

(It should be noted that the following courses are numbered at the 500 level and above. This signifies that they are graduate level courses. Courses in business, education, science and mathematics, liberal arts and social sciences, and other fields at the 400 level and below can be found in the undergraduate catalog.)

Doctoral courses are listed first and are listed in numerical order. Courses specific to one of three specialization areas for the doctoral degree are so noted. After the listing of doctoral level courses, Master's level courses are listed alphabetically by academic field and, within each field, they are listed numerically. A hyphen separating two course numbers for example, 513-514) indicates that the course sequence must be taken in the order given, except where indicated otherwise in the course descriptions. Before attempting to enroll in a course, the student should read the course description carefully to determine that he or she has met the stated prerequisites, if any.

#### **CREATIVE LEADERSHIP FOR INNOVATION AND CHANGE (CLIC)**

CLIC 800. LEADERSHIP THEORY AND CREATIVE PRACTICE (UVI Core Course 1)

Students critically assess and evaluate various conventional and innovative leadership theories and demonstrated practices with a special emphasis on identifying creative forms and original areas of research in this area of inquiry. Leadership theories and applications are considered within multiple contexts toward a systematic investigation of demonstrated practices, corresponding values, and underlying assumptions of leadership as the foundation towards leading complex organizations.

CLIC 801. SENSEMAKING, CREATIVITY, AND INNOVATION IN LEADERSHIP (UVI Core Course 2) This course thoroughly examines and explores how retrospective sense making and rational decision-making processes influence creativity and innovation. Emphasis is placed on learning how innovation and creativity reflexively change leadership practice. This course will also provide students with the opportunity to design an applied research project to systematically investigate some facet(s) of sense making and decision making with related to creative leadership.

3 credits

CLIC 802. ORGANIZATIONAL THEORY AND ANALYSIS (UVI Core Course 3)

This is a foundation course in the doctoral program. This course evaluates multiple theoretical perspectives of organizations toward building a working synthesis that can be utilized in researching and practicing organizational leadership.

3 credits

CLIC 803. ETHICS AND SOCIAL JUSTICE IN LEADERSHIP (UVI Core Course 4)

General ethical theory and relevant legal and social justice issues are critically examined within an organizational leader context toward the development ethical leader principles and demonstrated behaviors in complex organizations. This course is an advanced seminar and emphasizes systematic investigation of an ethical or social justice issue of problems requiring creative leadership.

3 credits

#### CLIC 804. ECONOMICS, FINANCE AND STRATEGY (UVI Core Course 5)

This course thoroughly examines and explores how strategy and finance shape organizational leader practices. Emphasis is placed on learning how economics influence organizational strategy and financial management. This course will also provide students with the opportunity to design an applied research project to systematically investigate some facet(s) of strategy and finance related to leadership in complex organizations.

3 credits

CLIC 805. TECHNOLOGY AND COMMUNICATION. (UVI Core Course 6). This course thoroughly examines and explores how technology and communication theory influences creative leadership practice. Emphasis is placed on learning the relationship between technology and creative communication that can enable or constrain organizational learning and productive activity. This course will also provide students with the opportunity to design an applied research project to systematically investigate technology and communication application.

3 credits

CLIC 806. QUALITATIVE RESEARCH METHODS I (Research Methods Course 1)

This course emphasizes qualitative methods of inquiry in applied organizational research. Learners evaluate case studies and ethnographies toward generating an original research design. This course may be offered in an online or hybrid format.

3 credits

CLIC 807. QUANTITATIVE RESEARCH METHODS II. (UVI Research Methods Course 2). This course emphasizes quantitative methods of inquiry in applied organizational leadership research. Learners evaluate experimental and correlational studies toward generating an original applied research design. This course may be offered in an online or hybrid format and include both laboratory and lecture section formats.

3 credits

CLIC 808. ACTION AND PARTICIPATIVE RESEARCH METHODS III. (UVI Research Methods Course 3) This course emphasizes quantitative methods of inquiry in applied organizational leadership research. Learners evaluate action research case studies toward generating an original applied research design. This course may be offered in an online or hybrid format and include both laboratory and lecture section formats.

CLIC 809. CAPSTONE/DISSERTATION I

5 credits

CLIC 810. CAPSTONE/DISSERTATION II.

5 credits

CLIC 811. CAPSTONE/DISSERTATION III.

5 credits

CLIC 812. FOUNDATIONS OF CREATIVE LEARNING. (CCL Track Course 1). Theory and research that form the foundation of the discipline of creativity studies; development of awareness and understanding of basic principles, select definitions, models, theories, and practice in applying them in a variety of contexts. Group interaction, discussion, and project work are expected.

3 credits

CLIC 813. PRINCIPLES IN CREATIVE PROBLEM SOLVING. (CCL Track Course 2). Theory and application of the Creative Problem-Solving (CPS) process; practice in both individual and group uses for either personal or professional contexts; group work and active participation are expected.

CLIC 814. CREATIVITY ASSESSMENT – METHODS AND RESOURCES. (CCL Track Course 3). Practical information on methods and resources for creativity assessment; review of basic measurement principles and a critique of specific tools used to assess creativity in both education and business. Students receive personal feedback on a number of measures and develop a profile of their own creative strengths.

3 credits

CLIC 815. FACILITATION OF GROUP PROBLEM SOLVING. (CCL Track Course 4). Advanced strategies for leading small groups through the Creative Problem-Solving (CPS) process; mastery of facilitation techniques and skills. Students receive expert feedback on their facilitation skills as they apply creative strategies to real issues. Examines conceptual relationships between facilitation and change leadership; develops basic change leadership skills.

CLIC 816. CREATIVITY AND CHANGE LEADERSHIP. (CCL Track Course 5). Culminating activities that cap the Foundations of Creativity strand of the curriculum; understanding and applying the characteristics of change leadership in the context of creativity and Creative Problem-Solving; theoretical and practical launching point for students to examine their future contributions to the field, domain, and discipline by articulating their personal philosophy and definition of creativity; relation of the CPS process and other change methods to the challenge of making lasting change in other disciplines, such as business, education, psychology, sociology, history, philosophy or the arts and sciences. Ideally, this should be taken as your last course in the program.

CLIC 817. CURRENT ISSUES IN CREATIVITY STUDIES. (CCL Track Course 6). In-depth survey of current issues on the nature and nurture of creativity; skill development in research and scholarship to increase critical thinking skills and general content literacy of creativity practitioners in any discipline; review, analysis and interpretation of findings from empirical and non-empirical sources, with some emphasis on the background and development of research at the International Center for Studies in Creativity.

3 credits

CLIC 818. ONLINE LEARNING ORIENTATION. (ODL Track Course 1). Designed to introduce students to the online environment and practices in Fielding's ODL program, this online seminar takes place prior to

the beginning of the first academic trimester. Students will learn to use Fielding's website and software to navigate, post and complete initial assignments. Students will meet online and begin building community with their entering cohort and receive course introductions in preparation for beginning the academic term. Faculty and staff participate in facilitating dialogue and increasing online skills as the seminar progresses. Certificate students participate in the orientation for two days; master's students participate for four days.

O credits

CLIC 820. LEADERSHIP: THEORY AND PRACTICE. (ODL Track Course 3). This course lays a theoretical and practical foundation in leadership. It explores the breadth and limitations of leadership theories (past and present) and traces their evolution. The course looks first at the organization as the context for leadership and how that context influences both leadership and followership. The course also focuses on ways leadership can, in turn, shape the organization. Students connect with their core values and aspirations as a foundation for expanding their leadership capacity. Through the fundamental leadership skills of observation, interpretation, and intervention students become instruments of organizational transformation.

CLIC 821. LEADING BY DESIGN: THEORY AND PRACTICE. (ODL Track Course 4). This course focuses on different theories of organizations and their relevance in today's workplace. It provides an overview of leading models of organizational structure, processes, rules, behavior, roles and function. The course considers chaos/complexity theory, addressing organizations as complex adaptive systems, co-evolving with an environment that is often turbulent and non-predictable. Students will critically examine different types of change -- incremental, transitional, transformative and strategic – and how to best enable intentional change from a design perspective. Students will explore their own orientation toward design and their use of self in the design process.

CLIC 822. GROUP DYNAMICS: EFFECTIVE TEAMS AND GROUP DEVELOPMENT. (ODL Track Course 5). This course focuses on group dynamics and the impact of collaborative working teams. Elements of an effective team in various situations are discussed, such as mergers and acquisitions or inter-organizational projects. Students examine how work gets done in virtual or geographically dispersed teams, including the impact of web technologies on group potential, performance, and learning. By simultaneously studying and participating in a group, students gain an understanding of group processes and how to facilitate and collaborate with groups online and face-to-face.

