

TENTATIVE COURSE OFFERINGS: SPRING 2012

The American College of Thessaloniki plans to offer a wide array of courses from the Divisions of Business, Humanities & Social Sciences, and Technology & Science for the Spring 2012 semester. For those students in the Study Abroad Program, prerequisite requirements can be waived if comparable completed coursework at their home institution can be demonstrated.

***Please note that ACT reserves the right to cancel a class due to low enrollment and will work to provide appropriate alternatives for those students impacted by any changes in course offerings.**

A. DIVISION OF BUSINESS

ACCOUNTING

Accounting 101: Financial Accounting

This course is designed to provide students with an understanding of accounting information and the environment in which it is developed and used. Accounting principles and procedures are discussed in order to provide an understanding of the financial accounting process, including the recording, summarizing, and reporting of business transactions, which result in the preparation of financial statements. Topics covered include accounting and the business environment, revenue and cost recognition, asset valuation, depreciation, and an introduction to financial statement analysis.

Accounting 102: Managerial Accounting

This course is designed to give insight into the interpretation and use of financial reports for management planning, coordination and control. Students will be exposed to the kind of accounting information needed, where this information can be obtained, and how this information can be used by managers as they carry out their planning, controlling, and decision-making responsibilities. Topics include management accounting vs. financial accounting, classification and behavior of costs, CVP analysis, segmented reporting, standard costing and responsibility accounting.

BUSINESS LAW

Business Administration 240: Principles of Commercial Law

This course covers the principles of commercial law as they relate to a business organization and its environment. Topics include forms of business organization, the creation of new business ventures, laws relating to international sales, purchasing contracts, international litigation procedures, counter-trade transactions, exclusive distribution agreements, franchising, forfeiting, export trade documentation and procedures, and types of international contracts of sale.

ECONOMICS

Economics 101: Introductory Macroeconomics

An introduction to modern economic analysis and its policy implications. The course centers on the applications of economic theory to national policy problems such as growth, inflation, unemployment, government expenditures and taxation, and the role of money. In addition, it provides a broad introduction to the understanding of the modern national socioeconomic systems in today's globalized economies.

Economics 102: Introductory Microeconomics

A continuation of the introduction to modern economic analysis concentrating on the factors affecting behavior and decision-making by households, business firms, and institutions operating under a mixed socioeconomic system. It also considers the issues of market failures and introduces basic concepts of international economics.

Economics 232: International Economics

The goals and objectives of this course are to facilitate the students understanding of foreign trade flow issues including the causes, the volume and the direction of these flows. Strong emphasis is given to the formulation of industrial trade policies. Topics to be covered include various trade and exchange rate theories, tariffs, and commercial policy, factor movement, regional economic integration, international institutions, international macroeconomic interactions, and international environmental issues and policies.

Economics/Management 242: Applied Managerial Economics

This course deals with the application of economic theory and the tools of analysis of decision science to examine how an organization can achieve its aims most efficiently. The course uses the theory of the firm to integrate and link economic theory (microeconomics and macroeconomics), decision sciences (mathematical economics and econometrics), and the functional areas of business (accounting, finance, marketing, personnel or human resource management, and production) and shows how all of these topics are crucial components of managerial decision-making. Emphasis is placed on actual real world managerial decisions.

FINANCE

Finance 201: Financial Management

This course provides a comprehensive introduction to the field of financial management. Emphasis is given to the examination of the processes and the methodology of financial statement analysis that can be applied and used as guidelines in assessing, interpreting and planning financial data to meet the objectives of managing a business entity effectively. Topics covered include goals and functions of financial management, short-term financial management decisions, financial statement analysis, planning and financial forecasting, and time value of money.

Finance 202: Corporate Finance

The goal of this course is to provide an understanding of various concepts, theories, practices and techniques of corporate finance. In particular the course aims to provide each student with an understanding of risk and required rates of return, an examination of the valuation of bonds and stocks, a complete treatment of the concepts of investment appraisal and the problems of applying the theory in practice, an examination of the capital structure decision and the cost of capital, and an introduction to long-term financing and capital markets.

Finance 220: Investment and Portfolio Management

The principal purpose of this course is to offer a comprehensive introduction to the characteristics and analyses of individual securities as well as the theory and practice of combining securities to form optimal portfolios. It provides an understanding of the general principles of financial and investment decision-making through an examination of asset pricing models and the efficient market hypotheses as well as treatment of interest rates, bond and stock pricing, and bond and stock fund management.

