I-II. The study of functional harmony including scales, modes, intervals, chords, sight-seeing, melodic-harmonic dictation and elementary compositional techniques. Prerequisite: Successful completion of placement exam in music theory or MUS 124. 3-3 credits

MUS 124. INTRODUCTION TO MUSIC. This course introduces students to the nature of music expression and elements of music including rhythm, melody, harmony, form and color. 3 credits

MUS 201-202. MUSIC THEORY III-IV. This course focuses on the use of non-harmonic tones, modulation, the sequence,
chromatically altered chords, sevenths, extended tertian harmonies, and the study of harmonic progression. Prerequisite: MUS 104. 3-3 credits

MUS 224. MUSICIANSHIP. A course designed to develop an introductory level of musical sensitivity, imagination, and practical skills through a variety of individual exercises in singing, playing, and listening to develop perception and rudimentary control of the elements of music. 3 credits

MUS 302. FORM AND ANALYSIS. A study and analysis of music literature including a review of music materials and their functions in musical form. Prerequisite: MUS 202. 2 credits

MUS 304. CHAMBER MUSIC. The study and exploration of music literature for small-group performance (instrumental or vocal) by high-advanced performers; an immediate application of harmonic and melodic devices utilized in each composition. Designed to cultivate independent musicianship that requires multiple high-level music responses within time and space, communicated through the art of music performance. The course provides opportunities to explore other cultures and traditions through standard repertoire for duets, trios, quartets and quintets. Prerequisite: Completion of MUS 261, or approval of applied music instructor. 1 credit

MUS 401. ORCHESTRATION AND ARRANGING. A study of the fundamentals of writing for vocal and instrumental ensembles including voicings, instrumentation, registration and the technical limitations of various orchestral instruments. Prerequisite: MUS 302. 3 credits

Music History And Literature

MUS 206, 207. MUSIC HISTORY AND LITERATURE. A survey of the major style periods in Western art music from antiquity to the 20th century. Chronological examination of works by principal composers. Outstanding stylistic characteristics in each period are differentiated against the backdrop of historical and sociological development. Prerequisite: MUS 104. 3,3 credits

MUS 290. MUSIC LAW. Examination of the United States code pertaining to copyright. Basic principles of music contracts and taxation as they relate to the creative musician. Study of American Federation of Musicians' regulations as they relate to the performing and non-performing musician. 2 credits

MUS 363. WORLD MUSIC. A survey course that explores indigenous music and contemporary popular music of diverse world cultures. World Music considers the function of music (religious and non-religious) and the related forms of artistic expression of different geographical regions, countries and ethnic groups. 3 credits

MUS 364. SURVEY OF CARIBBEAN MUSIC AND DANCE. The course explores the most important musical and dance traditions of the Caribbean. It will focus on stylistics differences and similarities in dance and music of the different islands. Students will examine the influence that cultural differences have on dance and musical diversity. 3 Credits

MUS 428. JAZZ HISTORY. Acquaints students with a variety of jazz styles and performers through audio/video recordings, and studying of important representative musical works from each of these eras. A significant focus will be on the relationship between the music and social and economic forces of the 20th Century. 3 Credits

MUS 452. QUELBÉ INTERACTIVE. Students examine the rich cultural history of the Quelbé musical traditions indigenous to societies of the Caribbean and specifically of the US Virgin Islands. Students explore and create unit sets in multi-disciplinary teaching opportunities afforded through comprehension of learning approaches, and significance in the use of the "MotherTongue" as a point of departure. 3 credit

MUS 465, 466. SELECTED TOPICS. Includes the study of areas of special interest in music and related disciplines. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. 3,3 credits

Music Education/Education

MUE 311. CONDUCTING TECHNIQUES. A study in fundamental conducting techniques; observation and practice in conducting choral and instrumental ensembles including problems in score reading and transposition. 3 credits

MUE 312. TEACHING MUSIC IN THE ELEMENTARY SCHOOL. A study of the general music curriculum, material, activities and vocal music instruction for primary and intermediate grades. For music majors only. 3 credits

MUE 321. BRASS AND PERCUSSION METHODS. A practical approach to brass pedagogy in preparation for elementary and middle school instrumental music instruction; covering six brass units (trumpet, French horn, trombone/euphonium and tuba) with emphasis placed on research and best practice topics. 1 credit

MUE 322. WOODWIND METHODS. A practical approach to woodwind pedagogy in preparation for elementary and middle school instrumental music instruction; covering five major/modern woodwind units (flute, oboe, clarinet, bassoon, saxophone) with emphasis placed on research and best practice topics. 2 credits

MUE 323. PERCUSSION METHODS. A practical approach to percussion pedagogy in preparation for elementary and middle school instrumental music instruction; covering seven major/modern percussion units (snare drum, keyboard percussion, timpani, accessory percussion, drum-set, marching percussion, and ethnic percussion) with emphasis placed on research and best practice topics. 1 credit

MUE 411. TEACHING MUSIC IN SECONDARY SCHOOLS. A study of the music curriculum, methods and materials in junior and senior high school general music, vocal and instrumental music programs. Instruction in music theory and literature at the senior high school level emphasizing the use of instructional and program objectives. For music majors only. 3 credits

MUE 412. STUDENT TEACHING AND SEMINAR IN MUSIC. Provides observation, participation and direct teaching-learning situations in various phases of elementary and secondary school music and music-related activities under the joint supervision of a University music instructor and public school classroom teacher. Prerequisites: Documented and approved eighty (80) hours of Service Learning projects, MUE 312 and MUE 411 with a minimum grade of "C" in each. 6 credits

Music Industry

MUS 110. BUSINESS OF MUSIC. This course provides instruction in the business of music for aspiring artists, music business entrepreneurs, producers, promoters, and others interested in making a living from music. The course will explore components of the music business that include career options, self-employment, development of fundamental business skills, and strategies for creating successful business models. 3 credits

MUS 125. BEGINNING MUSIC RECORDING WORKSHOP. This course is a survey course of the fundamental principles and practices of audio recording. Topics include sound and hearing, acoustics and the components of various recording systems. Students learn to manipulate studio and live sound installations. The fundamentals of music recording, producing, engineering, mixing, mastering, and editing techniques will be explored. Prerequisite: MUS 110. 3 credits

MUS 215. MUSIC MIXING WORKSHOP. This course provides the student the opportunity to explore various steps of the mixing process including equalization, panning, dynamic processing, reverb, and delay. The techniques utilized will be related to the Digital Audio Workstation (DAW) or the digital or analog console. Prerequisites: MUS 110, MUS 125. 3 credits

MUS 217. PROFESSIONAL TOOLS: DIGITAL RECORDING TECHNIQUES. Pro Tools software is the industry standard for digital audio recording and is used in the vast majority of professional recording studios worldwide. Subsequently, it is critical for the digital recording engineer to have an in depth understanding of a variety of digital audio workstations (DAWs), especially Pro Tools. This course will help the student to develop concepts, both musical and artistic, necessary in the field of musical engineering as producers in the recording industry. The course will also provide software training in preparation for students interested in obtaining Pro Tools certification. Prerequisites: MUS 110, MUS 125. 3 credits

MUS 250. MUSIC RECORDING THEORY AND TECHNIQUES. This course provides instruction on how to make high quality recordings utilizing a wide array of tools and techniques. Students will study audio theory, the physics of sound, mixing processes, and the skill of engineering recordings for various music genres. Prerequisites: MUS 110, MUS 125. 3 credits

MUS 252. MUSIC INDUSTRY MARKETING PRINCIPLES & APPLICATIONS. This course provides the basic overview of key music marketing principles, terms, and practices which together form the foundation for all music marketing plans. Students will then be able to explore key areas of opportunities for musicians, including merchandising, publicity, radio promotion (online and traditional), retail and distribution, advertising, and touring. They will also learn what companies and partners to work with in order to reach their core fans and how to communicate with them in ways to leverage the changes and new opportunities that internet offers to marketers. Prerequisite: MUS 110. 3 credits

MUS 254. INTELLECTUAL PROPERTY RIGHTS. This course provides an analysis of the competing policies underlying the Intellectual Property laws. It covers the basics of: patent, copyright, trademark, and trade secrets law, as well as some of the salient controversies in intellectual property law, including patent protection for software and business methods, the challenges to copyright law posed by file sharing technology, the role and difficulties of protecting trademarks on the Internet, and the application of common law doctrines to the Internet. Prerequisite: MUS 110. 3 credits

MUS 315. MUSIC ECONOMIC AND GLOBAL BUSINESS. This course provides the student with instruction in advanced concepts and practices related to the Music Industry from a global economic perspective. Students will discuss global statistics, regional and environmental economics, and policies related to current global business activity. Prerequisites: MUS 110. 3 credits

Music Performance

MUS 132. CONCERT BAND. The study and performance of standard and contemporary literature for concert band. Three hours per week. Prerequisite: Audition. (May be repeated for credit.) 1 credit

MUS 133. JAZZ ENSEMBLE. Study and performance of standard and experimental literature from all styles of the Afro-American idiom. Emphasis on Caribbean, jazz and jazz/rock styles. Three hours per week. Prerequisite: Audition. (May be repeated for credit.) 1 credit

MUS 134. STEEL BAND ENSEMBLE. A review of the historical background of pan and the study and performance of standard and contemporary literature for steel band with emphasis on Caribbean and West Indian repertoire. Prerequisites: Knowledge and skill on the steel pan, and admission by audition. 1 credit

MUS 140. CLASS STEEL PAN. The student examines techniques and methods essential to the mastery of the steel pan. Emphasis will be placed on the historical and artistic development of the instrument as a performance medium, ensemble participation, and skills related to reading music. 1 credit

MUS 151-152. CLASS GUITAR. Basic instruction in guitar performance for beginners and intermediate guitarists. The courses are designed for non-music majors and community residents interested in studying folk and popular guitar styles. 1-1 credit

MUS 161-162, 261-262, 361-362, 461-462. APPLIED MUSIC. Vocal, keyboard and instrumental instruction in the student's principal area of music study. The areas of instruction are as follows: voice, piano, woodwinds, brass and percussion. One hour lesson per week. Courses must be taken in sequence. Open to all students. 2-2, 2-2, 2-2, 2-2 credit

MUS 173-174, 273-274. SECONDARY PIANO. Instruction in elementary piano technique. All major and minor scales in four octaves in addition to major and minor chords and arpeggios. Required of voice and instrumental majors. Courses must be taken in sequence. Open to all students. 1-1, 1-1 credit

MUS 175-176, 275-276. SECONDARY VOICE. Instruction in elementary voice technique. Study of vocal anatomy, development of proper breathing, breath control and posture in addition to all vowels and consonants. Required of piano majors. Courses must be taken in sequence. Open to all students. 1-1, 1-1 credit

MUS 177-178. SECONDARY BRASS. The student will study the techniques and methods of elementary to intermediate brass performance. The student will be exposed to the theoretical and practical aspects of music and brass performance. 1-1 credit

MUS 179-180. SECONDARY WOODWIND. The student will study the techniques and methods of elementary to intermediate woodwind performance. The student will be exposed to the theoretical and practical aspects of music and woodwind performance. 1-1 credit

MUS 185-186. SECONDARY PERCUSSION. The student will study the techniques and methods of elementary to intermediate percussion performance. The student will be exposed to the theoretical and practical aspects of music and percussion performance. 1-1 credit

MUS 181-182. CLASS PIANO I-II. Instruction in fundamentals of keyboard performance consisting of scales, chords, arpeggios and basic piano literature. For non-music majors. 1-1 credit

MUS 183. CLASS VOICE I. A course for the non-music major interested in learning basic vocal theory aiming to master basic fundamentals in singing which includes learning to recognize and solve vocal problems. 1 credit

MUS 184. CLASS VOICE II. A course for the non-music major interested in learning performance techniques. 1 credit

MUS 242. CONCERT CHOIR. The study and presentation of standard and contemporary choral literature for mixed voices. Choral training and performances at concerts, University ceremonies and functions. Three hours per week. Prerequisite: Audition. (May be repeated for credit.) 1 credit

MUS 281.CLASS PIANO III. Designed to serve as a continuation of MUS 182. Instruction will be given on the intermediate level in keyboard performance and music theory through the study of scales, chords, arpeggios, music terms and selected piano literature. For non-music majors. Prerequisite: MUS 182. 1 credit

MUS 282. CLASS PIANO IV. Designed to serve as a continuation of Music 281. Instruction will be given on the advanced level in keyboard performance and music theory through the study of scales, chords, arpeggios, music terms and selected piano literature. For non-music majors. Prerequisite: MUS 281. 1 credit

MUS 283. CLASS VOICE III. A course for the non-music major interested in learning the components of artistry in singing. 1 credit

MUS 284. CLASS VOICE IV. A course for the non-music major interested in becoming familiar with and examining song literature for different voice types. 1 credit

MUS 335. CHAMBER MUSIC. Chamber Music is designed to foster music independence, critical thinking, and high-level performance skills. The course provides opportunities to explore other cultures and times through standard small-group repertoire for duets, trios, quartets, and quintets. (May be repeated for credit.) 1 Credit

MUS 497. SENIOR RESEARCH SEMINAR. The capstone experience offered through Senior Research Seminar 497 provides the opportunity for students of each concentration within the Department of Music to consolidate and synthesize important performance learning practices and research initiatives into a project that leads to the selection and preparation of a senior recital program. The course requires the identification of a research topic that corresponds to the selected recital literature and the presentation of the research idea in Abstract form. Portions of the Senior Recital will be presented in conjunction with the Abstract. Prerequisites: MUS161, MUS 162, MUS 261, MUS 262, MUS 361, MUS 362. 3 credits

MUS 498. SENIOR RESEARCH SEMINAR. The continuing capstone experience offered through Senior Research Seminar MUS 498 provides the opportunity for students of each concentration within the Department of Music to consolidate and synthesize important performance learning practices and research initiatives into a project that leads to the fruition of the Senior Recital program. The course requires the presentation of the research paper and Senior Recital program. Prerequisites: MUS 161, MUS 162, MUS 261, MUS 262, MUS 361, MUS 362, MUS 497. 3 credits.