4 credits

CLIC 823. ADMINISTRATION AND SUPERVISION OF LITERACY PROGRAMS. (ELC Track Course 1). This course will prepare school administrators with the knowledge, skills and expertise to effectively supervise literacy instruction. It will give an overview of the components of effective reading programs and the role of reading personnel. It will expose school administrators to the development of reading programs from pre-elementary level to college and adult levels as well as to the necessary components of a school's reading program, particularly relevant to the standards movement, standardized assessment, and other national standards that apply.

CLIC 824. GLOBALIZATION AND EDUCATION. (ELC Track Course 2). In this course, we explore these questions by first examining various theoretical perspectives on globalization. We then consider several major developments associated with globalization that is affecting education including increasing inequality, privatization, and international standards and assessments. We will consider the role of international organizations such as the World Bank and the United Nations in shaping international education policy and programs. We will also examine the role that the state, local communities and non-governmental agencies play in providing and improving the quality of education. We read and discuss case studies from Asia, Africa, Latin America and the United States to provide concrete examples of how global forces are changing the content and context of education internationally.

CLIC 825. ORGANIZATIONAL BEHAVIOR IN EDUCATIONAL LEADERSHIP: THEORY AND RESEARCH. (ELC Track Course 3). This course challenges students to become aware of human behavior in organizations and to develop their leadership abilities so that they can cope with individual and group behavior, interpersonal behavior, organizational structure, systems, culture, human resource management, career management, diversity, and leading organizational change.

3 credits

CLIC 826. CREATIVE EDUCATIONAL LEADERSHIP FOR A CHANGING WORLD. (ELC Track Course 4). This course is organized around the Interstate School Leaders Licensure Consortium (ISLLC), focuses on issues that are critical to understanding creative and effective school leadership for a changing world. It explores the changing role of principals as transformational leaders and provides doctoral candidates with

an understanding of the context of creative school leadership, the demands placed on leaders, as well as the scope of the real-life challenges one will face creating successful schools.

3 credits

CLIC 827. POLICY STUDIES IN EDUCATIONAL LEADERSHIP. (ELC Track Course 5). This course is designed to expose doctoral candidates to policy development, analysis, implementation, and evaluation. It will explore various theories of policy formation, policy-making processes, policy adoption and decision-making, as well as the impact and influence of culture, economics, politics, and demographics on educational policy. Ethical and social justice issues in policy development and implementation will be addressed. The course provides candidates an opportunity to examine research in educational policy and the impact of their role in policy formulation and implementation.

CLIC 828. ETHICS IN EDUCATIONAL LEADERSHIP. (ELC Track Course 6). This course will emphasize philosophical, social and moral standards, codes, and values and focus on how decisions in these areas impact public school leaders. Ethical decision-making will be underscored by social and moral values and these form the basis for understanding the relationship between values and decision-making. Further, this course will demonstrate the application of different ethical paradigms (the ethics of justice, care, critique, and the profession) through discussion and analysis of real-life moral dilemmas that educational leaders face in their schools and communities as well as address some of the practical, pedagogical, and curricular issues related to the teaching of ethics for educational leaders.

### **BUSINESS ADMINISTRATION (BUS)**

BUS 520. ADMINISTRATIVE THEORIES AND PRACTICES. The theories, tools, techniques, and systems useful in the management process. Each student will present a managerial problem as a case for discussion. (Also listed as PUA 520).

3 credits

BUS 521. QUANTITATIVE METHODS IN THE DECISION SCIENCES. The structure of human decisions is developed in a theoretical context followed by an overview of statistical methods and their limitations, the nature of useful data, the calculus of maxima and minima, linear algebra applied to business problems, and selected techniques for management taken from the broad field of managerial economics. Prerequisite: DSC 325 or MAT 235 or SSC 327-328.

BUS 522. FINANCIAL ADMINISTRATION. The responsibilities of finance managers, money and banking and monetary policy of government serve as broad review background for public finance, risk analysis, working capital policy, leverage, valuation, long and short term financial markets, domestic and international problems with emphasis on Caribbean problems, ownership and leasing, cash management the tax environment and bankruptcy. Prerequisites: ECO 221 and 222

BUS 523. ACCOUNTING FOR PLANNING AND CONTROL. The uses and limitations of accounting data in the decision making process. Topics include profit planning systems design, variance analysis, capital budgeting, inventory planning and control, cost behavior patterns, and decision models. Prerequisite: ACC 201. 3 credits

BUS 524. MARKETING MANAGEMENT. Management functions incurred in product planning and promotion, market analysis, marketing research, pricing and price policies, planning marketing activities and control of marketing activities. Prerequisites: ECO 221 and 222.

BUS 525. INFORMATION SYSTEMS. A study of systems analysis and design. The student is led to view a business as an information system and to be aware of the skills and tools of systems analysis. A background of management science is helpful but not essential. Systems analysis is the profession of effective application of computers to business management.

3 credits

BUS 527. OPERATIONS MANAGEMENT. The special skills of the manager; acquisition and management of plant assets, planning and measurement of output, control of inventories, purchas- ing scheduling, work-flow, quality control and cost controls. Prerequisites: ECO 221 and 222, DSC 325 or MAT 235 or SSC 327-328.

3 credits

BUS 528. SMALL BUSINESS OWNERSHIP. Personal characteristics of successful small busi- ness owners, entrepreneurship, dangers of failure, startup versus buying, personnel, selling and market research, finance, records, risk and insurance, inventory, and legal requirements give the student practical information about himself

and the opportunities in small business. Case studies are emphasized. Prerequisites: ACC 201, ECO 221 and 222.

BUS 531. GROUP PROCESSES AND LEADERSHIP. Small and large group processes, including role theory, communication techniques, types of leadership, aspects of decision-making, group maintenance and development as ongoing functions of group dynamics. (Also listed as PUA 531).

BUS 532. GOVERNMENT, BUSINESS AND SOCIETY. An analysis of the major issues with important ramifications for public and private administrators, such as environmental concern, equal opportunity requirements, unionism and collective, bargaining, white collar crime, and ethics in government and business. (Also listed as PUA 532).

BUS 533. PERSONNEL ADMINISTRATION. A comprehensive review of the principles and practices of personnel administration. The course will cover the legal, professional and ethical standards of public and private personnel systems including: selection, motivation, labor rela- tions, labor law, equal employment opportunity, merit systems and job performance evaluation. Students will learn the basic elements of job training classification, job enrichment and develop- ment, testing, human relations, disciplinary matters, and contract negotiation on the rights and duties of employees and managers. (Also listed as PUA 533).

BUS 534. INTERNATIONAL BUSINESS. A survey of the major elements of the international environment and their linkage to the functions and problems of the international business orga- nization manager. Topics include structures and strategies of the firm in international business, the firm and the nation, foreign exchange policies/problems and the national economy, inter- governmental agreements on trade and investment and current issues in international business operations. Special attention is given to regional and international institutions in the Caribbean region and their impact on the international manager.

BUS 536. SELECTED TOPICS IN BUSINESS ADMINISTRATION. Includes areas of special and current interest in business. Individual topics will be announced at the beginning of each semester. This course may be taken twice for credit subject to the approval of the Dean of the Business Administration Division.

3 credits

BUS 537. MANAGEMENT POLICY AND STRATEGY. Examination of overall business strategy formulation from the perspective of top management. Principally through the use of case analyses, the student will examine the management of change, competitive and environmental pressures and organizational dynamics in both service-oriented and goods-producing firms. Prerequisites: BUS 520, 521, 522, 523, 524 and 527. (BUS 521 and 523 may be taken concurrently).

BUS 538. INTERNATIONAL MARKETING. Analysis of the basic elements for the development of market plans for both entering new international markets and achieving goals for existing markets; evaluation of cultural, political and economic factors; and analysis of the separate elements that lead to the market plan — products, price, promotion, distribution, and sales and profit forecasting. The international marketing manager's role in control and coordination.

BUS 539. MANAGEMENT RESEARCH AND DECISION ANALYSIS. The student examines the analytical methods as they relate to operational management research problems within profit and nonprofit organizations. Emphasis is placed upon applied research techniques and consultative-oriented decision making with extensive local and regional business community involvement. Prerequisites: ECO 221, 222, DSC 325 or MAT 141, 232, or SSC 327-328, and ACC 201.

BUS 600. THESIS. A comprehensive written research project in the field of the student's con- centration, planned and executed under the guidance of a thesis committee and subject to its approval. Before credit is granted, the student must successfully orally defend the thesis before a review committee. Prerequisite: 15 graduate credits, including BUS 539.

#### **EDUCATION (EDU)**

EDU 500. BASIC RESEARCH TECHNIQUES. Study of historical, descriptive and experimental research including research design, problem stating, hypothesis formulation and testing, and research statistics.

3 credits

EDU 501. TESTS AND MEASUREMENTS. Designed to develop competencies in the concepts, purposes, objectives, techniques and principles of educational evaluation as related to test origins, types, administration, construction, interpretation and profiling.

3 credits

EDU 504. EDUCATIONAL PSYCHOLOGY. Reviews the developments of theories of learning, cognition, motivation and memory, the experimental support for these theories and provides examples of their application to the classroom situation.