Finance 400: Seminar in Finance

The purpose of this course is to analyze topics in Financial Management that have received limited coverage or no coverage in the other courses in Finance. The following topics will be covered in the course: Financial Innovations / Derivatives / Venture Capital / International Portfolio Management / International Acquisitions and Valuation / Currency Risk Management. The course topics and theme will vary over time to include the most recent issues affecting the financial sector.

MANAGEMENT**Management 101: Introduction to Management**

This course provides students with knowledge of basic management theories and concepts and introduces them to simple case studies relevant to the theoretical background that is covered. The subjects examined, including some insights from international management, are the following: the external and internal environment within which an organization operates; the historical foundations of Management; the social responsibility of business and the relation between business and government; the managerial function of planning; management by objectives; the organizing function and organizational structures; the function of staffing and personnel selection; the function of leading, motivation and job satisfaction, and finally, the function of controlling and coordinating a firm's actions to achieve its objectives.

Management 201: Organizational Behavior

The behavior of individuals and groups within the organizational context is presented and analyzed. Different forms of organizational behavior are considered, providing students with exposure to various models. Topics covered include the context of organizational behavior, organizational culture, understanding individual behavior,

personality-perception attitudes, job satisfaction, job stress, motivation and learning, interpersonal behavior and dynamics, leadership, power and politics.

Management 210: Human Resource Management

Theoretical concepts and principles that relate to the management of the human resources of an organization are presented. The main objective is to give students an in-depth understanding of the personnel management function. Topics covered include human resource planning, demand and supply for human resources, job analysis and design, recruitment, selection, training and development of human resources, performance appraisal, compensation systems, employee benefits and services, security and health issues, employee motivation, personnel communication, labor unions, and collective bargaining.

Management 218: International Business

The objective of this course is to present an overview of the global environment within which firms operate. Students are exposed to all aspects of international business and will learn how to interpret international developments and evaluate their consequences for the firm. Among the topics considered are the nature of the multinational corporation, the institutional framework for international business, environmental factors influencing the choice of international investment sites, factors related to business operations in specific countries/regions, and the special circumstances relating to the marketing and financing of international businesses.

Management /Economics 242: Applied Managerial Economics

*This course deals with the application of economic theory and the tools of analysis of decision science to examine how an organization can achieve its aims most efficiently. The course uses the theory of the firm to integrate and link economic theory (microeconomics and macroeconomics), decision sciences (mathematical economics and econometrics), and the functional areas of business (accounting, finance, marketing, personnel or human resource management, and production) and shows how all of these topics are crucial components of managerial decision-making. Emphasis is placed on actual real world managerial decisions. **Prereq: Economics 102, Math 115***

Management 322: Business Strategy

The aim of this course is to enable students to approach the whole organization: marketing, finance, accounting and personnel functions together. Strategy and structure are the central themes of the course. Topics covered include the business environment, the systems approach, industry analysis, organizational intelligence, organizational structuring, organizational power, strategy development and implementation, leadership styles, management of the external environment, and strategic decision-making.

Management 323: Business Strategy II (Capstone Project)

This course is designed to synthesize the knowledge and skills developed in previous business courses and apply them to the research project. Students learn about all aspects of the process of developing and carrying out their business strategy research project, and gain an understanding of standards and expectations that students need

to meet to be successful in completing their research. Typically there are no classroom sessions throughout the course. However, in order to make substantial progress, it is essential that students set and meet aggressive goals and meet regularly with their coordinator to ensure the research project is progressing in a focused and high quality manner. Lastly this research project should prove the student's independent ability to investigate and develop an issue within the field of business strategy.

Management 330: Entrepreneurship and Innovation

An in-depth study of the legal, financial, marketing and organizational aspects of starting up, implementing, and successfully managing one's own business venture. The major portion of the course, apart from presentation and discussion of theoretical bases involving starting a new business, consists of construction of a detailed business plan. Class members consider all issues involving initiation, building,, and controlling a new venture. The main goal is first the analysis and secondly the simulation of an effective business plan based on realistic, contemporary case scenarios.

Management 340: Business in Greece and the EU

The aim of the course is to give students in-depth insights into the complexities of the European environment from a global, business, economic, political, and legal perspective. The course also analyzes the various ways in which the European Union institutions influence a company working in or with Europe, with specific emphasis placed on doing business in Greece

MARKETING

Marketing 101: Introduction to Marketing

The objectives of this course are to introduce the basic marketing concepts, to present the practical use of marketing in modern corporations, to provide students with the elements of market thinking in solving business problems and to prepare them for working in the competitive and dynamic field of marketing. Topics covered include the macro and micro role of marketing, market segmentation, basic principles of marketing research, demographic and behavioral dimensions of consumers, marketing mix, product analysis, product strategies, new product development, distribution channels, pricing policies, introduction to promotion and advertising, and marketing plan construction. The course is enriched with supplementary up-to-date articles, real-world cases, video projections, and marketing simulation.