NATURAL SCIENCE (NSC)

NSC 101. FOUNDATIONS OF NATURAL SCIENCE I. A review of the underlying concepts common to all of the natural sciences, with emphasis on the interrelationships of natural phenomena. Principles and applications from astronomy, chemistry, earth sciences and physics will be considered. 3 hours lectures and 3 hours of laboratory weekly. Some lab sessions may take the form of scheduled field trips. Prerequisite: ENG 101/RCA 021 or a satisfactory score on the placement exam, or SAT exemption. Corequisite: MAT 141 or MAT 143. 4 credits

NSC 102. FOUNDATIONS OF NATURAL SCIENCE II. An introduction to living systems with a focus on the molecular basis of life, the diversity of living organisms, the mechanism of species changes and the ecology of natural populations and communities. Further emphasis will be placed on the natural history of the Caribbean region and current topics in human biology. Three lectures and 3 hours of laboratory weekly. Some lab sessions may take the form of scheduled field trips. Prerequisite: NSC 101 or CHE 151 or PHY 211 or PHY 241. 4 credits

NSC 103. OCEANS AND MAN. An introduction to the physical, chemical and biological aspects of the ocean with emphasis upon the interrelationship between man and the ocean. Three lectures and 3 hours of laboratory weekly. Some lab sessions may take the form of scheduled field trips. Prerequisite: NSC 101 or CHE 151 or PHY 211 or PHY 241. 4 credits

NSC 104. ASTRONOMY. A study of the properties and theories of evolution of the earth, sun, solar system, galaxy and universe with emphasis on the experimental techniques employed by astronomers. Three lecture hours and three hours of laboratory weekly. Astronomical observations will constitute an important part of the laboratory exercises. Prerequisite: MAT 140 or MAT 143. 4 credits

NSC 200. TOPICS IN THE NATURAL SCIENCES. Current topics in various scientific fields primarily for non-majors. The specific topic of each course will be listed in the class schedule. Topics might include galaxies, current geological processes, Caribbean biogeography, molecular structure, oil and its by-products, man and the environment, human biology, resources and man. May be repeated for credit provided different topics are selected. Prerequisite: One year of science. 3 credits

NURSING (NUR)

NUR 104. DRUG DOSAGE CALCULATION. This course presents concepts necessary for the calculation and administration of oral and parenteral medication dosages. Two lecture hours per week. Prerequisite: Admission to BSN program. (S-AAS/OEK). 2 credits

NUR 208. FUNDAMENTALS OF NURSING. This course provides an introduction to nursing and roles of the nurse in micro- and macrosystems, as well as profession-related and patient care concepts. Emphasis is placed on the knowledge and skills needed to provide safe, quality care. The theoretical foundation for basic assessment and nursing skills is presented, and the student is given an opportunity to demonstrate these skills in a clinical laboratory setting. An introduction to the nursing process provides a decision-making framework to assist students in developing effective clinical judgment skills. Four hours lecture and six clinical/laboratory hours per week. Prerequisite: Admission to BSN program. (S-AAS/OEK). 6 credits

NUR 209. HEALTH ASSESSMENT. This course provides the framework for preparing students to perform comprehensive health assessments. Emphasis is placed on taking a thorough nursing history, performing physiological, psychological, sociological, cultural, and spiritual assessments, as well as identification of stressors and health risks. Laboratory experiences provide an opportunity to practice assessment skills. Two hours lecture and three clinical laboratory hours per week. Prerequisite: Admission to BSN program. (S-AAS/OEK). 3 credits

NUR 210. BRIDGE TO PROFESSIONAL NURSING. This course provides an opportunity for nurses to explore the role of the professional nurse and professional nursing concepts essential for contemporary practice. Emphasis is placed on bridging the gap between prior educational experiences and the current competencies identified as essential to the practice of the baccalaureate degree nurse. Prerequisite: Admission to BSN Completion program. (AR-AAS/OEK). 2 credits

NUR 229. PHARMACOLOGY IN NURSING. This course provides an introduction to the principles of pharmacology, including: pharmacokinetics, pharmacodynamics, pharmacotherapeutics, adverse medication reactions, and potential food and drug interactions. Emphasis is placed on major drug classifications including common medications within selected classifications. Three hours lecture each week. Prerequisite: Admission to BSN program. (S-AAS/OEK). 3 credits

NUR 308. ADULT HEALTH NURSING I. This course focuses on the care of adult patients with health alterations that require medical and/or surgical intervention. Emphasis is placed on the care of patients with alterations in selected body functions. Concepts of patient-centered care, cultural sensitivity, informatics, safe practice, and professionalism are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to adults in a variety of settings. Three hours lecture and nine clinical/laboratory hours per week. Prerequisites: NUR 104, NUR 208, NUR 209, NUR 229. Corequisite: NUR 311. (F-AAS/OEK). 6 credits

NUR 311. PATHOPHYSIOLOGY. This course focuses on the altered processes of human physiology. Emphasis is placed on exploring changes in biological processes of the body and the effects on homeostasis along with clinical manifestations. Three lecture hours per week. Prerequisites: Admission to BSN program. (F-AAS/OEK). 3 credits

NUR 318. MENTAL/BEHAVIORAL HEALTH NURSING. This course focuses on the care of patients across the lifespan experiencing cognitive, mental and behavioral disorders. Emphasis is placed on management of patients facing emotional and psychological stressors as well as promoting and maintaining the mental health of individuals and families. Concepts of crisis intervention, therapeutic communication, anger management, and coping skills are integrated throughout the course. The community as a site for care and support services is addressed. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to patients in selected mental health settings. 2.5 hours lecture and 4.5 clinical/laboratory hours per week. Prerequisites: NUR 104, NUR 208, NUR 209, NUR 229. Corequisite: NUR 308, NUR 311. (F-AAS/OEK). 4 credits

NUR 319. ADULT HEALTH NURSING II. This course focuses on the care of adult patients with medical and/or surgical health alterations. Emphasis is placed on the care of patients with alterations in selected body functions. Concepts of health promotion, health education, evidence based practice, and interprofessional collaboration are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe care to patients and selected groups in a variety of settings. Three hours lecture and nine clinical/laboratory hours per week. Prerequisites: NUR 308, NUR 311. (S-AAS/OEK). 6 credits

NUR 321. MATERNAL NEWBORN NURSING. This course provides an integrative, family-centered approach to the care of mothers and newborns. Emphasis is placed on normal pregnancies, childbirth, and the transition of the fetus to extrauterine life, reproductive health and the promotion of healthy behaviors in patients. Common complications that can arise during the antepartum, intrapartum, and postpartum periods, and the newborn are addressed. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to mothers and newborns in selected settings. 2.5 hours per week of lecture and 4.5 hours of clinical/laboratory experiences per week. Prerequisites: NUR 104, NUR 208, NUR 209, NUR 229, NUR 308, NUR 311. (S-AAS/OEK). 4 credits

NUR 322. EVIDENCE-BASED PRACTICE. This course is designed to promote clinical decision making, based on evidence, through the exploration and integration of current scientific evidence, use of clinical

reasoning, identification of patient preferences, and assessment of available resources. The use of informatics in the analysis and synthesis of evidence to answer a clinical question relevant to nursing practice and patient centered care is stressed. Three hours lecture per week. Prerequisites: NUR 208, MAT 235. (S-AAS/OEK). 3 credits

NUR 323. PEDIATRIC NURSING. This course provides an integrative, family-centered approach to pediatric concepts applied in caring for the child/family as the child progresses through the different stages of development. Emphasis is placed on normal growth and development, family dynamics, common pediatric disorders and the promotion of healthy behaviors in patients. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe patient care to children in selected settings. 2.5 hours of lecture and 4.5 clinical/laboratory hours per week. Prerequisites: NUR 104, NUR 208, NUR 209, NUR 229, NUR 308, NUR 311. Corequisite: NUR 418. (S-AAS/OEK). 4 credits

NUR 417. ADULT HEALTH NURSING III. This course focuses on advanced concepts of nursing care as they relate to adults with complex health problems. Emphasis is placed on implementing time management and organizational skills while managing the care of patients with multiple needs and collaborating with the interprofessional team. Complex clinical skills, as well as priority setting, clinical judgment, and tenets of legal and ethical practice are integrated throughout the course. Clinical experiences provide the student an opportunity to apply theoretical concepts and implement safe care to patients and selected groups in a variety of settings. Three lecture hours and nine clinical/laboratory hours per week. Prerequisites: NUR 319, NUR 322. (F-AAS/OEK). 6 credits

NUR 418. COMMUNITY HEALTH NURSING. This course is intended to introduce students to nursing care of individuals, families, aggregates, communities, and populations. Principles and practices of community health are discussed. Emphasis is placed on assessing factors that influence the health of populations and the use of evidence-based practices in the delivery of spiritually and culturally appropriate health promotion and disease prevention interventions. The role of the nurse as advocate for social justice is explored. Two hours lecture and four clinical/laboratory hours each week. Prerequisites: NUR 308, NUR 311, NUR 318, NUR 319, NUR 321, NUR 322 or RN status. Corequisite: NUR 323. (F-AAS/OEK). 4 credits

NUR 421. NURSING LEADERSHIP & ISSUES. This course facilitates the transition of the learner to the role of a professional nurse in the microsystem of a work unit. Learners enrolled in this course will also review contemporary health-related issues, including social, political, organizational, and professional issues in relation to their influence on the nursing profession and nursing practice. The politics of health care are discussed within the context of health care systems. Emphasis is placed on management concepts, including developing the skills of delegation, conflict management, and leadership. Standards of practice and the significance of functioning according to state regulations and statutes are reviewed. Clinical experiences provide the learner the opportunity to apply theoretical concepts while functioning in a leadership role. Prerequisites: all 300 level nursing courses, NUR 417 or NUR 418. (S-AAS/OEK). 5 credits

NUR 432. SENIOR CLINICAL PRACTICUM. The purpose of this course is to provide the student the opportunity to function as a contributing member of the interprofessional team and collectively apply the knowledge and practice the skills acquired in previous courses. Students will be given the opportunity to provide care that is safe, evidence-based, patient-centered, and focused on promoting positive patient outcomes to a caseload of patients. Emphasis is placed on demonstration of professional behaviors, communication that supports information exchange, collaboration and conflict mediation, ethical comportment and the ability to effectively use leadership skills. Fifteen clinical hours per week. Prerequisites: NUR 417, NUR 418. Corequisites: NUR 421, NUR 433. (S-AAS/OEK). 5 credits