3 credits

EDU 505. ANTHROPOLOGICAL AND SOCIOLOGICAL FOUNDATIONS OF AMERICAN EDUCATION WITH REFERENCE TO THE VIRGIN ISLANDS. Designed to analyze the impact of man — his groups, institutions, culture and environment — upon American education, with special reference to the U.S. Virgin Islands.

3 credits

EDU 506. FOUNDATIONS OF GUIDANCE. Survey of guidance and personnel work, its foundations and rationale; principles and practices of modern guidance. Provides a foundation for guidance and counseling and discusses related problems.

3 credits

EDU 519. SUPERVISION OF READING INSTRUCTION. The supervisory and administrative role in establishing and maintaining the direction, operation and improvement of a total school reading program. Major topics include specialized personnel, school and classroom programs, testing, evaluation, in-service education and public relations.

3 credits

EDU 520. CHARACTERISTICS OF EXCEPTIONAL CHILDREN. Designed to acquaint the student with exceptional children and youth. Areas surveyed include students mental, physical, emotional and learning disabilities and the gifted and talented. A review of the theoretical and research bases of special education will be included.

3 credits

EDU 530. INDEPENDENT STUDY. An individualized program of consultation, reading research and reporting on a problem related to the student's specialization. The study is to result in practical information which is potentially useful to the Department of Education, a school district, a particular school, a grade level, a curricula area, an academic function, a school program, etc. Three copies of the final report are required. Students are urged to submit a proposal for the independent study during the prior semester. The final report must be submitted no later than mid-term of the following semester. The grade for this course will be pass or fail. Prerequisites: 18 graduate credits, including EDU 500, 501 and three courses in the concentration area.

EDU 531. EDUCATION IN A MULTICULTURAL SOCIETY. The experience of this course will be designed to assist educators in their development of multifaceted educational competencies especially related to multicultural and multiethnic educational settings. Emphasis will be placed on helping educators develop both a knowledge base (theories and concepts) concerning the area of multicultural and multiethnic education and a skills or action base (strategies, methods and techniques) for application in various educational situations.

3 credits

EDU 540. SPECIAL PROJECT IN CAI DEVELOPMENT. Students will lead a team of authors in the actual production of CAI software. Students must develop, with a team, a project description for approval and implement that project demonstrating sound management control and application of programming techniques.

2 credits

EDU 541. SPECIAL PROJECT IN CAI AUTHORING. Students will participate in a team comprised of a project leader (taking EDU 540) and possibly one other author student. Students must develop with team a project description including goals of the project and approach, and participate in the implementation and final review.

2 credits

EDU 542. THEORIES, STRATEGIES AND TECHNIQUES OF COUNSELING. A comprehensive overview of theories, strategies and techniques of individual counseling. Using case studies and examples, various theoretical approaches to the counseling process will be examined. Prerequisite: EDU 506.

EDU 542A. PRACTICUM IN THEORIES, STRATEGIES AND TECHNIQUES. Students will receive supervised experience in counseling. Corequisite: EDU 542. 1 credit

EDU 543. GROUP AND FAMILY COUNSELING AND CONSULTATION. A comprehensive review of the principles and techniques of group counseling including issues with implications for family counseling. Special attention will be given to the theories and processes of group counseling in relation to the group leader and group members in a variety of settings. Prerequisites: EDU 506, 542.

EDU 544. CAREER DEVELOPMENT COUNSELING. Provides a background in the theory of career development and research in the field which will prepare the student for career counseling including college placement. Career planning, vocational behavior, career education and other related topics will be covered. Prerequisite: EDU 506.

EDU 545. SEMINAR IN CURRENT TRENDS AND PROBLEMS IN COUNSELING AND GUIDANCE. Focuses on intensive study of contemporary problems, issues, trends and developments in counseling and guidance through critical examination and evaluation of current literature and exposure to specialists in the field. Enables students to become familiar with basic concepts of counseling and guidance and to consider the social, cultural, philosophical and economic forces which influence the field of counseling. Prerequisite: EDU 506.

EDU 546. PRACTICUM IN COUNSELING. Designed to provide opportunities for direct application of the basic concepts and skills related to individual and group counseling in various supervised settings. Students are required to attend a weekly seminar and discuss their field experiences. Prerequisite: Successful completion of all other required courses in the counseling area.

3 credits

EDU 547. FUNDAMENTALS OF SCHOOL ADMINISTRATION. Analysis of current theory and practice in organization, education administration of elementary and secondary schools, together with examination of administrative duties and responsibilities of the principal including finance, plant personnel, services and school-community relations.

3 credits

EDU 548. ORGANIZATION AND GOVERNANCE OF AMERICAN EDUCATION. An overview of organization and governance in American education at the federal, state and local levels. It includes an examination of the legal bases, structure and control of American education.

3 credits

EDU 549. SUPERVISION OF INSTRUCTION AND STAFF DEVELOPMENT. Consists of the supervisory and administrative role in analyzing and evaluating the direction, operation and improvement of the total school program. Attention is given to interpersonal and group dynamics in the school, communication, conflict management and resolution, in-service education, and general evaluation and improvement of staff.

3 credits

EDU 550. SEMINAR ON ISSUES IN EDUCATIONAL ADMINISTRATION. Provides an orientation to theoretical formulations, conceptual systems and research; emphasizes purposes, roles, tasks and processes; examines current national and local trends and issues, relating these to the practice of administration.

3 credits

EDU 551. CURRICULUM DEVELOPMENT. Designed to provide an overview of various perspectives and theories of curriculum design and development, the forces and processes that shape curricular decision-making in United States and Virgin Islands public schools, and the leadership aspects of effecting educational change through various strategies and procedures of curriculum development and planning.

3 credits

EDU 552. FUNDAMENTALS OF DEVELOPMENTAL READING INSTRUCTION. Study and application of principles, methodologies and materials used in developmental reading instruction which provide for differential classroom instruction and foster reading comprehension in grades K-8.

EDU 553. READING DIAGNOSIS AND REMEDIATION FOR CLASSROOM AND CLINIC. Designed to prepare students to identify, diagnose and remediate reading difficulties with emphasis on test selection, administration and interpretation. Corrective and remedial procedures will be explored within the classroom and clinical setting. Prerequisites: EDU 501 and 552.

EDU 554. LITERATURE FOR CHILDREN AND ADOLESCENTS. Using an eclectic approach, this course will provide students with background knowledge in literature for children and adolescents needed for the identification, discussion and application of major issues to elementary and secondary school curricular areas and to current situations in today's world.

3 credits

EDU 555. RESEARCH AND TRENDS IN READING AND WRITING. Investigation of research, trends and issues which impact on educators in the teaching of reading and writing together with the identification and development of procedures for organizing and implementing new knowledge and research into the school curriculum. 3 credits

EDU 556. SPECIAL EDUCATION: STATEGIES AND DESIGN. The skills of delivering individual instruction in special and regular classroom settings will be emphasized. The selection, adaptation and utilization of instructional methods and materials will be stressed, as well as examination of the basic models for teaching children with special needs. 3 credits

EDU 557. INTERNSHIP/SEMINAR IN SPECIAL EDUCATION. Designed to provide experiences in the classroom with children who have special needs. Competencies to be demonstrated by the student will be developed on an individual basis. Weekly seminars will cover issues in the delivery of special education services. Prerequisites: EDU 520 and 556.

EDU 558. BEHAVIOR MANAGEMENT IN EDUCATIONAL SETTINGS. Designed to enable educators to understand and apply behavioral principles. The content will include classroom and individual management plans, reinforcement in the classroom, and instructional methods that will help expand the learner's repertoire of behaviors. The intent is to provide a set of skill for ethically assisting learners in the management of their own behavior, thus maximizing their opportunities, not on the external manipulation of behaviors. 3 credits

EDU 559. ISSUES IN ELEMENTARY AND EARLY CHILDHOOD EDUCATION. Covers the foundations of elementary and early childhood education focusing on the social, psychological, and organizational influences. Historical, philosophical, political, cultural, economic and legal issues will also be included. 3 credits

EDU 560. ISSUES IN MIDDLE CHILDHOOD AND ADOLESCENT EDUCATION. Designed for persons working in educational settings with your in the transition period between childhood and adulthood, this course focused on the total environment for learning, including the problems and concerns of adolescents and the management of their academic and social behavior through organized subjects and special services. 3 credits

EDU 561. INTRODUCTION TO COMPUTERS IN EDUCATION. This hands-on course provides a computer education foundation for educators by exploring the variety of uses for computers in the classroom and school offices. Through class exercises and discussion of current research and literature, the course introduces the educational of word processing, spreadsheets, drill and practice, simulation, problem solving, graphics, logical gaming, test generating, mini-authoring, and programming-like activities. Students will also explore issues of equity, ethics and economics as they relate to computer use in today's educational environment. 3 credits

EDU 562. INTRODUCATION TO EDUCATIONAL TECHNOLOGY. This course will cover media and technology for education and training emphasizing non-computer educational technology. Areas of study include writing for educational media, basic instructional photography, books, radio and television, audio and video tapes, designing instructional video, principles of graphic production, compact disks, telecommunication. Integration of media into the classroom, production and selection of AV materials, preparation of inexpensive instructional materials and presentation of a multi-media lesson will also be part of this course. 3 credits

EDU 563. COMPUTER APPLICATIONS IN THE SCHOOLS. Students will learn how to teach database, word processing, spreadsheet, outlining and other application program skills. Utilization of applications programs to give students experience in problem solving, cooperation, logical thinking, and selfdirected learning will be emphasized. The use of application programs to help teachers with classroom administrative efforts will also be covered. The computer is not an object of study but a tool to make instruction more effective in established curriculum areas. Emphasis is on curricular issues, not the use of the computer or other techniques. Prerequisite: EDU 561.