Marketing 212: Sales Management

The main objectives of the course are to introduce the basic concepts of personal selling, to give an explicit and practical view of salespeople's main tasks and working practices, and to discuss and organize the current sales management tactics by analyzing up-to-date, real world situations. Topics include sales management functions and strategies, the personal selling process, account relationship management, territory management, setting sales goals, personnel recruitment and selection, sales training, territory design, leadership, motivating and compensating the sales force, and evaluation and control of sales force performance.

Marketing 318: Global Marketing

This course addresses marketing management problems, techniques and strategies needed to incorporate the marketing concept into today's global marketplace. More specifically the course deals with modes of foreign market entry, pricing issues, cultural and demographical issues and the impact of foreign currency fluctuations on a firm's performance.

Marketing 320: Marketing Research

The major objective of this course is to introduce students to the useful and multi-purpose theory and practice of marketing research. Application of this theory to product, price, place and promotion strategies, as well as to every practical marketing issue confronting a business organization, is one of the main course goals. Topics that are discussed in detail include the role and the environment of marketing research, planning a research project, secondary sources of information, qualitative interviewing methods, survey-interviewing methods, the basics of sampling, major sampling techniques, questionnaire construction, data-processing, analysis and tabulation, and reporting research findings. All topics are dealt with through examples in the context of real business situations.

RESEARCH**Research 299: Research Methods**

This course aims to provide to students a comprehensive knowledge of good research practices. Students will also be exposed to ethical and legal issues related to research. Emphasis will be placed on the ability of the students to apply the appropriate research methodologies and analytical techniques and on acquiring academic writing and presentation skills.

B. DIVISION OF HUMANITIES & SOCIAL SCIENCES**INTERNATIONAL RELATIONS (History, Politics, European Studies)****History 120: The Modern World**

This course takes its point of departure in late eighteenth-century Europe during the period of the Enlightenment and the French Revolution, and concludes in the late twentieth century with the end of the Cold War and the immediate post-Cold War decade. Course materials integrate social, cultural, political, and economic approaches, as well as aspects of historiographical analysis, in order to facilitate study of both the foundations of the contemporary world and questions relating to historical representation. The course also provides coverage of significant global developments in the modern era.

History 201: Women in Modern Times

An upper-level survey which studies the evolving conditions in which women have lived and worked in the western world from ca. 1750 to the present. A variety of types of evidence, from legal documents to art and literature, will be examined. Students will also be introduced to contemporary theoretical developments in the larger field of women's studies.

Politics 101: Contemporary Politics

Politics is one of the richest fields of human inquiry, made all the more essential in that just about everything we do in this life can be interpreted to have a political sense. The purpose of this course is to help students discard the negative baggage they carry with them instinctively about politics in order to examine somewhat more objectively the main issues and branches of the academic discipline commonly called political science. Among the topics studied are: political power, authority, and legitimacy; sovereignty and the state; justice; the role of political institutions and political groups; political ideologies and vocabularies; and actors and issues in contemporary international relations.

Politics 201: International Relations

This course begins with an examination of the key notions and actors in the field of international relations, as observed principally from the twin perspectives of global interdependence and mutual vulnerability. It then focuses on various institutional, ethnic, geopolitical, strategic, and economic issues of current interest. At the same time the course has as an objective to provide an overview of the main classic and contemporary trends in international relations scholarship.

Politics 207: The Modern Greek Nation-State

This course analyzes contemporary Greek society by exploring some of its institutions and structures as well as its socio-political practices. A thematic organization of the course allows for particular idiosyncrasies of the Greek state to be investigated in depth. Topics for examination are: the modern Greek state structure, a civil society indicative of clientelism and populism, public administration and the role of political parties, the Greek Orthodox Church and religion, the Greek economy and the European Union, and the role of geopolitics

Politics 231: International Law

The aim of the course is to introduce students to the basic principles of international (public) law and to the functioning of major international organizations, and to delineate the intensifying organizational and rule-making activity which has come to be characterized as "global governance." Students will be acquainted with the language and the basic concepts of international law. The role of international organizations, political institutions, political groups, and actors will be a major area of study. The development of international law, its content and effectiveness as a system of rules will be the focus of most of the course.