NUR 433. NCLEX PREPARATION. This course is designed to build confidence, review relevant content, and prepare candidates for the NCLEX-RN licensure exam. One hour lecture and three laboratory hours per week. Prerequisites: NUR 417, NUR 418 or admission to BSN Completion program. Corequisites: NUR 421, NUR 432. Corequisites not applicable for BSN Completion. (S-AAS/OEK). 2 credits

NUR 434. RN CLINICAL PRACTICUM. The purpose of this course is to provide the student the opportunity to function as a contributing member of the interprofessional team and collectively apply the knowledge and practice the skills acquired in previous courses. Students will be given the opportunity to provide care that is safe, evidence-based, patient-centered, and focused on promoting positive patient outcomes to a caseload of patients. Emphasis is placed on demonstration of professional behaviors, communication that supports information exchange, collaboration and conflict mediation, ethical comportment and the ability to

effectively use leadership skills. Nine clinical hours per week. Prerequisites: NUR 418. Corequisites: NUR 421. (AR-AAS/OEK). 3 credits

NUR 465. SELECTED TOPICS. Topics will address areas of study of interest in nursing, including health policy, management of care, health care delivery and other topics related to client needs and responses to care. Prerequisites will be announced with each topic. (AR-OEK). 1-4 credits

PERSONAL LIFE (PLS)

PLS 200. SELF MANAGEMENT: WELLNESS AND RISK. This course is taught from the interdisciplinary view of nursing, physical education and psychology focusing on the development of the whole person. The central theme of the course is the concept of balance. This is a general education course required for baccalaureate students. It introduces concepts related to physical and psychosocial health and wellness. Specific content areas include high risk behaviors such as alcohol, other substance use and sexuality issues. Wellness perspectives such as fitness, nutrition and stress management are presented. The course emphasizes the evaluation of these concepts in relation to the individual's own life style and supports the student as he/she explores their own behaviors. Prerequisites: FDS 100, WAC 011, RCA 021. 2 credits

PHILOSOPHY (PHI)

PHI 200. CRITICAL THINKING. Students examine the basic principles of critical thinking with an emphasis on the use of criteria to evaluate issues; the development of extensive experience in constructing, analyzing, evaluating, and presenting oral and written arguments. Students discover different ways of knowing and exploring philosophical concepts through a variety of interdisciplinary literatures, and apply these concepts in the study of contemporary issues of society in everyday contexts, especially as promulgated in the mass media. Corequisite: ENG 201. (F, SUM). 3 credits

PHI 231. INTRODUCTION TO EPISTEMOLOGY AND LOGIC. An introduction to various theories concerning the nature, extent and limitations of human knowledge. A study of the methods and principles used to distinguish logical from illogical thinking. Prerequisite: ENG 201. 3 credits

PHI 232. INTRODUCTION TO METAPHYSICS AND HUMAN VALUES. An introduction to various ideas concerning the nature of reality and the foundation, meaning and purpose of human values. Prerequisite: ENG 201. 3 credits

(Note: Either of the above courses satisfies the general education requirement in Philosophy.)

PHYSICAL EDUCATION AND HEALTH (PED)

PED 100-159. The PED 100-159 physical education courses are designed to provide health instruction, knowledge and application of fundamental movement and skills that may facilitate participation in an activity which the student can use after leaving the University. *Note: Classes meet one hundred minutes weekly during fall and spring semesters and 200 minutes weekly during the summer session(s).*

PED 200-259. The PED 200-259 activity courses are advanced classes designed as a continuation of the noted activity. All 1/2 credit

PED 100. SWIMMING/ SNORKELING. Instruction in the mechanics of strokes, snorkeling and water safety designed to meet the needs and interest of beginning swimmers and individuals new to snorkeling.

PED 110. AEROBICS. Continuous and rhythmic movement to music designed to strengthen the heart, lungs and cardiovascular systems.

PED 111. CARDIO & MUSCULAR CONDITIONING. Theory and practice in the proper techniques of weight training and flexibility development with a special emphasis on endurance/cardiac training.

PED 112. STRENGTH TRAINING. Theory and practice in the proper techniques of weight training, muscular endurance, and flexibility development.

PED 113. BEGINNING YOGA. Instruction on the basic aspects of traditional yoga focusing on breathing, restorative and dynamic poses, meditation and relaxation practices.

PED 120. Caribbean Dance. Aerobic workout using modern dance techniques performed to various Caribbean music.

PED 121. MIDDLE EASTERN DANCE. Instruction in the fundamentals of Middle Eastern dance incorporating such aspects as isolation of body areas, arm patterns, veil work and basic dance choreography.

PED 130. ARCHERY. Instruction and practice in the basic skills, rules, and fundamentals of target shooting.

PED 131. BOWLING. Instruction in the basic skills, rules, and strategies needed to bowl.

PED 132. FENCING. Instruction and practice in the fundamentals of beginning fencing.

PED 133. GOLF. Instruction in the basic skills, rules, and strategies necessary to play golf.

PED 134. TABLE TENNIS. Instruction in the rules and fundamental skills with an emphasis on game situations.

PED 135. TENNIS. An introductory course emphasizing ground strokes, net play and serves. Game situations and strategies in singles and doubles play are also emphasized.

PED 140. BASKETBALL. Introduction to basic knowledge and skills in basketball with emphasis on game situations.

PED 141. ALTERNATIVE SPORTS. Instruction and practice of non-traditional sports like ultimate frisbee, broom ball, indoor soccer and paint ball.

PED 142. VOLLEYBALL. Introduction to basic knowledge and skills in volleyball with emphasis on game situations.

PED 143. SOFTBALL. Introduction to basic knowledge and skills in softball with emphasis on game situations.

PED 150. TAE-KWON-DO. Introduction to basic knowledge and skills in Tae-Kwon-Do with emphasis on self-defense.

Note: The following course cannot be used to meet the general education PE requirements:
PED 170. CARDIOPULMONARY RESUSCITATION. Instruction in Basic Life Support and cardiopulmonary resuscitation for healthcare providers using American Heart Association approved techniques for victims of all ages. Students who meet American Heart Association standards will receive certification cards. This course cannot be used to meet the general education PE requirements. 1/2 credit

PED 221. ADVANCED MIDDLE EASTERN DANCE. Advanced Middle Eastern Dance techniques and introduction of zills (finger cymbols) within dance. Prerequisite: PED 121 or equivalent.

PED 233. ADVANCED GOLF. Advanced golf techniques with emphasis on strike play. Prerequisite: PED 133 or equivalent.

PED 235. ADVANCED TENNIS. Advanced tennis techniques with emphasis on match play. Prerequisite: PED 135 or equivalent.

PED 242. ADVANCED VOLLEYBALI. Advanced skills and techniques are presented with an increased emphasis on understanding and playing the game. Prerequisite: PED 142 or equivalent.

PED 265/266. SELECTED TOPICS. Includes the study of areas of special interest in Physical Education, Health and Recreation. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. 1/2 - 2 credits

PHYSICS (PHY)

PHY 211-212. INTRODUCTION TO PHYSICS I-II. An introduction to mechanics, heat, sound, electricity, magnetism, optics and modern physics. A terminal course in physics for nonphysical science majors. Three

hours lecture and three hours laboratory weekly. Prerequisites: MAT 153. PHY 241 may substitute for PHY 211 as a prerequisite for PHY 212. 4-4 credits

PHY 241-242. GENERAL PHYSICS I-II. An introduction to mechanics, heat, sound, electricity, magnetism, optics and modern physics, with strong emphasis on a rigorous mathematical development of the science. Serves as a prerequisite for more advanced courses in the physical sciences and engineering. Four lectures and three hours of laboratory per week. Prerequisite: MAT 241-242 (may be taken concurrently). (VAR). 5-5 credits

PHY 271. ASTRONOMY I. Astronomy I is the first in a 2-semester course sequence designed as an introduction to the tools and techniques of modern astronomy and astrophysics and as a survey of the use of these tools as they are applied to arrive at our current understanding of the composition, structure, and evolution of the cosmos. In the first course in the sequence, emphasis is placed on applying fundamental principles of mechanics including gravitation, conservation laws, and basic radiation principles, to understand the observed properties of the solar system. (In the second course in the sequence, greater emphasis is placed on applications to topics beyond the solar system.) The course begins with a treatment of the appearance of the objects in the night sky and how observation leads us to an understanding of the basics of celestial mechanics. The fundamentals of physics that are required for deeper discussion are then reviewed followed by a treatment of the tools of astronomy, telescopes, optics, and detectors. From there, the local structure of the universe is explored beginning with a discussion of the structure and contents of the solar system followed by discussion of the fundamentals of stellar structure and stellar evolution. The course concludes with a treatment of the techniques for discovering planets around other stars and a survey of the variety of extra-solar planets discovered to date and what their properties imply about the nature of planets throughout the universe. Corequisite: PHY 241 3 Credits

PHY 311. CLASSICAL MECHANICS I. Statics and dynamics of systems of structureless particles and of rigid bodies, moving coordinate systems, gravitation and the Kepler problem. Three hours of lecture per week. Prerequisite: PHY 241. Corequisite: MAT 341 3 credits

PHY 312. CLASSICAL MECHANICS II. Lagrangian and Hamiltonian formulations of classical mechanics, rotation of rigid bodies, theory of small vibrations. Three hours of lecture per week. Prerequisites: PHY 311 and MAT 346 which may be taken concurrently. 3 credits

PHY 321. ELECTROMAGNETISM. Advanced study of electromagnetic phenomena. Electrostatic fields from Laplace's and Poisson's equations, magnetic fields, effects of dielectric and magnetic materials, electromagnetic induction, Maxwell's equations, propagation and radiation of electromagnetic waves. Three hours of lecture per week. Prerequisites: PHY 242 and MAT 346 which may be taken concurrently. 3 credits

PHY 341. MODERN PHYSICS. The fundamental concepts of relativity and quantum physics. Application to atomic structure and spectra, blackbody function; solid-state physics, nuclei and elementary particles. Three hours of lecture per week. Prerequisites: PHY 242 and MAT 342 which may be taken concurrently. 3 credits

PHY 351. MODERN PHYSICS LABORATORY. Introduces the student to experimental research in physics. Crucial experiments in modern physics. Three hours of laboratory per week. Prerequisite: PHY 341 which may be taken concurrently. 1 credit

PHY 371. ASTRONOMY II. Astronomy II is the second in a 2-semester course sequence designed as an introduction to the tools and techniques of modern astronomy and astrophysics and as a survey of the use of these tools as they are applied to arrive at our current understanding of the composition, structure, and evolution of the cosmos. (In the first course in the sequence, emphasis is placed on applying fundamental principles of mechanics including gravity, conservation laws, and basic radiation principles, to understanding the observed properties of the solar system.) In the second course in the sequence, greater emphasis is placed on applications to topics beyond the solar system. The course begins with a discussion of various techniques used for measuring distances to different depths into the cosmos. From there, the larger scale structure of the universe is explored beginning with a discussion of the structure of our Milky Way Galaxy followed by discussion of other galaxies and the structure of the universe as a whole. The course concludes with a treatment of some of the more remarkable findings of modern astronomy and astrophysics including our understanding of the history and evolution of the universe and some of its more

exotic components (e.g., black holes, dark matter, and dark energy). Prerequisite: PHY 271. Corequisite: PHY 242. 3 Credits

PHY 397. JUNIOR SEMINAR I. Junior Seminar I is the first course of two junior seminar courses designed to give the student experience researching and presenting a topic in the field of physics. Prerequisite: PHY 241. Corequisite: PHY 242. 0.5 Credits

PHY 398. JUNIOR SEMINAR II. Junior Seminar II is the second course of two junior seminar courses designed to give the student experience researching and presenting a topic in the field of physics. Prerequisite: PHY 397. 0.5 Credits

PHY 441. QUANTUM MECHANICS. Quantum Mechanics is an introduction to classical and quantum statistical mechanics, and thermodynamic laws and functions, with emphasis on the application of concepts in astrophysics, such as electromagnetic radiation, low-temperature physics, and solid-state physics. Prerequisite: PHY 341. Corequisites: MAT 342, MAT 346. 3 Credits

PHY 465. SELECTED TOPICS. The Selected Topics course will cover topics relevant to the field of Astronomy. The topics will be chosen based upon their relevance to the field and the expertise of regular and visiting faculty. Prerequisites: To be announced with each topic. Corequisites: To be announced with each topic. 1-4 Credits