EDU 564. EDUCATIONAL TECHNOLOGY IN THE LEARNING PROCESS. This course focuses on the higher-level thinking skills using appropriate educational technology. Students will work with selected software to discover how the software functions as a tool for learning. The process of the students' inclass work with educational technology will help them to model and experiment with classroom strategies

that teach skills with technology and thinking skills in tandem. Students examine and discuss existing research on many types of educational technology to determine appropriate uses in education. The Logo programming language will be an integral part of the course.

3 credits

EDU 565. PRACTICUM IN EDUCATIONAL TECHNOLOGY. Users of educational technology are likely to be in a position to influence how this technology will be used in the school. Through discussion, role-playing, and actually conducting workshops in the schools, students will learn approaches to help them in their role as advisor to faculty and administrator. Students will learn to effect individuals and institutional change and work in small groups to develop realistic plans to support educational technology used in the school. Prerequisites: EDU 561, 562, 563, and 564.

EDU 566. SELECTED TOPICS. Includes areas of special and current interest in education. Individual topics will be announced at the beginning of each semester. Prerequisites: (To be announced with each topic).

1-3 credits

EDU 567. DIRECTED FIELD EXPERIENCE IN ADMINISTRATION. Designed to give prospective educational administrator direct experience in the study of educational problems of concern to administrators; whereby the student is provided with opportunities for assuming responsibility for decision making in both actual and simulated settings. Each student works under the supervision of a practicing administrator and a professor. At least 10 hours of work in the field and attendance at the weekly seminar are required. Prerequisites: Successful completion of all other required courses in Educational Leadership.

3 credits

EDU 573. INTRODUCTION TO LEARNING DISABILITIES. This course is designed to introduce education professionals to the nature of learning disabilities. Emphasis will be on the definition, characteristics, etiology, classification and identification of learning disabilities. Concepts and terminology used in the field will be addressed.

3 credits

EDU 574. ASSESSMENT IN SPECIAL EDUATION. Designed to acquaint practicing teachers and educational personnel with methods and models of assessment. Emphasis will be on the use of formal and informal assessment and the interpretation of evaluation data.

3 credits

EDU 575. SPECIFIC LEARNING DISABILITIES: STRATEGIES AND CURRICULUM DESIGN. Designed to prepare education professionals to work with individuals with learning disabilities in a classroom setting. The emphasis will be on preparing professionals to use a approach to diagnosing student needs, designing curricula based on those needs, and using effective teaching strategies and techniques to carry out individualized instructional programs.

EDU 576. INTERNSHIP/SEMINAR: SPECIFIC LEARNING DISABILITIES (SLD). Designed to provide classroom experience with SLD students and in-depth study in selected program competencies. Field student will select one program competency area, and conduct a seminar session.

3 credits

EDU 577. SCHOOL LAW. This course is intended for students in educational leadership. The course is designed to develop an appreciation and understanding of legal principles, concepts, provisions, terminology and restrictions which surround and undergrid the American system of public education and which affect those who work in and attend public schools. In addition the course is intended to expose students to the laws governing public schools and to explore the issues that have impacted public education. Attention will be paid to the legal structure for education and the rights and responsibilities of parents, students, teachers and administrators.

EDU 578. SCHOOL FINANCE. This course is a study of financing systems, schools, and the school financial and business management functions of school-level administrations as they relate to public education. Local, state, national funding issues, ecomonics and politics of school finance, budget preparation, accounting, auditing, plant operation and maintenance from school level will be studied.

3 credits

EDU 586. PRE-PRACTICUM IN INTERPERSONAL SKILLS. This course is an introduction and application of basic counseling skills including: interviewing, clinical observation, and a general orientation to counseling settings. Counselors and other helping professionals will benefit from this action-learning course. Evaluation will be based on strengths and deficits in intra and interpersonal skills and on demonstration of counseling skills in checkout role-play and/or written situation.

EDU 587. MULTICULTURAL COUNSELING. This course provides a theoretical, research-based understanding of the cultural contexts of relationships, issues and trends in a multicultural and diverse society related to factors such as culture, ethnicity, nationality, age, gender, sexual orientation, mental and physical characteristics, values, customs, belief systems socio-economic status, relation, language, and lifestyle. It covers the influence of views, multicultural counseling theories, and professional competencies for counselors and practical examinations, of cultural groups represented in the Virgin Islands.

EDU 588. ADVANCED HUMAN DEVELOPMENT. This course covers the bases of human development across the life span and the many layers of contexts that influence development. Students will receive advanced coverage of recent empirical evidence, current theoretical perspectives on human development as well as emerging approaches, and learn how to keep abreast of empirical research in this field. Traditional as well as authentic forms of assessments will be used to evaluate student's learning. Prerequisites: EDU 500, EDU 542. 3 credits

EDU 600. THESIS. A comprehensive written research project in the field of the student's concentration, planned and executed under the guidance of a thesis committee and subject to its approval. Before credit is granted, the student must successfully orally defend the thesis before a review committee. Prerequisites: 15 graduate credits, including EDU 500, 501 and two courses in the concentration area.

EDU 601. FOUNDATIONS OF SCHOOL PSYCHOLOGY. The first seminar in School Psychology provides students with a broad overview of school psychology including history, models of training and practice, the nature of the psychology specialty and its practice, and ethics and law relevant to professional practice. In addition, students will become knowledgeable of the context resource available to these professionals as well as the professional development support systems, which enhance continuing effective functioning as a school psychologist. 3 credits

EDU 602. PSYCHOLOGICAL DEVELOPMENT IN CHILDHOOD AND ADOLESCENCE. This course is designed to discuss current empirical evidence and theoretical perspectives on human development. Emphasis will be on postnatal development during infancy, childhood, and adolescence. Discussion will also include how development during the first 20 years impacts outcomes in adulthood. 3 credits

EDU 603. PSYCHOPATHOLOGY OF CHILDHOOD AND ADOLESCENCE. This course provides an overview of systems for diagnosing psychopathology in children and adolescents. Students will learn how to identify psychopathology and will gain an understanding of prevention and intervention processes that are effective for particular problems or populations. Prerequisite: EDU 602.

EDU 604. THE PSYCHOLOGY OF COGNITION AND LEARNING. This course is designed to provide students with an understanding of theories and concepts related to cognition and learning relevant to the process of schooling. Students will become familiar with theories of cognitive development, learning and motivation, instruction as related to school learning, mental processes including areas such as perception, language, problem solving, reasoning and decision-making. Various types of memory (e.g. working memory, long-term memory) will also be included. 3 credits

EDU 605. STATISTICS, DATA ANALYSIS AND PROGRAM EVALUATION. This course will focus on calculating and understanding the statistics that a school psychologist will most likely encounter and use in the field. It will provide the learner with an adequate review of, exposure to, and interaction with a variety of statistical methods so students will be able to conduct their own program evaluations and others analyses. Links between research methodology and quantitative statistical procedures will be discussed.

EDU 606. PSYCHOEDUCATIONAL ASSESSMENT FOR INTERVENTION I. This is the first course in a three-course sequence in individual psychoeducational assessment for intervention. The course introduces school psychology majors to foundations and principles needed to understand and utilize individual psycho educational assessment. Students will learn to select, administer, score, interpret and report assessment instruments and to use results for planning interventions for children and youth. Corequisite: EDU 606A. 3 credits

EDU 606A. PRACTICUM IN PSYCHOEDUCATIONAL ASSESSMENT FOR INTERVENTION I. Students will receive supervised experience in psychoeducational assessment, interpretation, and report writing. Students will also use results to develop individualized plans and interventions. Corequisite: EDU 606.

1 credit

EDU 607. PSYCHOEDUCATIONAL ASSESSMENT FOR INTERVENTION II. This is the second course of a three-course sequence in individual psychoeducational assessment for intervention. This course will address the selection, administration, scoring and interpretation of current assessment measures used with young school age children and adolescents. Prerequisite: EDU 606. Corequisite: EDU 607A. 3 credits

EDU 607A. PRACTICUM IN PSYCHOEDUCATIONAL ASSESSMENT FOR INTERVENTION II. Students will receive supervised experience in psychoeducational assessment, interpretation, and report writing. Students will also use results to develop individualized plans and interventions. Corequisite: EDU 607.