Politics 249: The Politics of International Economic Relations

The course aims at giving the students an advanced understanding of international economic relations. This is done by focusing on the following three aspects of the

international political economy: 1) the theoretical debate on the history and nature of the international economic transformations which have been taking place since World War II; 2) the histories and impact of international institutions as key players; 3) the impact on communities of the dominant free-market economic policies of the last three decades with particular attention to the recent financial crisis.

Politics 301: War, Peace, and Genocide in the Modern World

War has been a constant preoccupation of humankind. A first segment of this fundamentally interdisciplinary course examines various perspectives on the causes, nature, and implications of war, and the dynamics of efforts to settle violent conflict, with a view toward familiarizing students with the major issues, questions, and vocabulary associated with the study of peace and war, including such topics as interstate and intrastate war, conflict resolution, prerequisites for peace, and so on. The second part of the course reflects on the genocidal character of much of modern and contemporary warfare, with a particular focus on the Holocaust, the Armenian Genocide, the Killing Fields of Cambodia, and the Rwandan Genocide. *Students enrolled in this course will have an opportunity to take a Humanitarian Studies Certificate, pending additional completion of specially designed public service initiatives.*

Politics 350: Senior Thesis

An intensive, semester-long research project guided by one or more ACT faculty.

European Studies 211: The Politics of the European Union

The aim of this course is to introduce students to the major historical, political, and legal developments leading to the creation and evolution of the European Union. The course examines in detail EU treaties, institutions, and policy-making processes, and provides a critical examination of theories of European integration and enlargement. *Students who enroll in this course will have an opportunity to take a European Studies Certificate, pending additional participation in an on-campus simulation of the EU.*

European Studies 321: Citizenship and Democracy in the European Union (Citizenship Proseminar)

This course examines the political systems of European Union Member States. The issues of democracy and citizenship in Europe are considered, and they are related with enlargement and the future of the EU as a political structure. The course reviews the EU institutional system, and the structures, institutions, and interests in European politics of a number of EU member states. It focuses on the process of democratization, and the way these members interact with other member states, and EU institutions. Finally, the notion of “EU citizenship” is analyzed, and is the debate on what kind of civil liberties, political and/or social rights it should include.

Social Sciences (Anthropology, Sociology, Psychology)

Anthropology 101: Introduction to Anthropology

This course provides an overview of major themes and concepts of Anthropology considered both in relation to the biological disciplines (Paleontology, Ethology, Sociobiology) and as the comparative study of human cultures (Social Anthropology/Ethnology). The course establishes the continuity of human culture from an evolutionary perspective and acquaints students with contemporary interdisciplinary debates on major issues.

Anthropology 222: Greek Folklore

This course provides an overview of the creation, evolution and theory of folklore studies in Greece (19th and 20th centuries). It will introduce students to the major folklore categories (oral literature, customs, artifacts of material culture) and their collections (archives and museums). Emphasis will be placed on the study of folksongs and folktales. The course will also address the phenomenon of folklorismus, the revival of traditional customs, and its uses in modern Greek society.

Sociology 101: Contemporary Society

This course will explore the discipline of sociology, with a particular focus on the key concepts and issues relating to the study of contemporary society and culture. The course seeks to establish a methodological balance between theoretical grounding and an applied framework as it examines the following thematic issues: social and cultural theoretical perspectives, globalization, power, ethnicity, gender, the mass media, and the dynamics of culture in the contemporary world

Humanities and Fine Arts (English, Greek, Humanities, Philosophy, Art and Music)

Art History 201: Modern Art and Architecture

This course offers a study of styles of the modern period, with special emphasis on the work of Manet, the Impressionists, and the Post-Impressionists who laid the groundwork for the art of the 20th century. There will be a close look at the social conditions and metaphysical concepts which led to the rebellion in the arts in the second half of the 19th century. The styles of Expressionism, Cubism, Abstract Art, Futurism, the Metaphysical School and Surrealism will then be analyzed. Prereq: Art 120 or Art History 103

Humanities 210: Religions of the World

This course will expose students to a comparative study of five of the world's main religious traditions, exploring those traditions through their literatures, while focusing also on origins, cultural contexts, histories, beliefs, and practices. Through reading, discussion, and visual appreciation of artistic renditions of religious world-views, students will gain valuable understanding of traditions other than their own, contributing to their broadened and deepened awareness of the world.