PHY 466. SELECTED TOPICS. The Selected Topics course will cover topics relevant to the field of Astronomy. The topics will be chosen based upon their relevance to the filed and the expertise of regular and visiting faculty. Prerequisites: To be announced with each topic. Corequisites: To be announced with each topic. 1-4 Credits

PHY 481. ASTRONOMY LAB I. Astronomy Lab I is a hands-on astronomy research lab in which students will 1) gain first hand experience collecting data using the UVI's Virgin Islands Robotic Telescope (VIRT) at the Etelman Observatory, 2) learn about the workings of modern astronomical telescopes and detectors, 3) practice the art of data analysis, 4) draw conclusions based on their analysis, and 5) present their results in journal format as well as in class presentations. Students will thereby gain an authentic research experience in the field of astronomy that develops their critical thinking skills, problem solving skills, and ability to collaborate as part of a research team. Students will work in groups to collect data periodically through the course of the first half of the semester on an assigned astronomical object (this may be a variable star, an active galaxy, or some other pertinent astrophysical object of the instructor's choosing). Students will be guided in the remote use of the VIRT and will then be henceforth responsible for collecting data on their source throughout the semester (observations can be done remotely and so will not require the students to travel to the Observatory). Students will also learn and practice the techniques of data analysis during the first half of the course. In the second half of the course, the students will analyze their data, produce appropriate plots and figures to support their analysis and conclusions, and ultimately detail their data, analysis, and results in a journal-style article. Students will also present their work in-class in the form of seminar presentations to their instructor and peers. Prerequisite: PHY 271. 1 Credit

PHY 482. ASTRONOMY LAB II. Astronomy Lab II is a hands-on astronomy research lab in which students will 1) gain first hand experience collecting data using UVI's High Vacuum Research Chamber (HVRC), 2) learn about the workings of modern astronomical telescopes and detectors, 3) practice the art of data analysis, 4) draw conclusions based on their analysis, and 5) present their results in journal format as well as in class presentations. Students will thereby gain an authentic research experience in the field of astronomy that develops their critical thinking skills, problem solving skills, and ability to collaborate as part of a research team. Students will work in groups to collect data periodically through the course of the first half of the semester on an assigned detector research project (this may be a measurement of detector outgassing at low pressure, a test of detector performance at various pressures/temperatures, or another project of the instructor's choosing). Students will be guided in the use of the HVRC and will then be henceforth responsible for collecting data on their source throughout the semester. Students will also learn and practice the techniques of data analysis during the first half of the course. In the second half of the course, the students will analyze their data, produce appropriate plots and figures to support their analysis and conclusions, and ultimately detail their data, analysis, and results in a journal-style article. Students will also present their work in-class in the form of seminar presentations to their instructor and peers. Prerequisite: PHY 271. 1 Credit

PHY 495. DIRECTED INDEPENDENT RESEARCH IN PHYSICS. Provides an opportunity for students, under the guidance of a faculty supervisor, to pursue scholarly research or study in areas associated with their academic field but outside of prescribed courses. Student and the prospective supervisor should develop and submit for approval a proposal to the dean at least one month prior to the start of the course. For each hour of academic credit to be awarded, the student must have three hours of lab or study per week and one hour of consultation per week with the supervisor. Student may register for repeated enrollment in this course up to the maximum of six credits. Proposals must also include an evaluation plan. Prerequisite: PHY 242 with a minimum cumulative grade point average of 2.5. 1-4 credits

PHY 496. INTERNSHIP/FIELD STUDIES. Provides an opportunity for students to earn academic credit for activities conducted outside of the University. Field studies, internships, summer research programs and career-related employment activities can qualify for credit under this course. Written proposals for such work must be developed by the student and the prospective field/employment supervisor and submitted to a college committee. Proposals must be submitted at least one month prior to the start of the course. The amount of academic credit to be earned will be determined by the committee based on the duration and quality of the experience, with a maximum of four credits through repeated enrollment. Prerequisite: PHY 242 with a minimum cumulative grade point average of 2.5. 1-4 credits

PHY 497. SENIOR SEMINAR I. Senior Seminar I is the first course of two senior seminar courses designed to give the student experience researching and presenting a topic in the field of physics. Prerequisite: PHY 398. 0.5 Credits

PHY 498. SENIOR SEMINAR II. Senior Seminar II is the second course of two senior seminar courses designed to give the student experience researching and presenting a topic in the field of physics. Prerequisite: PHY 497. 0.5 Credits

POLITICAL SCIENCE (POL)

POL 120. INTRODUCTION TO POLITICAL SCIENCE. Introduces students to political science. It examines the various forms politics takes in relation to the state, political institutions and individuals, in an effort to understand the world at large and one's position in it. Prerequisite: Successful completion of the English placement exam or ENG 100/WAC 011, or SAT exemption. (F,S). 3 credits

POL 121-122. INTRODUCTION TO POLITICAL AND SOCIAL THOUGHT. An examination of ideas, concepts and theories about politics and political systems, and about individual and group relationships in society, with emphasis on the ways in which the social sciences enable us to think more clearly and accurately about our social environment. Prerequisites: POL 120, POL 121 (F), POL 122 (S). 3-3 credits

POL 129. INTRODUCTION TO PUBLIC ADMINISTRATION. Designed to acquaint students with the basic principles and concepts associated with administrative management and the execution of public policy, the organization and functioning of public institutions and the implementation of policy decisions in the public arena. A survey course designed to promote interest and understanding of basic management practices and administrative procedures applicable to the public section. It is concerned with the processes by which bureaucratic organizations function. Prerequisite: POL 120. (F, S). 3 credits

POL 151-152. AMERICAN GOVERNMENT. A study of the development of the constitution; political parties; civil liberties; the nature and functions of the legislative, executive and judicial branches of the federal government; structure and functions of state and local governments; relation between federal and state and local governments. Prerequisites: POL 120. POL 151 (F). POL 152 (S). 3-3 credits

POL 310. POLITICAL THEORY. Students gain an understanding of political philosophies and various forms of politics from a theoretical perspective. This course also offers a full examination of the approaches by which power, law, ethics and equality relate to philosophies that contribute to modern day governments and political behaviors. Prerequisite: POL 120. (DEM). 3 credits

POL 315. POLITICAL PARTICIPATION and ELECTIONS. This is a comprehensive study of political participation, political parties and party systems. This course focuses on party memberships in political groups, social movements and dissents, voting, and its effects on elections. This course also offers a full examination and evaluation of historical and recent political elections in the U. S. Virgin Islands, the Caribbean region, and in the United States. (F-E). 3 credits

POL 321. CONTEMPORARY CORRECTIONS. A study of the development of penal philosophies from revenge to rehabilitation. The structure of the American correctional system including probation, institutionalization and parole with consideration of current alternatives to incarceration. Survey of techniques, strategies and problems encountered in correctional counseling. Prerequisite: CJU 110. (Also listed as CJU 321.) (F). 3 credits

POL 330. GLOBAL ENVIRONMENTAL POLITICS. Addresses the political nature of worldwide environmental themes. Through international relations and public policy, this course uncovers the political conflicts and interactions that emerge from governance of the natural environment. Prerequisites: POL 120 (F-O). 3 credits

POL 340. CARIBBEAN GOVERNMENT AND POLITICS. A comparative study of development, structure and processes of government and politics of the Caribbean Islands, with special reference to problems of national integration, political identity, constitutional independence and political ideology, and to the various solutions to these problems which have been adopted. Prerequisite: POL 120. (S-E). 3 credits

POL 341. AFRICAN POLITICS. A comparative study of the development, structure and processes of government and politics on the African continent. As such, it will look at the African political system prior to the arrival of Europeans, the colonial era, and the post-colonial era. The major political issues, ideologies, and the unique development of the principal political institutions will be examined. Case studies will focus on individual nations within each of the five regions of the continent (i.e., north, south, east, west and central). Prerequisite: POL 120. (F). (DEM). 3 credits

POL 351. COMPARATIVE GOVERNMENT. A comparative study and analysis of the governments of Great Britain and Russia. Attention is also given to the politics and governments of developing countries. Prerequisite: POL 120. (S-O). 3 credits

POL 352. INTERNATIONAL POLITICS. A study of politics among nations. Prerequisite: POL 120. (S-E). 3 credits

POL 401. U. S. VIRGIN ISLANDS GOVERNMENT AND POLITICS. An examination of the government and politics of the U. S. Virgin Islands. Emphasis is placed on the social and cultural context of the political process. The major institutional components of the political structure are examined, including the Organic Acts, the major branches of government, political parties, and federal-territorial relations. Outstanding political issues and possible political changes are discussed. Prerequisite: POL 120. (S-O). 3 credits

POL 405. COMPARATIVE CRIMINAL JUSTICE SYSTEMS. This course is a study of the variations in patterns of corruption and political crimes as well as patterns of law enforcement and adjudication among political systems: democratic, communist and modernizing. This course introduces students to a global, comparative approach to the study of crime and penal sanctioning. Students will survey transnational crimes such as human trafficking and terrorism and learn how different countries respond. This course will cover a wide range of topics over a large number of countries. Prerequisites: ENG 120, CJU 110, POL 120. (Also listed as CJU 405.) (F-O) 3 credits.

POL 496. PRACTICUM IN POLITICAL SCIENCE. Opportunities for supervised field work experience in areas related to government and politics, with emphasis on the linkage between course work and practical application. A comprehensive program must be submitted to the dean no later than the sixth week of the semester prior to the semester in which the field work is to be undertaken. Prerequisites: Senior standing and political science concentration. (S). (DEM). 3 credits

POL 498. POLITICAL SCIENCE SEMINAR. An examination of methodological controversies concerning the nature and methods of political science and recent major work in the various areas of the discipline. The course is designed to help prepare advanced students for graduate training. Prerequisites: 6 credits of lower level and 6 credits of upper-level political science courses. (F). (DEM). 3 credits

PRIOR LEARNING EXPERIENCE (PLA)

PLA 201. PROFESSIONAL LIFE SKILLS: PRIOR LEARNING ASSESSMENT THEORY AND PRACTICE. A three credit course designed to assist students in identifying the areas of learning for which they wish to be granted credit for their life experiences or skills acquired through prior schooling, training or on-the-job experience that they bring to higher education classroom. The course will ultimately result in a portfolio(s) that will be assessed by LearningCounts; however, students must successfully pass this course

in order to be able to submit a portfolio for assessment. Specifically, the development of a portfolio will serve to highlight areas of learning that would be evaluated for college-level equivalency. This course will guide students through the preparation and compilation of all components required for the evaluation of a portfolio of prior learning. Students may be granted anywhere between three and twelve credits for completed portfolios from LearningCounts. Prerequisites: ENG 120; two (2) or more years of learning experiences are strongly encouraged. Students will need the permission of the Director of the Center for Student Success (CSS) to enroll in the course. 3 credits

PROCESS TECHNOLOGY (PRT)

PRT 101. INTRODUCTION TO PROCESS TECHNOLOGY. An introduction to chemical and refinery plant operations. Topics include process technician duties, responsibilities, and expectations: plant organization; plant process and utility systems; the physical and mental requirements of the process technician; an overview of a typical process plant; identification of process equipment; the purpose of equipment; safety, health, and environmental components; and the roles, responsibilities and work environment. Prerequisite: Successful completion of MAT 023 and MAT 024, or satisfactory SAT Math score, or a satisfactory score on the mathematics diagnostic examination. (F, S). 3 credits

PRT 110. BASIC ELECTRICITY THEORY. Provides instruction in understanding and designing direct-current and alternating-current electrical circuits. Topics include voltage, current, resistance, Ohm's Law, magnetism's relationship with electricity, inductance and capacitance, and multi-phase electrical systems. Corequisite: MAT 140. (F, S). 3 credits

PRT 121. INSTRUMENTATION I. The first course of a two-semester sequence which involves the study of the instruments and their integration into instrument systems used in petroleum refining, petrochemical and chemical processing, including terminology, symbols, data highways, input-output, and basic troubleshooting. Corequisite: MAT 140. (F, S). 3 credits

PRT 122. INSTRUMENTATION II. The second course of a two-semester sequence which involves the study of the instruments and their integration into instrument systems used in petroleum refining, petrochemical and chemical processing, including terminology, symbols, data highways, input-output, and basic troubleshooting. Prerequisite: PRT 121. (F, S). 3 credits