1 credit

EDU 608. PSYCHOEDUCATIONAL ASSESSMENT FOR INTERVENTION III: EARLY CHILDHOOD AND LOW INCIDENCE ASSESSMENT. This is the third in a three-course sequence in psychoeducational assessment. It prepares students to assess: young children and infants; children with severe or low incidence disabilities; and culturally/linguistically diverse children including those for whom English is a second language. Students will be prepared to use assessment results for individualized program planning and intervention. Prerequisite: EDU 607. Corequisite: EDU 608A.

EDU 608A. PRACTICUM IN PSYCHOEDUCATIONALASSESSMENT FOR INTERVENTION III. Students will receive supervised experience in psychoeducational assessment, interpretation, and report writing with young children and low incidence disabilities. Students will also use results to develop individualized plans and interventions. Corequisite: EDU 608.

EDU 609. BEHAVIOR ANALYSIS AND INTERVENTION. This course is designed to provide graduate students with an opportunity to use prevention, intervention and behavioral strategies to help teachers and parents meet and manage problems within the educational environment. School psychology majors will learn a variety of strategies and techniques designed to: (1) facilitate optimal learning of all children using individual and group management methods; (2) establish positive teacher-student and peer relationships, and (3) examine a wide range of behavioral methods. Corequisite EDU 609A.

3 credits

EDU 609A. PRACTICUM IN BEHAVIOR ANALYSIS AND INTERVENTION. Students will receive supervised experience in behavior analysis and intervention. Corequisite: EDU 609.

EDU 610. SCHOOL CONSULTATION METHODS. This course will introduce students to the indirect service delivery approach with school staff, parents and community agencies. Models of consultation and collaboration with individuals and groups will be examined. The role of teams as a decision-making tool and indirect service models will be examined. Corequisite: EDU 610A.

3 credits

EDU 610A. PRACTICUM IN SCHOOL CONSULTATION METHODS. Students will receive supervised experience in school consultation. Corequisite: EDU 610.

EDU 611. CURRICULUM-BASED ASSESSMENT AND ACADEMIC INTERVENTIONS. This course will provide a review of tests and curriculum-based methods for assessing reading, writing, math, and other academic skills. It will cover a range of strategies and techniques which research suggests are effective in improving student achievement in key academic areas.

EDU 612. ADVANCED SEMINAR IN SCHOOL PSYCHOLOGY. This course will provide a review and integration of knowledge related to school psychology and discussion of current issues, standards, and trends in the field. The course also includes the presentation and evaluation of a portfolio of cases derived from the school psychology internship, and helps students to prepare for practice and continuing professional development as school psychologists. Prerequisites: Completion of all the required courses in Psychological and Educational Foundations, Assessment, and Application/ Intervention.

4 credits

EDU 614. INTERNSHIP IN SCHOOL PSYCHOLOGY I. This is the first part of a one-year,1,200 hour, two-semester school psychology internship sequence. This first course requires a minimum of 600 clock hours of field experience supervised by a credentialed school psychologist or (for non school settings) a credentialed psychologist. At least one-half of the total internship hours must be completed in a school setting. Prerequisite: Completion of all the required courses in Psychological and Educational Foundations, Assessment, and Application/Intervention.

EDU 615. INTERNSHIP IN SCHOOL PSYCHOLOGY II. This is the second part of a one-year, 1,200 hour, two-semester school psychology internship sequence. This second course requires a minimum of 600

clock hours of field experience supervised by a credentialed school psychologist or (for non school settings) a credentialed psychologist. At least one-half of the total internship hours must be completed in a school setting.

3 credits

#### MARINE AND ENVIRONMENTAL SCIENCE (MES)

MES 501. PHYSICAL AND ECOLOGICAL PROCESSES ALONG A LAND-SEA GRADIENT I. This course provides a theoretical and hands-on introduction to global ecological concepts and to diverse ecosystems. Students will be introduced to current ecological thinking through readings and discussion, including primary literature. They will also participate in laboratory and field work to introduce them to local flora and fauna and the habitats (terrestrial, coastal and marine) in which they are found. This is a core course required of all students in the MS program. Two hours of lecture and 3 hours of laboratory per week. Prerequisite: Acceptance to Master of Marine and Environmental Science program. Corequisite: MES 503. (F).

MES 502. PHYSICAL AND ECOLOGICAL PROCESSES ALONG A LAND-SEA GRADIENT II. This course follows up on knowledge and skills that were introduced in Physical and Ecological Processes I. Ecological concepts will be examined by using the interactions between local flora and fauna and the abiotic environment along a land-to-sea gradient as specific examples. Students will examine conceptual models linking terrestrial, coastal and marine zones, and examine the effect of large scale physical changes on ecological processes through specific case studies. Students will also participate in collecting data for long-term ecological studies. This is a core course required of all students in MS program. Two hours of lecture and 3 hours of laboratory per week. Prerequisite: MES 501. Corequisite MES 404. (S).

MES 503. RESEARCH METHODOLOGIES AND TOOLS I. This course sets the theoretical and practical foundations for conducting scientific research. Students will learn how to design research projects from inception of an idea, formalizing a hypothesis, designing sampling/experimental techniques and data collection, and an overview of statistical and geospatial analyses. This is a core course required of all students in MS program. Two hours of lecture and 3 hours of laboratory per week. Prerequisite: Acceptance to Master of Marine and Environmental Science program. Corequisite: MES 501. (F).

MES 504. RESEARCH METHODOLOGIES AND TOOLS II. This course provides training in database management, and the statistical and geospatial tools necessary to conduct research in natural and social sciences. This is a core course required of all students in the MS program. Two hours of lecture and 3 hours of laboratory per week. Prerequisite: MES 503. Corequisite: MES 502. (S).

MES 505. NATURAL RESOURCE MANAGEMENT I. This core course provides an overview of environmental management by examining services provided by natural resources, introducing resource management paradigms, and analyzing case studies. This is a core course required of all students in the MS program. Three hours of lecture per week. Prerequisite: Acceptance to Master of Marine and Environmental Science program. Corequisite: MES 507. (F).

MES 506. NATURAL RESOURCE MANAGEMENT II. This core course provides continued training in natural resource management with particular emphasis on Caribbean coastal and marine ecosystems. Students will examine institutions and policies that influence natural resource management, have the opportunity to interact with guest lecturers from local natural resource management agencies, and work as a team on a project that addresses a local resource management issue. This is a core course required of all students in the MS program. Three hours of lecture per week. Prerequisite: MES 505. Corequisite: MES 508. (S).

MES 507. PROFESSIONAL DEVELOPMENT I. This course provides an introduction to the tools necessary to be a successful scientist and resource manager. It will address communication with diverse audiences, public speaking and presentations skills, negotiation and conflict resolution. This is a core course required of all students in MS program. One hour of discussion per week. Prerequisite: Acceptance to Master of Marine and Environmental Science program. Corequisite: MES 505. (F).

MES 508. PROFESSIONAL DEVELOPMENT II. This course continues to build students' professional skills. It will address proposal preparation and presentation, grantsmanship, and ethics, and will introduce students to project planning. Additional topics covered will depend on the professional interests of students

in the course. This is a core course required of all students in MS program. One hour of discussion per week. Prerequisite: MES 507. Corequisite: MES 506. (S).

MES 524. MARINE ECOLOGY. Principles of marine ecology introduced through reading and discussion of recent scientific literature. Course includes all topics of the undergraduate course MBI 424; additional requirements include, but are not limited to, more rigorous, extensive, and in depth analysis of primary literature. Three 50 minute lectures per week. Prerequisite: BIO 223 Ecology and at least one of the following courses: MBI 220 Marine Invertebrate Zoology, MSC 239 Oceanography, BIO 349 Aquatic Plant Botany or MBI 222 Ichthyology or equivalent and graduate standing. (S-O).

MES 549. AQUATIC PLANT BIOLOGY. A comprehensive survey of aquatic plants with emphasis on marine systems. The life histories, morphology, physiology, ecology, and evolutionary relationships among the major groups of algae and flowering plants are examined using local flora as examples. The commercial uses of algae are included. Course includes all topics of the undergraduate course BIO 370; additional requirements include, but are not limited to, oral presentations of material from the primary scientific literature and completion of an independent research project. Three 50 minute lectures and three hours of field laboratory per week. Prerequisite: BIO 142 General Biology II or equivalent and graduate standing. (F-E).