PRT 125. INDUSTRIAL PROCESS. A study of the various processes employed in the oil refining, chemical, distillation, water and waste water treatment industries with an emphasis on processes utilized by local industry. Prerequisites: COM 120, MAT 140, and PRT 101. 3 credits

PRT 130. PROCESS TECHNOLOGY I – EQUIPMENT. Provides instruction in the use of common process equipment including drums, reactors and other processing vessels; pumps, compressors, blowers, fans and other rotating equipment; flow, temperature, pressure and other instrumentation; relief valves, automatic shutdown devices and other safety protection equipment. The course will include the identification, terminology and basic functions of these process equipment components and the scientific principles associated with them. Prerequisite: PRT 101. (F, S). 3 credits

PRT 225. SAFETY, HEALTH & ENVIRONMENT. Develops the knowledge and skills that will reinforce the attitudes and behaviors required for safe and environmentally sound work habits. Emphasis is on safety, health and environmental issues in the performance of all job tasks and regulatory compliance issues. Also included are the components of a typical plant safety and environmental program; the role of a process operator in relation to safety, health, and environment; and identification and use of safety, health and environmental equipment. Prerequisite: PRT 130. (F, S). 3 credits

PRT 231. PROCESS TECHNOLOGY II – SYSTEMS. Explores the interrelation of process equipment and process systems and the application of relevant scientific principles to the process environment. Course topics will include construction of process systems from basic equipment, analysis of process systems, system control under normal operating conditions, and recognition of abnormal conditions. Prerequisite: PRT 130. (F, S). 2 credits

PRT 232. PROCESS TECHNOLOGY III – OPERATIONS. Combines systems into operational processes with emphasis on operations under various conditions. Topics include typical duties of an operator, combining systems into operating processes; describing a process technician's role during plant

operations; writing operating procedures, and demonstrating the application of operating procedures. Prerequisite: PRT 231. (F, S). 3 credits

PRT 240. PROCESS TROUBLESHOOTING. Provides instruction in the different types of troubleshooting techniques, procedures, and methods used to solve process problems. Topics include application of data collection and analysis, cause-effect relationships, reasoning, the steps in troubleshooting models; the use of troubleshooting tools, and the troubleshooting techniques used to solve process problems. The application of computerized process control is a major part of this course. Prerequisite: PRT 231. Corequisite: PRT 232. (F, S). 3 credits

PRT 275. INTERNSHIP. Provides an opportunity for students to earn academic credit for on-the-job technical training at industrial process plants in a supervised work setting. These activities will be conducted in restricted locations onsite within the industrial process plant. Students will work alongside field experts in daily activities that will supplement courses in process troubleshooting and process operations. Individual assignments will be made by the end of the third semester by the Process Technology Coordinator after consulting with the Process Technology Instructors. Prerequisite: Good Academic Standing. Corequisite: PRT 232. (F, S, SUM I). 3 credits

PSYCHOLOGY (PSY)

PSY 120. GENERAL PSYCHOLOGY. A broad overview of the field of psychology. Such topics as basic human neurophysiology, child development, principles of learning, social psychology, abnormal behavior, personality development and approaches to clinical intervention will be covered. Prerequisites: A satisfactory grade on the English and reading placement exams or the satisfactory completion of ENG 100/ WAC 011 and ENG 101/RCA 021 or SAT exemption. (F, S, SUM I). 3 credits

PSY 202. LIFE SPAN DEVELOPMENT. An introduction to human development throughout the life cycle. Using a topical approach, biological, physical, personality and social processes will be examined from the prenatal period through late adulthood. The impact of the life span perspective on developmental theory and research methodology will be emphasized. Prerequisite: PSY 120. (F, S, SUM II). 3 credits

PSY 203. INTRODUCTION TO PERSONALITY. Provides a broad introduction to the contemporary field of personality psychology. Genetic, environmental, social and cultural influences on personality are discussed, and the major personality theorists and assessment methods are introduced to the student. Empirical findings are stressed in the examination of topics such as personality types and traits, motivation and achievement, concepts of the self, sex roles, perceived control and responsibility, love, altruism and aggression. Prerequisite: PSY 120. (F). 3 credits

PSY 223. SOCIAL PSYCHOLOGY. A study of the individual's behavior and experience in social situations. Topics will include: the dynamics of groups; social roles, attitudes and values, communication, prejudice and mass behavior. Caribbean approaches to these topics will be stressed. Prerequisite: PSY 120. (Also listed as SOC 223.) (S). 3 credits

PSY 240. BIOPSYCHOLOGY. An introduction to the biological and neurological bases of behavior. Topics on the brain structure and organization, the neural mechanisms of behavior, the process of evolution and adaptation, the study of genetics, the visual, perceptual, and sensorimotor systems, and the regulation and control of homeostatic processes and the influence of biology on cognitive and emotional functioning will be studied. Both normal and abnormal behavior will be explored. The laboratory component of the course will vary from week to week, and will be related to the particular area of biopsychology on which the class is working at any given time. Prerequisites: PSY 120, SCI 100. (S). 4 credits

PSY 241. SOCIAL DETERMINANTS OF HEALTH AND DISEASE. This course provides a research-based review of the major topics, theories, and issues in health psychology, including health behaviors (e.g., including those related to smoking, eating, exercise, and alcohol use), managing chronic and terminal disease, and interacting within the health care system, research methods, personality, social support, and persuasive appeals. Student self-awareness and the principles of health promotion and health maintenance are developed throughout. (Also listed as SOC 241.) 3 credits.

PSY 301. HISTORY AND SYSTEMS OF PSYCHOLOGY. A survey of the history of the field, its major systems and methods. Contemporary issues and trends will be examined in terms of their roots in the

history of the study of human behavior. Prerequisites: PSY 120, limited to juniors and seniors majoring in psychology. (F-ALT-O). 3 credits

PSY 302. CULTURE AND BEHAVIOR. An examination of the mutual relevance of psychology and anthropology to the understanding of human behavior. Conceptual and methodological issues will be emphasized in the substantive areas of cross-cultural research such as the cognitive processes, socialization and personality development, as well as its application to social issues, mental health and intercultural communication. Prerequisite: PSY 120 and PSY 202. (F-ALT-O). 3 credits

PSY 304. COGNITIVE PSYCHOLOGY. An introduction to the theoretical and experimental foundations of mental processes including consciousness, perception, learning, memory and thinking. Current approaches such as information-processing and cognitive science will be examined. Prerequisite: PSY 202. (F-ALT-E). 3 credits

PSY 308. HELPING SKILLS. A practical, skill-based introduction to helping behaviors that can be used in any setting in which students may later work. These include active listening, reflection, non-verbal behaviors, assessment and interviewing, goal-setting and change techniques. The course is designed to give students an understanding of the theory behind helping skills, and provide an opportunity for students to observe and practice these skills in role play and simulations. Prerequisite: PSY 202, PSY 203 and junior or senior standing. (F). 3 credits

PSY 310. INTRODUCTION TO RACIAL AND ETHNIC HEALTH DISPARITIES IN HEALTH CARE. This course will address areas of study of interest in nursing, other health care professions and the social sciences, including health policy, management of care, health care delivery and other topics related to client needs and responses to care. Prerequisite: ENG 201 (Also listed as SOC 310, SWK 310 and NUR 310). (F, S and SUM I). 3 credits

PSY 312. PSYCHOLOGY OF LEARNING. Provides a theoretical, historical, and applied perspective on the psychology of learning. It investigates the ways in which organisms (human and non-human) change their behavior as a result of experience. The course is designed to give students an understanding of the basic concepts of classical, operant, and observational learning. Also, it allows students to apply these concepts in a variety of settings. Prerequisite: PSY 120. (S-ALT-O). 3 credits

PSY 315. HUMAN SEXUALITY. Provides factual information on the topic of human sexuality, integrating perspectives from biopsychology, human development, sociology and health to provide a comprehensive understanding of contemporary sexuality. Prerequisite: PSY 120. (S-ALT-E). 3 credits

PSY 321. CHILD DEVELOPMENT. Covers topics important in child development including prenatal development, infancy, early experience, learning, emotional development, language, cognitive development, moral development, sex-role acquisition, personality and social development including role of family, peers, school and mass media in the socialization process. Prerequisite: PSY 202. (S-ALT-O). 3 credits

PSY 322. ADULT DEVELOPMENT. Will focus on issues in adulthood and aging. Topics covered include the emergence of adult roles, marriage and family life, predictable life crises, role of work, retirement and leisure, special issues in aging, and the psychological aspects of death, dying and bereavement. Prerequisite: PSY 202. PSY 321 is strongly recommended. (F-ALT-E). 3 credits

PSY 323. PSYCHOLOGY OF THE EXCEPTIONAL CHILD AND ADOLESCENT. Will survey the behavior needs and characteristics of those children who deviate significantly from the average to require special attention to develop their potential. Emphasis will be placed on assessment, patterns of adjustment and some therapeutic strategies. Prerequisite: PSY 321. (S-ALT-E). 3 credits

PSY 325. ADOLESCENT DEVELOPMENT. Provides expanded, in-depth coverage of the adolescent period in development. In particular, issues of family, relationships, self-concept and identity, delinquency and psychological disorder, and societal risk factors will be covered. Prerequisite: PSY 202. (F-ALT-O). 3 credits

PSY 327. PSYCHOLOGY OF WOMEN. This course will provide an overview of contemporary theory and research as it applies to sex and gender differences in biology, development, socialization, cognition, interpersonal relationships, and psychological disorders. Prerequisites: PSY 202, 203. (S-ALT-E). 3 credits

PSY 332. INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY. This course presents a general introduction to the field of industrial and organizational psychology, focusing on the structure and function of organizations and the role they play in our lives. Students taking this course will develop an understanding of organizational processes, culture, behavior and productivity, and will be given both a theoretical and applied approach to the field. Prerequisites: PSY 202. (S-ALT-E). 3 credits

PSY 340. BEHAVIORAL NEUROSCIENCES. This course involves the study of specialized areas of central importance in the broad field of the behavioral neurosciences; these topics may vary and will be announced at the beginning of each semester. Topics are likely to include the behavioral neurobiology of eating disorders, schizophrenia, addictions and psychopharmacology, aging, anxiety, ADHD, and bipolar disorder, as well as behavioral neurogenetics and genomics, and cognitive neuroscience. Prerequisite: PSY 240. (F-ALT-E). 3 credits

PSY 345. FORENSIC SCIENCE. Forensic science is concerned with the analysis of physical evidence associated with the crime scene, the victim(s) and/or the suspect(s). This course will introduce students to the concept of forensic science, forensic psychology in the court system, the investigation of crime scenes and the analysis of evidence, specifically the identification and characterization of biological fluids and stains, DNA, terrorism, and the federal rules of evidence which relate to the admissibility of evidence. Depending on the availability of guest lecturers who are considered experts in their area of specialty, other areas of forensic science to be discussed may include but are not limited to medicolegal investigation of death, entomology toxicology, odontology, trace evidence such as hair, fiber, glass, paint or soils, fingerprints, impressions such as footwear and tire, firearms and tool marks, accident reconstruction, forensic psychology and/or psychiatry, and white-collar crime. Weekly laboratory exercises will provide students with a deeper understanding of the methods of analysis of evidence. Prerequisite: CJU 110. (Also listed as CJU 345.) (F). 4 credits

PSY 348. SENSATION AND PERCEPTION. This course is an introduction to sensory systems and perceptual processes, with a primary emphasis on humans. Each major sensory modality (including visual, auditory, somatosensory, olfactory, and gustatory systems) will be explored from the physical stimuli, sensory anatomy and physiology, brain processing to how experience and age influence the sensory systems. Prerequisite: PSY 240. (F-ALT-O). 3 credits

PSY 349. FORENSIC PSYCHOLOGY. This course provides a comprehensive introduction to the field of psychology and law, emphasizing how theory and research in psychological science is used to enhance the gathering and presentation of evidence, improve legal decision-making, prevent crime, rehabilitate criminals, and promote justice. Topics such as DNA and forensic identification, criminal profiling, lie detection, eyewitness testimony, the insanity defense, workplace law, and the death penalty will be considered. Prerequisites: PSY 120, CJU 345/PSY 345, PSY 203. (Also listed as CJU 349.) (F-ALT-O). 3 credits