MES 550. TERRESTRIAL PLANT BIOLOGY. Comprehensive introduction to plant life from bryophytes through angiosperms. Morphology, evolution, from the local flora. Students study principles that aid in understanding the biology and ecology of terrestrial plant ecosystems and learn to use field and laboratory techniques of plant biology. Course includes all material as the undergraduate course BIO 350 with additional graduate level work including a literature search, more in-depth examination questions, and a rigorous field research project. Three 50 minute lectures and one 3 hour field/laboratory per week. Prerequisites: BIO 142 General Biology II or equivalent and graduate standing. (S-O).

MES 552. PLANT PHYSIOLOGY. Comprehensive introduction to physiological mechanisms that affect plant ecological processes. Topics covered include photosynthesis, respiration, nutrition, hormones, growth, absorption, and conduction. Students study principles that aid in understanding the ecology of terrestrial plant ecosystems and learn to use field and laboratory techniques of plant physiology. Course includes all material as the undergraduate course BIO 352 with additional graduate level work including a literature search, more in-depth examination questions, and a rigorous field research project. Three 50 minute lectures and one 3 hour field/laboratory per week. Prerequisites: BIO 223 and CHE 152 or equivalent and graduate standing. (S-E).

MES 565. SELECTED TOPICS IN MARINE AND ENVIRONMENTAL SCIENCE. Topics in various fields of marine and environmental science designed to educate graduate students in areas of special interest or regional need; topics such as mathematical and computer modeling of natural systems, coastal management, advanced geographical information systems, conservation genetics, global environmental change, ecological physiology, and fisheries biology among others. May be repeated for credit as varying topics will be offered. Prerequisite: To be announced with each topic.

1-4 credits

MES 567. PEDAGOGY AND MENTORING. Introduction to techniques and designed to enhance the undergraduate learning experience, including recent research on cognition and how the findings of this research can be incorporated into the teaching of undergraduate laboratory sections, supplemental instruction, and mentoring of undergraduate researchers. Students will have the opportunity to practice techniques and obtain feedback on the effectiveness of their instruction. Other topics to be discussed will include UVI policies, use of technology in teaching, ethical issues, such as confidentiality, sexual harassment, and academic integrity. One 50 minute lecture per week or distributed as necessary if offered during summer session. Prerequisite: Graduate standing. (F).

MES 570. EVOLUTION. Concepts of evolutionary biology, including the molecular level, population genetics, speciation, behavior, and broad patterns of macroevolution. Course includes all topics of the undergraduate course BIO 370; additional requirements include, but are not limited to, a more intensive consideration of the application of evolutionary theory to conservation biology, marine and environmental science. Three 50 minute lectures per week. Prerequisites: BIO 245 or equivalent and graduate standing. (F-O).

MES 595. INDEPENDENT STUDY. Reading and synthesis at the graduate level in an area not otherwise available. May be repeated for credit if different topics are studied, but the student cannot accumulate more

than four (4) credits. A written proposal must be submitted by the student to the supervising professor and the MMES Director at least four weeks prior to registration for the course.

1-4 credits

MES 596. INTERNSHIP. Students may participate in an internship with a natural resource management agency or non-profit organization. Written proposals for the internship must be developed by the student and the prospective agency supervisor and submitted to the MMES Director and the student's advisory committee for approval at least four weeks prior to the start of the internship. A maximum of four (4) credits can be earned, the number of credits being determined by the duration of the experience.

MES 600. THESIS. Students collect, analyze and interpret data, and present the results of this original research in written and oral form, under the direction of their major professor and advisory committee. Variable credit and hours, up to 12 can be taken for repeated credit.

1-12 credits

#### **MATHEMATICS (MAT)**

MAT 501. ADVANCED GEOMETRY FOR MATHEMATICS TEACHERS. Through discovery and proof of a wide range of geometric properties and relationships, students will gain a broadened perspective of geometry. Includes Euclidean geometry in two and three dimensions and some work with non-Euclidean geometries. Prerequisite: MAT 522.

MAT 511. LEARNING THEORY FOR MATHEMATICS TEACHERS. Various learning theories, with special attention to the work of Piaget, Bruner, Vygotsky, Gardner, the Van Hieles, Greeno and Polya, will be analyzed and interpreted in terms of implications for mathematics learning and mathematics education reform. Prerequisite: Admission to graduate program in Mathematics.

MAT 521. MATHEMATICS TOPICS FOR SECONDARY SCHOOLS I. This course, the first of a two-course sequence, includes topics in real and complex numbers; functions; equations; integers and polynomials; and number system structures. The purpose of the course is to deepen teachers' understanding of topics in the secondary curriculum in an environment of challenging problems and investigations. Non-enrolled Mathematics teachers may attend advertised sessions of each course which will be offered in workshop format, provided that they pre-register for that session. Prerequisite: Admission to graduate program in Mathematics.

MAT 522. MATHEMATICS TOPICS FOR SECONDARY SCHOOLS II. This course, the second in a sequence of two courses, includes topics in congruence; similarity; trigonometric functions; area and volume; axiom systems and Euclidean geometry. Non-enrolled Mathematics teachers may attend advertised sessions of each course which will be offered in workshop format, provided that they preregister for that session. Prerequisite: MAT 521.

MAT 541. REAL ANALYSIS FOR MATHEMATICS TEACHERS. This course is designed to provide students with a fundamental understanding of the basic concepts of mathematical analysis and the logical thinking, strategies and tactics used to prove analysis theorems. The focus will be on how these concepts can be used to more effectively teach secondary level mathematics. Prerequisite: MAT 521 and MAT 522.

3 credits

MAT 544. PROBABILITY FOR MATHEMATICS TEACHERS. Probability of events on discrete and continuous sample spaces; random variables and probability distributions; expected values; transformations; the central limit theorem and the law of large numbers. The theory will be applied broadly to Caribbean environmental and social topics and issues. A focus will be on how these concepts can be used to more effectively teach secondary level mathematics. Prerequisite: MAT 242.

MAT 551. DISCRETE DYNAMICAL SYSTEMS AND MATHEMATICAL MODELING I. This course and its sequel, 562, will develop mathematical models of situations that change over time using discrete dynamical systems. Elementary dynamical systems modeling will be studied in the context of situations of interest and relevance to those living on Caribbean islands so that teachers will be able to develop appropriate lessons for students in high school algebra, geometry, pre-calculus, and calculus courses using concepts from discrete mathematics. Teachers will develop prototypes for such lessons for their grade 7-12 students within this course. Prerequisite: Admission to graduate program in Mathematics.

MAT 552. DISCRETE DYNAMICAL SYSTEMS AND MATHEMATICAL MODELING II. This is the second in a two-course sequence of work with developing mathematical models of situations that change over time

using discrete dynamical systems designed for secondary mathematics teachers. This course focuses on non-linear models. Prerequisite: MAT 551.

MAT 557. ACTION RESEARCH IN THE MATHEMATICS CLASSROOM WITH REQUIRED MAJOR PAPER. Using all phases of action research and emphasizing teacher-level factors and student motivation, teachers will develop and implement action research plans for their own classrooms and their schools in an area of the school mathematics curriculum. Each student will produce a major paper based on his/her own action research. Prerequisite: EDU 500.

MAT 561. ABSTRACT ALGEBRA FOR MATHEMATICS TEACHERS I. This course is the first of two providing an introduction to abstract algebra by using number theory as motivation. It includes properties of integers; residue classes; groups; theorems of Fermat, Lagrange and Euler; decompositions; polynomials; primitive roots; Gaussian integers and primes; Pythagorean triples; and quadratic Residues. Prerequisite: Admission to graduate program in Mathematics.

MAT 562. ABSTRACT ALGEBRA FOR MATHEMATICS TEACHERS II. This course is a continuation of MAT 561. It includes fields, vector spaces, rings, and ideals. Prerequisite: MAT 561. 3 credits

MAT 565. SPECIAL PROJECT IN MATHEMATICS OR MATHEMATICS EDUCATION. Special project in mathematics education or in mathematics experience in science, industry or government agencies. The teacher enrolled in the Masters program for Secondary Mathematics Teachers may gain graduate credit through a project that advances and broadens knowledge of mathematics teaching and/or mathematics. The course is intended to encourage teachers' experience in international mathematics education and/or the work of the professional mathematician. The student's advisor will determine amount of credit to be awarded for each project. Prerequisite: Project must be approved by the student's advisor and by the Mathematics Masters Program Committee. Enrollment is restricted to students enrolled in the Master of Arts in Mathematics degree program.

MAT 567. TECHNOLOGY, MANIPULATIVES, AND LIFE EXPERIENCES FOR MATHEMATICS LEARNING. Students will develop field trips and other experiences to bring data from the "real world" into the secondary mathematics classroom. Careful attention will be given to the use of data to enhance mathematics learning, including application of appropriate technology and concrete models. Prerequisite: Admission to the Mathematics graduate program.