PSY 350. DRUGS, BEHAVIOR, AND SOCIETY. This course will develop within successful students an in-depth, factual, objective understanding of the use and misuse of legal and illegal drugs in contemporary society, and in sports, as reported in the media, as well as with associated historical antecedents. Approaches to both treatment and prevention of addictions will be studied, in addition to the pharmacological activity and long-term effects of various types of drugs (including alcohol). Prerequisite PSY 120 and/or Junior standing and/or permission of the instructor. (F-ALT-E). 3 credits

PSY 432. PSYCHOLOGY OF PERSONALITY. The study of personality development emphasizing the normal individual and her/his/their adjustment to her/his/their environment. Theories of personalities and techniques of measuring personality will be discussed. Prerequisites: PSY 202 and PSY 203. (DEM). 3 credits

PSY 433. INTRODUCTION TO COUNSELING AND PSYCHOTHERAPY. Will survey the major approaches to counseling and psychotherapy. Theoretical and research findings will be critiqued. Emphasis will be placed on selection and implementation of therapy for different reference groups. Prerequisites: PSY 203 and PSY 434. (F). 3 credits

PSY 434. ABNORMAL PSYCHOLOGY. Emphasizes the dynamics of mental illness; diagnostic methods for classifying and understanding the degree of individual maladjustment; levels and focuses of therapeutic intervention. Prerequisite: PSY 203. (S). 3 credits

PSY 435. TESTS AND MEASUREMENTS. Focuses on the nature and value of psychological instruments, particularly those relevant to an academic setting. Critical topics such as cultural relativity, ethics and research considerations will be discussed. Prerequisites: PSY 202, PSY 203 and MAT 235. Strongly recommended: PSY 434. Limited to juniors and seniors. (DEM). 3 credits

PSY 440. APPLIED RESEARCH METHODS. An introduction to research methods used in the study of behavior, both experimental and non-experimental. The scientific method, including ethics, principles and methods of research design, data collection, statistical analysis and interpretation, and report writing are covered. The student will have hands on experience both in groups and individually in conducting research studies. Prerequisite: SSC 328. (F). 3 credits

PSY 465-466. SELECTED TOPICS. Includes the study of areas of special interest in psychology, especially those that may be of regional importance, or will introduce the student to evolving specialties in the field. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. (DEM). 3-3 credits

PSY 496. PRACTICUM IN PSYCHOLOGY. Individualized and supervised field work experience in the areas of school, developmental, clinical, social and industrial psychology. Major emphasis on integration of theory and practice, also personal and professional development. A comprehensive program must be submitted to the dean no later than the sixth week of the semester prior to the semester in which the field work is to be undertaken. Prerequisites: PSY 120, PSY 202, and PSY 203; for clinical areas, also PSY 434 and PSY 433; for human service areas, also HMS 310 (Introduction to Human Services), HMS 375 (Field Placement and Seminar), PSY 434 and PSY 433; for school counseling and developmental areas, also PSY 321 and PSY 325 (Adolescent Development); for social/organizational areas, also PSY 223 and PSY 332 (Industrial/ Organizational Psychology). Senior standing is required. (S). 3 credits

SCIENCE (SCI)

SCI 100. THE NATURAL WORLD: THE CARIBBEAN. A topical examination of the natural world of the Caribbean. Included will be considerations of elements of Caribbean life associated with the natural world with emphasis on their roots in the Natural Sciences. The approach is interdisciplinary with a variety of learning strategies employed. Two hours of lecture and three hours of lab per week. This course is half of the two-part Freshman-Year Program general education curriculum. (F, S). 3 credits

SCI 200. CHANGES IN THE NATURAL WORLD. Students learn to use the vocabulary and concepts underlying the scientific view of the natural world. An exploration of cosmology and biological principles provide a contrast with mythology and a framework within which to understand the scientific explanations of change and evolution in physical systems and living organisms. Students learn to relate to emerging scientific applications and to the overall organization of scientific knowledge. Laboratory exercises establish the principles of observation and analysis as a basis for scientific theory. This course partially satisfies the general education requirements for a BA degree. Two hours of lecture and three hours of lab per week. Prerequisite: SCI 100 (except in the case of a student admitted into a degree program with 24 or more credits), ENG 120. Corequisite: MAT 140. (F, S). 3 credits

SCI 210. INTRODUCTION TO METEOROLOGY. The course is designed to provide students with a fundamental understanding of weather phenomena. The students will understand meteorological measurements of the atmosphere and be able to interpret weather developments from these measurements. In addition, this course provides the foundation for further studies in the field of meteorology. Students participating in this course must have acquired skills of sending and receiving attached documents by email and must be familiar with web browser navigation. Students are expected to access web resources on the Internet daily. It is strongly recommended that students have a computer with availability to the Internet. Prerequisites: ENG 120, SCI 100 (for those students required to take SCI 100). Corequisite: MAT 140 or 143. (F, S). 4 credits

SCI 220. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS. This multidisciplinary course will cover basic concepts of geographic information systems (GIS) and will combine an overview of the general principles of GIS with analytical use of spatial information. Students will learn GIS techniques to collect, organize, analyze and present data. Students will apply these techniques to conducting “spatial inquiry.” (Also listed as CJU 220 and SSC 220.) 3 credits

SCI 230. DATA SCIENCE I. Data Science I provides students with an introduction to the concepts and basic skills needed to understand the role of data in today's world. The course explores the emergence of the field using the data science workflow as the unifying framework to illustrate the importance of each stage of the workflow, how it contributes to the final report, and how that new information is used. Topics include applications of data science; data ethics; data preparation; data stewardship; analysis, evaluation, communicating results, and best practices. The trade-offs among tools, algorithms, and visualizations are discussed using both effective and ineffective examples. This is a hands-on course, students work with datasets in a peer-peer and near-peer groups. (Also listed as CSC 230 and IST 230). Prerequisites: MAT 140 or MAT 143. 3 credits

SCI 301. APPLICATION OF PRINCIPLES FROM THE NATURAL WORLD. The application of key scientific principles to selected aspects of our immediate surroundings, and an interdisciplinary examination of the technology used to manipulate those surroundings. A variety of teaching techniques, including laboratory exploration, will be employed. Two hours of lecture and three hours of lab per week. Prerequisites: MAT 140 or 143. (F, S, SUM). 3 credits

SCI 305. BIOLOGY OF HEALTH AND DISEASE. Illness often begins as a normal response to various insults that may lead to debilitating injury and death. Students learn how signs and symptoms become the clinical starting point for identifying and treating disease. This course surveys multiple disease processes while introducing basic medical and health care terminology. The laboratory explores tests and strategies for assessing wellness as well as diagnosis and treatment of common disease. BHD is one of 5 core course for non-science majors seeking a Health Sciences minor. Two 50 minute lectures, and one 170 minute lab per week. Prerequisites: MAT 140 or 143, ENG 201. 3 credits

SCI 360. SCIENCE AND THE ELEMENTARY TEACHER. This course, a joint offering of the Science and Teacher Education programs, is designed for elementary education majors. It will give students an opportunity to actively participate in the construction of scientific knowledge by engaging them in critical thinking and original research projects in the natural sciences. Additionally, the course will expose students to science teaching reform, standards in science teaching, and the theories of teaching and learning in science. During the semester, concurrent field experiences under the supervision of the School of Education in conjunction with the math program will consist of two hours weekly. Prerequisites: EDU 250 and admission to the School. (Also listed as EDU 360.) (F). 5 credits

SCI 435 DATA SCIENCE II. This course provides students with the core competencies in data science in preparation for graduate studies or an entry-level position in data science. The course builds on the fundamental concepts of data science with real-world examples that require advanced mathematical, statistical, programming and critical thinking skills. This is a hands-on course. Students will work with multiple datasets for their assignments. The course is suitable for upper-level undergraduate students in computer science and computational sciences, applied mathematics, business, and related analytical fields. (Also listed as CSC 435 and IST 435). Prerequisites: SCI/CSC 230 and MAT 235 or MAT 245 or DSC 325. 3 credits.

SCI 497. A twice-weekly interdisciplinary capstone seminar encompassing mathematics, marine biology, computer science, chemistry, bioinformatics, biochemistry, and biology. Each student will present one seminar. Provides one of the two semesters of Senior Science Seminar required by all science and mathematics majors. SCI 497 may be taken concurrently with other junior or senior science or mathematics seminars only with the special permission of the dean of CSM. Prerequisites: BIO 397-398 or CHE 397-398 or CSC 397-398 or MAT 397 or MBI 397-398. 1 credit

SCIENCE, TECHNOLOGY AND MATHEMATICS EDUCATION (STE)

STE 110. STEP 1: INQUIRY APPROACHES TO STEM TEACHING. This is a field experience course designed for students interested in exploring teaching in STEM-related fields. Students enrolled in this course will engage in field experiences for at least 2 hours in an elementary third, fourth, fifth, or sixth grade classroom. Students will obtain first-hand experience with planning and implementing inquiry-based STEM lessons. Attention to diverse populations and the integration of technology will form a part of this course. Students will implement lessons under the supervision of the mentor teacher. Intensive support is provided for the student during this field experience course by the mentor teacher, the master teacher, and selected education faculty. Reflections of their classroom experiences will be required. Prerequisites: SCI 100 or one semester of another laboratory science course and MAT 140 or MAT 143. Corequisite: ENG 120. 1.5 credits

STE 112: STEP 2: INQUIRY BASED LESSON DESIGN. This field experience course is designed to enable eligible students interested in teaching in STEM related fields to engage in direct classroom interaction and instruction on the middle school or junior high level. Students will become familiar with excellent science and mathematics curricula along with local and district math curriculum within the middle school setting. Students prepare, practice, implement and reflect on 5E lessons aligned with district math and science curriculum. This course builds upon and practice lesson design skills that were developed in STE 110. Emphasis is placed on writing good 5 E lesson plans with a focus on the importance of using appropriate questioning strategies throughout the lessons. Students develop pre-and post-assessments for performance objectives and engage in analysis, reflection, and lesson redesign based on these assessments. Classroom mentor teachers, master teachers, and Education faculty provide intensive coaching that enables students to improve their teaching skills. Reflections of classroom experiences form a part of this field experience course. Prerequisites: STE 110. Corequisite: PSY 120. 1.5 credits

SOCIAL SCIENCE (SSC)

SSC 100. AN INTRODUCTION TO THE SOCIAL SCIENCES: A CARIBBEAN FOCUS. A topical examination of the social dimensions of Caribbean cultures from the origins of human habitation to the present. Its interdisciplinary approach will emphasize the perspectives of the various social sciences, with attention also given to the arts of the Caribbean. A variety of teaching and learning strategies will be utilized. Two hours of lecture and 2 hours-workshop. Corequisites: ENG 100/WAC 011 and ENG 101/RCA 021, unless exempted by SAT or placement tests. 3 credits

SSC 113. CLARIFICATION OF THE SOCIAL SELF. In this course the student will explore communication and listening, conflict-resolution, assertiveness and decision-making as they apply to individuals in an interpersonal context. Values clarification and ethical decision-making exercises will be used in structured and unstructured group learning activities as well as readings and discussion. Prerequisites: Satisfactory completion of English and Reading placement tests, SAT exemption, or completion of ENG 100/WAC 011 and ENG 101/RCA 021. (DEM). 3 credits

SSC 154. METHODOLOGY OF INTERDISCIPLINARY STUDIES. Directed at preparing the student for interdisciplinary studies within the social sciences. Deals with the basic methodologies of such programs. The course includes identification and exploration of the nature and scope of selected local problems, the design, strategy, and evaluation of research projects from the point of view of application of results. (DEM). 3 credits

SSC 220. INTRODUCTION TO GEOGRAPHIC INFORMATION SYSTEMS. This multidisciplinary course will cover basic concepts of geographic information systems (GIS) and will combine an overview of the general principles of GIS with analytical use of spatial information. Students will learn GIS techniques to collect, organize, analyze and present data. Students will apply these techniques to conducting “spatial inquiry.” (Also listed as CJU 220 and SCI 220.) (S). 3 credits

SSC 327-328. QUANTITATIVE RESEARCH METHODS IN THE SOCIAL SCIENCES. Techniques and methods of measurement, analysis, interpretation and explanation of statistical data. Topics include frequency distributions and graphic presentation, measures of central tendency and dispersion, the normal and binomial distributions, probability theory, hypothesis testing, point and interval estimation, measures of association and regression, goodness-of-fit tests and analysis of variance; sampling and research design; questionnaire construction. Emphasis is placed on the interrelationships between theory and applied research. Three hours of lecture and three hours of laboratory per week. Prerequisites: MAT 140, MAT 235. SSC 327 (F). SSC 328 (S). 4-4 credits

SSC 497-498. SOCIAL SCIENCES SENIOR SEMINAR. A periodic seminar which explores current topics in the various fields of the social sciences. The first semester will be devoted to a period of instruction in social sciences research methodology, followed by written and oral presentation of a research proposal by the student. In the second semester, students will write their research papers and make an oral presentation of the results of their work. A schedule of meetings will be established at the first meeting of each semester. Prerequisites: SSC 327-328 and senior standing in the Social Sciences. SSC 497 (F). SSC 498 (S). 1-1 credit

SSC 499. INDEPENDENT STUDY. Advanced students who have acquired adequate academic skills may, with the assistance of faculty members, propose a semester program of independent reading, research and reporting to be conducted under the mentorship of one or more full-time social science faculty

members. Acceptance of the proposal should be obtained from the faculty members who will supervise and from the dean at least one month prior to the beginning of the semester. (F, S). 1-3 credits

SOCIAL WORK (SWK)

SWK 224. INTRODUCTION TO SOCIAL WELFARE. Examination of the social welfare problems and needs of the Virgin Islands, Caribbean and mainland United States; the network of agencies and programs to meet these needs; the gaps and limitations of services; the roles of professional social workers in providing social welfare services. (Also listed as SOC 224.) (F). 3 credits

SWK 310. INTRODUCTION TO RACIAL AND ETHNIC HEALTH DISPARITIES IN HEALTH CARE. This course will address areas of study of interest in nursing, other health care professions and the social sciences, including health policy, management of care, health care delivery and other topics related to client needs and responses to care. Prerequisite: ENG 201. (Also listed as SOC 310, NUR 310 and PSY 310.) (F, S). 3 credits

SWK 325. SOCIAL WELFARE AS A SOCIAL INSTITUTION. Historical development of public and private social welfare and the profession of social work in the context of economic, philosophical, social and other forces. In addition, major changes in governmental social philosophy, welfare programs and issues in social welfare and social work are examined with the use of analytic and evaluation paradigms. Participant observational learning experiences are a part of the requirements of this course. (Also listed as SOC 325.) (F). 3 credits

SWK 331. SOCIAL WORK METHODS I. An introduction to basic social work practice utilized by professional social workers in their interventions with any social system. The focus of this course is on people with problems and perceptions of their functioning, relevant systems, and the helping process, including time phases, the worker and the kinds of helping roles, the client in the situation, communication skills, objectives and goals, and values and self-awareness. The values and ethics of the profession are examined in relation to social needs and the context of practice. The social agency context of sanctions, organization and accountability are examined. The variety of social work practice in relation to social problems and human need will be considered. This foundation knowledge is further developed in Social Work Methods II, III and IV. Prerequisite: SWK 224. (S). 3 credits

SWK 334A - 334B. HUMAN BEHAVIOR AND THE SOCIAL ENVIRONMENT. This two-semester course analyzes theories of human behavior in the social environment from a life span developmental approach. The content of these courses is designed to increase the students' potential for effective generalist social work assessment and interventions with individuals, families, groups, social systems and communities. The course also strives to build students' appreciation for and understanding of the ramefications of the "person-in-environment" principle that primarily takes into consideration the social, biological and psychological influences of the environment. Students will examine the effects of social structures, social policies and cultural patterns on individuals at all stages of life. SWK 334A (F). SWK 334B (S). 3-3 credits

SWK 335. CONTEMPORARY ISSUES IN SOCIAL GERONTOLOGY. An intensive overview of the major concepts, programs and contemporary issues in social gerontology and their relationships to social welfare and other human services. Topics include health care, income maintenance, social security benefits, crime, media, social networks and others. Prerequisite: SOC 121 or Special 131E (Gerontology Institute). (Also listed as SOC 335.) (S). (DEM). 3 credits

SWK 425. SOCIAL WORK METHODS III. Utilizing a systems approach, assessment and the beginning phase of practice are examined. An emphasis is placed on the generic practice process and beginning engagement skills with individuals, families, groups and local communities, including observation, data collection, interviewing and assessment. A further emphasis is placed on the worker's skill in facilitating direct services for people in the context of social work purposes. (Must be taken concurrently with SWK 427.) (F). 3 credits

SWK 426. SOCIAL WORK METHODS IV. A continued development of social work generic practice. The middle and termination phases of practice with individuals, families, groups and local communities are stressed. Attention is paid to short-term interventions for work with individuals and families, particularly in regard to delivering social services in relation to functional and dysfunctional processes both in societal systems and client systems. Special attention is paid to task-oriented groups, including agency work

groups and interventions on local community levels. Team and interdisciplinary aspects of professional practice are examined. (Must be taken concurrently with SWK 428.) (S). 3 credits

SWK 427. FIELD INSTRUCTION II AND FIELD SEMINAR. Builds upon the knowledge and experience gained in SWK 333 and requires the student to integrate the content of SWK 425 in a practicum basis. A minimum of two days per week is required. Concurrent participation in a regular field instruction seminar is also required. (Must be taken concurrently with SWK 425.) (F). 6 credits

SWK 428. FIELD INSTRUCTION III AND FIELD SEMINAR. Builds upon the knowledge and experience gained in Social Work 427 and requires the student to integrate the content of SWK 426 in a practicum basis. A minimum of two days per week is required. Concurrent participation in a regular field instruction seminar is also required. (Must be taken concurrently with SWK 426.) (S). 6 credits

SWK 430. SOCIAL WELFARE: POLICIES, PROGRAMS, ISSUES. An analysis of social welfare programs, policies and issues in regard to selected major areas of social welfare need in the United States, the Virgin Islands and the Caribbean. Issues, strategies and programs in the delivery of social welfare services in a multi-cultural, multiracial context are examined, including the implications for professional priorities and decision-making. Prerequisite: SOC 121 (Also listed as SOC 430.) (S). 3 credits

SWK 465, 466. SELECTED TOPICS. Includes the study of areas of special interest in social work. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. (DEM). 3,3 credits

SOCIOLOGY (SOC)

SOC 121. INTRODUCTION TO SOCIOLOGY. Analysis of the basic perspectives, concepts and methods used in studying societies. Society and culture: diversity and uniformity, society and the individual. Social organization: primary groups; family; kinship and marriage; stratification; racial and ethnic groups; and communities. Social institutions: religious, educational, scientific, political, and economic. Population and society: deviancy, conformity, and social change. (F, S, SUM). 3 credits

SOC 124. SOCIAL PROBLEMS. A study of conditions in society. Problems of the life cycle: adolescence, education, work, the aged. Problems of deviance: delinquency, crime, and mental illness. Problems of the nation: race relations, poverty, and housing. World problems: population, war, and new nations. Prerequisite: SOC 121. (F). 3 credits

SOC 223. SOCIAL PSYCHOLOGY. A study of the individual's behavior and experience in social situations. Topics will include: the dynamics of groups; social roles, attitudes and values, communication, prejudice and mass behavior. Caribbean approaches to these topics will be stressed. Prerequisite: PSY 120. (THI). (S). 3 credits

SOC 224. INTRODUCTION TO SOCIAL WELFARE. Examination of the social welfare problems and needs of the Virgin Islands, Caribbean and mainland United States; the network of agencies and programs to meet these needs; the gaps and limitations of services; the roles of professional social workers in providing social welfare services. (Also listed as SWK 224.) (F). 3 credits

SOC 236. MARRIAGE AND THE FAMILY. A thorough examination of the significance of marriage and the family today, the family life cycle, dating and mate selection, love, marital and sexual adjustment, divorce and desertion, remarriage. (S). 3 credits

SOC 241. SOCIAL DETERMINANTS OF HEAL TH AND DISEASE. This course provides a research-based review of all the major topics, theories, and issues in health psychology, including health behaviors (e.g., including those related to smoking, eating, exercise, and alcohol use), managing chronic and terminal disease, and interacting within the health care system, research methods, personality, social support, and persuasive appeals. Student self-awareness and the principles of health promotion and health maintenance are developed throughout. (Also listed as PSY 241.) (F-O). 3 Credits.

SOC 255, 256. AFRICAN CIVILIZATION. Historical survey of the several major culture areas of continental Africa. Comprises a comparative study of the ways by which the several African peoples treated have handled the basic problems of human existence: origin, survival, self-realization and destiny. (Also listed as ANT 255, 256 and HIS 255, 256.) (DEM). 3,3 credits

SOC 257, 258. THE BLACK EXPERIENCE IN THE NEW WORLD. A study of the slave trade, the conditions of slavery, and the process of Black acculturation in the New World since emancipation. SOC 256 is recommended as a preparatory course. (Also listed as ANT 257, 258 and HIS 257, 258.) (DEM).
3,3 credits

SOC 300. SOCIOLOGICAL THEORY. Students will examine various perspectives and paradigms in classical, neoclassical, and postmodern sociological thought. Specifically, they will explore major themes including Marxism, structural functionalism, neo-functionalism, contemporary feminist theory, micro-, macro-, and agency-structure integration, contemporary theories of modernity, globalization, and post-structuralism. Emphasizes student acquisition of the analytical skills needed for succeed in work across discipline genres. Prerequisite: A satisfactory grade on the English and reading placement exams or the satisfactory completion of ENG 100/WAC 011 and ENG 101/RCA 021 of SAT exemption. (DEM).
3 credits

SOC 310. INTRODUCTION TO RACIAL AND ETHNIC HEALTH DISPARITIES IN HEALTH CARE. This course will address areas of study of interest in nursing, other health care professions and the social sciences, including health policy, management of care, health care delivery and other topics related to client needs and responses to care. Prerequisite: ENG 201 (Also listed as NUR 310, SWK 310 and PSY 310.) (F,S). 3 credits

SOC 315. VICTIMOLOGY. This course focuses on the victim and will expose students to a new study within the criminal justice field: victimology. Students will study different types of victimization, and roles of and ethics related to the criminal justice practitioner. Students will access sources of information regarding crime victims from the UCR and the NCVS. This course will also examine victim allocution and victim-impact statement. An analysis of the different types of punishment and justice will be discussed. Prerequisites: CJU 110, ENG 120. (Also listed as CJU 315.) (S-E). 3 credits

SOC 325. SOCIAL WELFARE AS A SOCIAL INSTITUTION. Historical development of public and private social welfare and the profession of social work in the context of economic, philosophical, social and other forces. In addition, major changes in governmental social philosophy, welfare programs and issues in social welfare and social work are examined with the use of analytic and evaluation paradigms. Participant observational learning experiences are a part of the requirements of this course. Prerequisite: SOC 121. (Also listed as SWK 325.) (F). 3 credits

SOC 332. COMPARATIVE INSTITUTIONS. The comparative study of institutions such as the family, stratification, and kinship, with emphasis on structure and function. Data will be presented from selected cultures of Indonesia, the Caribbean, the USSR, India, and Polynesia. Prerequisite: SOC 121. 3 credits

SOC 333. CRIMINOLOGY. The study of criminal and delinquent behavior including its variations, ramifications explanations and measures of prevention, control and treatment. (Also listed as CJU 333.) (F).
3 credits

SOC 335. CONTEMPORARY ISSUES IN SOCIAL GERONTOLOGY. An intensive overview of the major concepts, programs and contemporary issues in social gerontology and their relationships to social welfare and other human services. Topics include health care, income maintenance, social security benefits, crime, media, social networks and others. Prerequisite: SOC 121 or Special 131E (Gerontology Institute). (Also listed as SWK 335.) (DEM). 3 credits

SOC 345. RACE AND ETHNIC RELATIONS. An analysis of the concept of race, race differences, prejudice, conflict, annihilation, stratification, segregation, pluralism, assimilation, and reactions to minority status. (F).
3 credits

SOC 355, 356. CULTURAL HISTORY OF WEST AFRICA. Deals with the cultural history of the West African Sudan: the area between 7 and 17 degrees north latitude and extending from the northwestern border of Nigeria to the Atlantic Ocean. The period covered extends from the 7th to the 19th centuries which permits a discussion of the rise and flowering of the various peoples involved: Ghana, Mali, Sosso, Songhay, Wolof-Serer and the Fulani. (Also listed as ANT 355, 356 and HIS 355, 356.) (DEM). 3,3 credits