MAT 586. HISTORY & AND PHILOSOPHY OF MATHEMATICS. The course includes history of significant mathematical concepts and the mathematicians and cultures that produced them, perspectives on mathematics in a wide variety of world cultures, and philosophical perspectives on mathematics. MAT 586 will include all of the topics of MAT 386; additional requirements will include but not be limited to a more intensive consideration of the philosophical issues that have guided the historic development of mathematics in the 19th and 20th centuries and into the present and the implications these issues have for teaching. MAT 586 will also require development of materials that insert mathematics history into the mathematics content in the secondary curriculum. Prerequisites: MAT 242, MAT 301 or MAT 522 or equivalents. (Also listed as MAT 386).

MAT 591. SEMINAR: TEACHING SECONDARY MATHEMATICS I. These seminars are intended to prepare students to apply a variety of strategies aligned with the professional mathematics teaching standards for planning, teaching, and assessing mathematics at the secondary level. The course is intended to permit students to integrate new knowledge of content and method into exemplary practice in the teaching of secondary mathematics. Prerequisite: MAT 522. Corequisite: MAT 511.

MAT 592. SEMINAR: TEACHING SECONDARY MATHEMATICS II. These seminars are intended to provide students with in-depth knowledge appropriate for applying a variety of strategies aligned with the professional standards for planning, teaching, and assessing mathematics at the secondary level. Key issues pertinent to providing mathematical experiences in an inquiry- based learning environment will be explored through literature and web searches. The course is intended to permit students to integrate new knowledge of content and method into exemplary practice in the teaching of secondary mathematics. Prerequisite: MAT 591.

### PSYCHOLOGY (PSY)

overview of the major classic and current theoretical approaches to personality. Students will develop the skills and applications needed to interpret and integrate theory with contemporary research from within a framework sensitive to and respectful of multicultural issues. Students will be encouraged to identify and develop their own integrated theoretical approaches to the development of personality. Prerequisite: Graduate status.

PSY 520. HUMAN GROWTH AND DEVELOPMENT THROUGHOUT THE LIFE SPAN. This course is a comprehensive overview of human development from conception to death, including research methods. Topics include pre- and neonatal biological and psychological development through adulthood and late adulthood, in addition to the physical, cognitive, and social normative and nonnormative changes characterizing each stage, as well as the influence of culture on the developing person throughout. Prerequisite: Graduate status.

PSY 530. RESEARCH METHODS IN APPLIED SETTINGS AND PROGRAM EVALUATION. This course provides a comprehensive overview of measurement issues, research and evaluation methods, multivariate statistics and the use of statistical software, research ethics, and the writing of research reports. Topics include approaches and methods, observations, and data collection, as well as the analysis and interpretation of multivariate analyses in behavioral research. Prerequisite: Graduate status.

3 credits

PSY 534. ABNORMAL PSYCHOLOGY. This course provides a comprehensive overview of the field of abnormal behavior and mental illness, diagnostic assessment and classification procedures, legal and ethical issues, and therapeutic interventions. The emphasis of this course is on maladaptive behavior as a product of the interaction between personal and biological vulnerabilities, life experiences, cultural and environmental factors, and constitutional factors. Prerequisites: PSY 503, Graduate status.

PSY 540. COUNSELING AND PSYCHOTHERAPY: THEORY AND PRACTICE. This course will familiarize students with the major historical theoretical approaches to counseling and psychotherapy (including positive psychology), their constructs and practical applications. Students will develop the skills and applications needed for counseling within a multicultural feminist-social justice framework, which is emphasized throughout the course. In addition, students will identify and develop their own integrated approaches to counseling and psychotherapy. Prerequisite: Graduate status.

PSY 541. PSYCHOLOGICAL COUNSELING: ORIENTATION AND ETHICS. This course is designed to equip students with the tools required for ethical professional decision making, including informed consent, client rights and counselor responsibilities, boundaries and the use of power, the ethical and legal issues surrounding confidentiality, issues in theory, practice, research, and multiple relationships, competence, supervision and consultation, and it provides an expanded view of multicultural ethics in counseling and therapy. Students will become knowledgeable with respect to the primacy of cultural awareness in counseling, the roles of counselors in the community, the ethical decisions regarding group counseling and confidentiality, as well as in the consultation and referral process. Prerequisite: PSY 540.

PSY 542. SOCIAL AND CULTURAL CONTEXTS OF COUNSELING. This course will provide requisite background knowledge for prospective mental health professionals who can reasonably expect to provide counseling services to a culturally diverse population. Students will learn about and understand the particular backgrounds of people in a wide variety of cultures, while maintaining and integrating both multicultural and lifespan considerations, which are crucial to counseling effectiveness.

Prerequisite: PSY 540.

3 credits

PSY 550. DRUGS AND HUMAN BEHAVIOR. Students will be presented with an overview of the behavioral, biological, clinical, social, historical, and legal and illegal uses and misuses of drugs. Treatment and prevention of addictions will be examined, in addition to the pharmacological activity and long term biological and psychological effects of drug use. Prerequisite: Graduate status.

PSY 630. PSYCHOMETRICS. This course provides a comprehensive overview of testing and assessment issues and research, including historical, ethical, legal, and cultural diversity perspectives. Technical merit and the construction of instruments are examined and psychological tests will be administered. Clinical, personality, behavioral, and intelligence assessments will be included; consideration is also given to the assessment of couples and families as well as to career counseling assessment approaches. Prerequisite: Graduate status.

3 credits

PSY 635. PSYCHOLOGICAL TESTING. This course provides a comprehensive overview of research considerations and psychological testing, including cognitive testing, observational, social-emotional, and projective techniques and the interpretation of individual differences. Clinical and behavioral applications in the field of psychological assessment, including methods for interviewing children, adults, parents, teachers, and families, and observational methods of assessment will be studied. In addition, testing in education, civil service and the military, health psychology and health care, as well as in both industrial and business settings and in forensic settings will be examined to assist in decision making and problem solving. Prerequisite: PSY 630.

PSY 640. PSYCHOLOGICAL COUNSELING WITH INDIVIDUALS. This course enables students to become knowledgeable about and to build competency in professional interviewing and counseling using microskills in multicultural settings, to re-evaluate their current behaviors and perceptions, to gain insights about themselves and their strengths, and to identify those areas needing further development. Students will conduct interviews using five different theoretical approaches, and develop an integrated personalized style of individual counseling and therapy that is consistent with their aptitudes and affinities. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 641. PSYCHOLOGICAL COUNSELING WITH CHILDREN AND ADOLESCENTS. This course will provide students with a comprehensive overview of the theoretical concepts and practical essentials and tools of counseling and psychotherapy with children and adolescents. From within a multicultural framework, students will address the particular issues and problems of children and adolescents within the contexts of their larger groups – families, schools, and other agencies, and will also consider the impact of managed care and evidence-based treatment on the therapeutic process. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 642. PSYCHOLOGICAL COUNSELING WITH GROUPS. This course will enable students to reinforce and further develop the skills and applications already learned, and they will expand and incorporate them to fit the changing demands of group work at different stages. Across a wide variety of major theoretical approaches to group counseling, and sensitive to comparisons and contrasts, students will integrate the needs of diverse clients within a multicultural framework as the group evolves. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 643. FAMILY SYSTEMS COUNSELING. This course focuses on the historical development of systems theory and with the major theoretical approaches to a systemic-cybernetic framework for understanding individuals and families in context. Skills development within a respectful multicultural framework will be emphasized, viewing family and developmental theories as being integrated into a dynamic process model for understanding family interactions and relationships. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 644. COMMUNITY MENTAL HEALTH COUNSELING. This course presents a comprehensive overview of counseling and psychotherapy in multicultural community-based settings, and advances an inclusive model of mental health counseling within this framework. Issues of professional identity and credentialing, roles and responsibilities, boundaries, and contemporary trends such as managed care and reimbursement are examined, and professional ethical codes are integrated throughout the course. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 645. COUNSELING IN VOCATIONAL AND CAREER DEVELOPMENT. This course provides a comprehensive overview of the major theories and current research regarding career development and occupational/educational information systems and sources. Career development program planning, resources, and evaluation are included, with emphasis on how career and vocational counseling is practiced in culturally diverse populations by the mental health professional in response to the work-related issues, challenges, transitions, and disruptions that frequently arise over the course of the life span. This course includes a clinical component. Prerequisites: PSY 540 and PSY 534.

PSY 695-696. INTERNSHIP IN PSYCHOLOGY. The internship sequence is a critical, intense supervised field experience in professional training in Psychology, which emphasizes growth in skills, knowledge, and professional identity and development. This sequence is intended to create an opportunity for the integration, synthesis, and application of all prior academic coursework with active, supervised participation in clinical practice. This internship represents a year long, capstone course, that must include at least 1,200 hours of supervised work experience, and will normally be completed in a 12-month period, but must be

completed within 24 months for course credit. Prerequisites: Restricted to students who have successfully completed all prior coursework in the Master of Arts in Psychology program. (3 + 3) credits

PSY 697-698. THESIS IN PSYCHOLOGY. A comprehensive written research project in the field of the student's concentration, planned and executed under the guidance of a thesis committee, and subject to approval. Before credit is granted, the student must successfully orally defend the thesis before a review committee. The thesis will normally be completed in a 12-month period, but must be completed within 24 months for course credit. Prerequisites: Restricted to students who have successfully completed all prior coursework in the Master of Arts in Psychology program. Students who wish to write a thesis must have a B average in all graduate courses, and have been approved by the Program Director as a potential candidate for thesis work, through the evaluation of the quality of graduate work, student workload and other factors. Students must complete a written application one semester before completion of graduate course work, have selected a topic, and received the support of a faculty member to be an advisor for the thesis.