SOC 381. CONTEMPORARY CARIBBEAN SOCIETY. An analysis of society in the contemporary Caribbean, using comparative studies of social structure, race, color, class, religion, family, personality, etc., to discuss problems of social cohesion and social change. Prerequisite: SOC 121. (S-O). 3 credits

SOC 382. SOCIOLOGY OF DEVELOPMENT. Examines the concept, nature and context of development and underdevelopment in the international system, using the Caribbean and Latin America as areas of focus. Includes an analysis of the relationship between various institutional areas and developments. Prerequisite: SOC 121. (DEM). 3 credits

SOC 430. SOCIAL WELFARE: POLICIES, PROGRAMS, ISSUES. An analysis of social welfare programs, policies and issues in regard to selected major areas of social welfare need in the United States, the Virgin Islands and the Caribbean. Issues, strategies and programs in the delivery of social welfare services in a multi-cultural, multiracial context are examined, including the implications for professional priorities and decision-making. Prerequisite: SOC 121. (Also listed as SWK 430.) (S). 3 credits

SOC 469. PRACTICUM IN SOCIOLOGY. Provides supervised experiences in applying the tools and theories of sociological analysis to community problems and policy issues. A comprehensive program must be submitted to the Dean no later than the sixth week of the semester prior to the semester in which the field work is to be undertaken. Prerequisites: Senior standing and a Sociology concentration, with at least 12 credits in the concentration. (DEM). 3 credits

SPANISH (SPA)

SPA 131. FUNCTIONAL ELEMENTARY SPANISH I. This course is designed to develop a basic level of competence in understanding and an acceptable level of competence in communicating in Spanish. Its learning activities draw upon a broad range of state-of-art facilities and techniques, including videos, computer-assisted language practice and multi-media supported activities. This first course lays the foundation in phonology, vocabulary and grammar for effective command of the other two in this sequence. (F, S, SUM). 4 credits

SPA 132. FUNCTIONAL ELEMENTARY SPANISH II. This course is designed to develop in the second language learner a higher elementary level of competence in understanding and communicating orally and in writing standard Spanish. The learning program is based on state-of-the-art videos, computer-assisted language activities and practice provided by multi-media resources. This second course builds upon the foundation laid by the introductory elementary course and continues to develop phonology, vocabulary and grammar in preparation for the intermediate and more advanced stages of the language. The development of language functions moves from ritualistic expressions to more complex usages in conversation. Prerequisite: SPA 131 or successful completion of the appropriate placement test. (F, S, SUM). 4 credits

SPA 141. ALTERNATE FUNCTIONAL ELEMENTARY SPANISH I. This course is designed for students who have previous knowledge of Spanish and who wish to develop a higher level of competence in the language, a greater command of grammar, and a broader grasp of the Hispanic or Latino culture. 3 credits

SPA 231. INTERMEDIATE SPANISH. Grammar review, intensive practice in listening, speaking, reading, writing, and culture. Practical vocabulary and conversation will be stressed. Prerequisite: SPA 132 or successful completion of the appropriate placement test. (F, S, SUM). 4 credits

SPA 235. SPANISH FOR LAW ENFORCEMENT. This is an intermediate Spanish course designed to strengthen students' knowledge of basic Spanish while providing vocabulary specific to law enforcement agents. Through skits and role-play, students will be placed in situations where they will use the vocabulary learned to carry out certain functions performed by law enforcement agents. Prerequisites: CJU 110, SPA 131 and 132, or 141, or successful completion of the appropriate placement test. 4 credits

SPA 305. ORAL SPANISH. Conducted entirely in Spanish. Intensive oral practice; pronunciation, vocabulary, reading, comprehension, conversation, short speeches and group discussion. Some use of audio aids. Prerequisite: Any 200 level course or successful completion of the appropriate placement test. 3 credits

SPA 306. ADVANCED CONVERSATION. Conducted entirely in Spanish, and designed to develop fluency and correctness in the spoken language by means of prepared and impromptu discussions on topics of cultural and current interest. Prerequisite: Any 200 level course or successful completion of the appropriate placement test. 3 credits

SPA 311. ROMANCE LINGUISTICS. A groundwork is laid for studies in the development of the Romance languages. Some essential and practical concepts and applications of descriptive linguistics are studied.

Methodologies for recording and analyzing languages are explored. Reading and reports are initiated on the histories of the Spanish language. Prerequisite: Any 200 level course or successful completion of the appropriate placement test. 3 credits

SPA 312. ROMANCE LINGUISTICS. The development of grammatical structures and lexicons of Spanish out of the Latin language is the subject of detailed study. The roles of sociolinguistics contact phenomena are also brought into perspective as agents of language change. Theories on language origins and language change are evaluated, particularly in the light of creole developments. Prerequisite: SPA 311. 3 credits

SPA 321. STUDIES IN SPANISH LANGUAGE AND STYLE. Taught in Spanish. An approach to advanced grammar through contemporary readings in various fields. Extensive practice in translation and written and oral expression. Prerequisite: Any 200 level course or successful completion of the appropriate placement test. 3 credits

SPA 322. ADVANCED STUDIES IN SPANISH LANGUAGE AND STYLE. Taught in Spanish. Intensive exercise in composition and oral expression. Prerequisite: SPA 321. 3 credits

SPA 331. SPANISH LITERATURE AND CIVILIZATION TO THE 18th CENTURY. Taught in Spanish. The purpose of this course and SPA 332 is to study works representative of the most significant currents in Spanish literature. The lectures will stress the interrelation of Spanish literature with general development in the Spanish speaking world. Selected texts will be analyzed and discussed. May be taken independently of SPA 332. 3 credits

SPA 332. SPANISH LITERATURE AND CIVILIZATION FROM THE 18th CENTURY TO THE PRESENT. See SPA 331. May be taken independently of SPA 331. 3 credits

SPA 365, 366. SELECTED TOPICS. Includes but is not limited to areas of special interest related to the language, cultures and literatures of countries and territories where Spanish is the/an official language. Individual topics will be announced at the beginning of each semester. May be repeated for credit under various topics. Prerequisite: Any Spanish course at the 200-level. 3, 3 credits

SPA 433. SPANISH LITERATURE OF THE GOLDEN AGE. Taught in Spanish. A discussion of the principal authors of the 16th and 17th centuries from Garcilaso to Quevedo. 3 credits

SPA 434. CONTEMPORARY SPANISH LITERATURE. Taught in Spanish. Representative authors from the generation of 1898 to the 1927 group: Unamuno, Azorin, Ortega, Miro, Garcia Lorca, Salinas, Guillen, and others. 3 credits

SPA 435. SPANISH-AMERICAN LITERATURE I. Taught in Spanish. A study of the significant literary works produced in Spanish America from the colonial period to 1888. May be taken independently of SPA 436. 3 credits

SPA 436. SPANISH-AMERICAN LITERATURE II. Taught in Spanish. Stresses the coming of age of Spanish-American literature: Ruben Dario and modernismo; the development of the essay and the novel; significant literary works produced in the post modernistic period, from 1918 to the present. May be taken independently of SPA 435. 3 credits

SPA 465, 466. SELECTED TOPICS. Includes but is not limited to areas of special interest in history of the language or the literatures of Spain and Latin America, including such topics as the romantic movement in Spain, the modern novel or literary criticism as such. Individual topics will be announced at the beginning of each semester. May be repeated for credit under various topics. Prerequisite: Any Spanish course at the 300 or 400 level. 3,3 credits

SPA 499. INDEPENDENT STUDY. Individual research under the direction of a member or members of the department. The students report in weekly conferences to their research advisor and present such papers as may be prescribed. Prerequisites: Advanced standing; completion of at least six hours of Spanish beyond the 200 level; cumulative grade point average of 3.00; consent of the dean. A proposal must be approved prior to the end of the preceding semester. 3 credits

THEATRE (THE)

THE 110. INTRODUCTION TO THEATRE. Surveys historical development and dramatic literature of the Greek, Roman, Medieval and Elizabethan periods, along with an examination of representative American, Caribbean and African plays. The student is also exposed to an overview of the technical aspects of a production. 3 credits

THE 210. THEATRE SERVICE. The study of the basic theories of scene design, stage lighting, costume design, stage management and construction techniques applicable to stage settings. Three hours of instruction and full participation in one production per semester. 4 credits

THE 211, 212, 213, 214. THEATRE PRODUCTION. The art of play production is studied from the practicum state of participation in a University of the Virgin Islands mainstage and/or studio productions. The technical assignment will be in one of the following areas: technical director, designer, lighting technician, wardrobe, stage manager. Work duties will be assigned by the technical advisor of a production if this is a technical position or rehearsals by the director if the student is cast in a major acting role. This course may be repeated four times for credit. The students will be encouraged to choose a different area for each repeat of the course. Prerequisite: THE 110. 1,1,1,1 credit

THE 220. BASIC STAGE MOVEMENT. This course emphasizes basic physical conditioning for phe actor. It will enable a student to learn about gesture, the physical manifestation of emotion, and to become more relaxed and poised in front of an audience. The students will examine the styles and forms of period movement and their expression in relation to needs of the theatre. 3 credits

THE 312. DIRECTING STAGE PRODUCTIONS. The study of the basic theories of stage directing including the director's preliminary investigation, script selection, script analysis, casting and staging techniques. 3 credits

THE 315. THEATRE IN THE CARIBBEAN. This course will explore theatre in the English-speaking Caribbean starting from the Bahamas, Cayman Islands, U. S. and the British Virgin Islands, to Trinidad and Tobago, including Guyana. Students will study various forms of theatre from story-telling and carnival and festivals to formal presentations. 3 credits

THE 323. BASIC ACTING. The study of the basic techniques, analytical skills and the principles which underlie the methodologies of acting as they relate to the actor's performance. Three lectures weekly and rehearsal time will be required. 3 credits

THE 325. READERS THEATRE. Group training in effectively bringing the written drama to life with or without the traditional adjuncts of costuming, scenery, and lighting. The students will learn to script nondramatic literature for group presentations. Prerequisite: COM 227 or COM 221. 3 credits

THE 411. CREATING THEATRE. Using creativity, problem-solving and group-dynamics information and techniques, enrolled sdudents will participate with available extracurricular volunteers in the actual invention and preparation of a theatre-piece. Though not a course in play-writing per se, students will adapt what are, conventionally speaking, nondramatic materials, fiction and nonfiction, articles, essays, etc., for a theatrical presentation and audience. Available for credit or as an extracurricular activity. Six hours per week. 3 credits

THE 412. SCENE DESIGN AND STAGE LIGHTING. Designed to expand the students already existing awareness of the principles of design as applied to stage scenery and theatrical lighting. The student will create and execute a design of both a theatrical set and the accompanying stage lighting for a hypothetical production of either a community educational theatre piece. Prerequisites: THE 210 and at least one from THE 211, 212, 213, 214. 3 credits

THE 413. THEATRE CRITICISM. The students examine the theatre experience through a critical analysis of the role of audience, dramatic structure, environment and visual elements, and performers and directors. The theatre process is studied by examining synopses and representative plays of appropriate genre. Prerequisites: THE 110 and at least one from THE 220, THE 312, THE 323. 3 credits

THE 415. THEATRE MANAGEMENT. The students examine the business of theatre: organizing, funding, managing and sustaining an artistic enterprise. Emphasis is placed upon the roles of the producer, stage manager and house manager in professional, community and educational organizations. Prerequisite: THE 110. 3 credits

THE 465, 466. SELECTED TOPICS. Includes but is not limited to areas of special interest in dramatic literature, various genre of theatre, history of different periods of theatre, including era of "Isms," i.e., expressionism, surrealism, etc. Individual topics will be announced at the beginning of each semester. May be repeated for credit under varying topics. Prerequisite: To be announced with each topic. 3,3 credits

THE 499. INDEPENDENT STUDY. Individual study and research under the direction of a member or members of the College. Students will have weekly conferences with their advisors and do such readings and papers as may be required. Prerequisite: Advance standing. Students must have completed at least 20 credits of speech and/or theatre courses beyond the 200 level with a cumulative grade point average of 3.00. Students must secure consent of the dean and advisor. Written proposals must be approved prior to the end of the preceding semester. 3 credits