(3+3) credits

### **PUBLIC ADMINISTRATION (PUA))**

PUA 500. INTRODUCTION TO PUBLIC ADMINISTRATION AND PUBLIC AFFAIRS. An introductory survey of the major concepts and theoretical perspectives in the field of public administration as well as the basic vocabulary. Students will also be initiated to an understanding of the interaction between political and bureaucratic processes, and their impact on policy choices and results. PUA 500 and 524 may be taken concurrently.

PUA 520. ADMINISTRATIVE THEORIES AND PRACTICES. The theories, tools, techniques, and systems useful in the management process. Each student will present a managerial problem as a case for discussion. (Also listed as BUS 520).

3 credits

PUA 521. PUBLIC PROGRAM SEMINAR. Case studies of the application of administrative processes to a major public problem. Students in the course are expected to produce substantial research papers on selected public problems. Prerequisites: ECO 221 and 222 and PUA 500.

3 credits

PUA 523. RECENT DEVELOPMENTS IN PUBLIC ADMINISTRATION. Identifies and traces major trends in selected areas including the study of public administration, the professionalization of public administration, administrative organization and reorganization, intergovernmental developments during the last two decades. Prerequisite: PUA 500.

3 credits

PUA 524. COMPARATIVE ADMINISTRATION. An overview of major trends and emphasis in comparative public administration. Major topics are: theoretical approaches, bureaucracy as a model for comparison, administration in developed and developing nations. PUA 500 and 524 may be taken concurrently.

3 credits

PUA 526. QUANTITATIVE METHODS FOR PUBLIC ADMINISTRATION. Aimed at students and practitioners in public administration who are interested in how research methodologies and statistical techniques are relevant to social and political problems administrators will face in public agencies. It will also demonstrate the application of the knowledge of policy and administrative situations by illustrated examples, exercises, writing research reports, gathering, calculating, interpreting and analyzing statistical materials. Prerequisite: General Statistical Requirement.

PUA 527. ADMINISTRATIVE LAW. Aimed at providing an understanding of the law concerning the powers and procedures of administrative action. Although federal agency law and procedures will be covered, attention will also be focused on agency procedures and judicial review in the Virgin Islands. 3 credits

PUA 528. LABOR/MANAGEMENT RELATIONS. Covers the general applicable concepts in the evolving field of public labor-management relations, recent developments in public employee relations, review of pertinent federal, state and local laws and court decisions, the art of labor negotiations and handling of public employee grievances; comparisons of labor relations in the private and public sectors. 3 credits

PUA 531. GROUP PROCESSES AND LEADERSHIP. Small and large group processes, including role theory, communication techniques, types of leadership, aspects of decision-making, group maintenance and development as ongoing functions of group dynamics. (Also listed as BUS 531).

PUA 532. GOVERNMENT, BUSINESS AND SOCIETY. An analysis of the major issues with important ramifications for public and private administrators, such as environmental concern, equal opportunity requirements, unionism and collective, bargaining, white collar crime, and ethics in government and business. (Also listed as BUS 532). 3 credits

PUA 534. BUDGET MANAGEMENT. Covers all major aspects of budgeting: the public budget cycle and process; income and revenue, projection of receipts and expenditures; budget systems, objectives, outcomes, programs, activities and the line item budget. Emphasis will be on the role of the budget as the central tool of management planning, execution and control of public programs. Students will learn how to prepare a budget, balance accounts, control federal funds and other special funds. In addition, budget approval, administration and control will be examined. Prerequisites: ECO 221 and 222. 3 credits

PUA 535. PUBLIC PROGRAM PLANNING. The design and management of governmental administrative systems. Special attention is given to systems theory, methods of systems analysis, communications, management controls and methods of program evaluation. 3 credits

PUA 536, SELECTED TOPICS IN PUBLIC ADMINISTRATION, Includes areas of special and current interest in public administration. Individual topics will be announced at the beginning of each semester. Prerequisite: PUA 500. 3 credits

PUA 540. ADMINISTRATION OF COMMUNITY POLICING: CRIMINAL JUSTICE AND HOMELAND SECURITY. Through the perspective on community policing, this course examines the administration of Criminal Justice and Homeland Security programs, agencies and institutions. This course is intended to prepare students to contend with the administrative complexities of combating crime and domestic terrorism. This course will also explore the systematic use of partnerships and problem-solving techniques to community policing. Prerequisites: PUA 500 and PUA 520 3 credits

PUA 541. CRIMINAL INTELLIGENCE: STRATEGIC THINKING AND ANALYSIS. The field of criminal intelligence and crime analysis has emerged to tackle combatsophisticated criminal activities. Criminal intelligence analysis is the study of criminals, crime suspects, incidents, issues and trends. The course provides an overview of the methods and techniques of criminal intelligence analysis and strategic organized crime. The course will provide students with opportunities to demonstrate their capacity to predict trends, weakness, dangers, intentions, changes and threats needed to combat criminal activities and organizations. 3 credits

PUA 542. THE LAW AND THE LEGAL SYSTEM. As an in-depth introduction to the American legal system, this course will probe the how's and why's of lawmaking in addition to the types of legal reasoning used by lawyers, judges, and legislators. The skills to use legal resources and legal reasoning will also be covered. Students are introduced to the structures, purposes, and jurisdiction: of territorial, state, and federal courts. The course examines the roles of lawyers, lay persons, judges and jurors in civil, criminal, administrative and alternative justice systems. Skills for "briefing cases," legal research, and analysis are provided.

3 credits

PUA 544. LEGAL ASPECTS OF CRIMINAL JUSTICE. This course reviews the constitutional criminal procedure and cases of the United States Supreme Court and other courts. Students learn the structures. purposes, and jurisdiction of territorial, state, federal, and international courts. Attention is paid to training, use of force, discipline, ethics, diversity and employment in criminal enforcement. Cases currently in the news are provided by the instructor and discussed. Students gain knowledge of prison law, the rights of prisoners, parole and pardons. Further, immigration and civil rights consequences of criminal convictions are explored. Attention is paid to training, use of force, discipline, ethics, diversity, and employment in criminal enforcement. A detailed law oriented paper on an issue covered in class is expected. Students are encouraged to publish, or offer for publication, a paper from this class. 3 credits

PUA 546. ADMINISTRATIVE PUBLIC SERVICE INTERNSHIP. This internship course is designed to provide students with advance instruction and career-related work experience in public service. The course requires students to complete a single or series of significant projects at a public sector, non-profit or quasigovernmental site. Students will be required to fulfill approximately 300 hours of field work. This course will be completed under the direction of both an instructor and a site supervisor. Prerequisites: PUA 500 and PUA 520

PUA 548. ETHICS IN PUBLIC ADMINISTRATION. The course is an overview of the philosophical and practical issues related to ethical decision making in the public sector. This course provides opportunities

for identification and analysis of moral and ethical issues facing public administrators. This course will take in ethical theory, personal and professional ethics, ethical response, ethical capacity development and improvement strategies. Case studies will be utilized to illustrate these and other related issues and problems.

3 credits

PUA 550. SOCIAL ENTREPRENEURSHIP IN THE PUBLIC AND NON-PROFIT SECTOR. While the term, social entrepreneurship is commonly used to apply to the social engagement of the private sector or the entrepreneurial approach to the non-profit sector, social enterprise has been gaining grounds within the public sector and the public administration discipline. Therefore, this course is intended to cover topics in the evolving field of social entrepreneurship within the public and non-profit sector. The course will also look at the application practical private sector solutions to social problems. Student will be provided with entrepreneurial basis to create new product, new service, or new approach to address social problems.

PUA 552. PUBLIC RELATIONS AND COMMUNICATION MANAGEMENT IN PUBLIC ADMINISTRATION. The course provides an intensive introduction to the role of media and the importance of administrative communication in the public and non-profit sector. The course is open to students in any discipline, with no prior public relations or communication experience. The course is intended for graduate students interested in obtaining theories and strategies to public relations, public communication and reporting management. Advantageously, developing an understanding of the principles to public relations and communication within the field of public administration, will benefit students in their professional pursuits. Prerequisite: PUA 500

PUA 600. THESIS. A comprehensive written research project in the field of the student's concentration, planned and executed under the guidance of a thesis committee and subject to its approval. Before credit is granted, the student must successfully orally defend the thesis before a review committee. Prerequisites: 15 graduate credits including PUA 500 and 526.