Humanities 230: The World of Alexander

This course is conceived to situate Macedonia in the history of ancient Greece. Students will read Homer's *Iliad*, the book that set Alexander's dreams in motion; ponder the thought of Aristotle, Alexander's tutor; recite Euripides' *The Bacchae*, first produced in Pella in 405 BC. The class will visit Aristotle's birthplace and Philip's tomb, retrace the early stages of Alexander's fateful campaign eastward, relive the pathos of ancient tragedy, and recreate the culminating grandeur of Hippodamean architecture. *Students enrolled in this course will have an opportunity to take a Hellenic Studies Certificate, pending additional completion of a Modern Greek language course and participation in extracurricular activities scheduled by ACT's Office of International Programs.*

English 101: Composition I

The course reviews the basic sentence and paragraph skills and introduces students to essay writing techniques as needed for academic purposes through the study of a number of rhetorical modes, such as comparison and contrast, causal analysis, classification and division. In addition, students are introduced to information literacy skills through spending 14 hours in the library, developing effective search strategies, understanding the differences between types of resources and acquiring the skills necessary to evaluate these resources. Throughout the course, students submit regular writing assignments ranging from paragraph to essay to short critical reports and journals, and practice basic oral presentation skills.

English 102: Composition II

This course builds upon the writing skills presented in English 101. First, it introduces students to the mode of argumentation by analyzing various types of arguments and teaching the essential principles and techniques used in effective argumentation. At the same time, it introduces students to research paper writing by guiding them step-by-step in the process of forming an argumentative thesis, incorporating sources together with their own thinking into papers, and documenting sources. Summarizing, paraphrasing and quoting skills help students practice their academic writing and complete a research report and an argumentative research paper.

English 120: Introduction to Literature

This course introduces students to the literary genres of fiction, poetry, and drama, and to the critical concepts and problems involved in the interpretation of literature. Through analysis of a selection of classic literary texts, the course aims to stimulate in students a critical appreciation for literature and a demonstration of the relevancy of literature to life.

English 203: Reading and Writing in the Disciplines

This course will focus on selection of readings in different disciplines (academic essays, professional articles, technical reports, business cases) and on practicing advanced reading comprehension skills. It will emphasize vocabulary enhancement, critical thinking, and synthesizing of ideas. Students will practice advanced writing skills (writing essays & academic papers with relevant scholarly apparatus, short argumentative reports, critical reviews, professional summary writing, informative reports, comprehension exercises) and oral presentations.

English 255: Advanced Writing & Professional Communication

The purpose of this course is to provide instruction and practice in the skills and strategies necessary to produce effective written and oral communication in any professional context. The course addresses topics such as persuasive writing techniques, formal professional communication (including executive summaries, legal documentation, letters and reports) as well as intercultural communication, professional writing in the 'e-world' and advanced public communication writing & speaking skills. The course is designed to foster skills development in the areas of critical thinking, presentation techniques, application of accepted professional frameworks to new ideas and use of innovative writing, with the aim of preparing students for realistic professional situations

English 268: Women and Literature

The course focuses on 19th and 20th century Anglophone women writers in an attempt to assess the implications of gender in the production and consumption of literature. Through a study of a selection of literary and critical texts written primarily by women or about women, the course will attempt to answer the question "what does it mean to be a woman writer" by examining such recurrent issues as production, oppression, representation, sexuality, desire, violence and identity, and the way these manifest themselves in women's writing. The concurrent exploration of sociopolitical and economic issues makes the course a contextualized study of sexual politics, and therefore of interest to students outside the English major as well.

Greek 101: Beginning Modern Greek I

The aim of this course is to develop students' familiarity with oral and written Greek through dialogues dealing with everyday situations and written material drawn from the popular media. Emphasis is on oral communication. Grammar is learned through dialogues illustrating everyday communication, while students gain practice by role-playing and acting out numerous everyday situations. The vocabulary used meets basic social needs for an environment where Greek is spoken. [Meets four hours weekly]

Philosophy 101: Introduction to Philosophy and Critical Reasoning

The primary aim of this course is to train students in the skills required for critical analysis of discourse. Its secondary aim is to apply these critical analytic skills to the activity of philosophizing. Accordingly, the course is divided into two parts. In the first, the main concern is with the validity of inferences. Students learn sentential and predicate calculus so that they are in a position to check the validity of any argument proposed. In the second part, the main concern is inquiry and to this purpose the students first apply logical theory to methodology (induction, hypothesis, abduction, explanation, reduction theory, definition, distinction, issue, problem), and then apply all these techniques to the discussion of two problems: the existence of God and the problem of mind and its relation to matter.

Philosophy 203: Ethics

This course is designed to help students develop their critical abilities through the analysis of ethical problems and to introduce them to contemporary ethical theory.

Following an introduction to the structure of ethical problems, three classical approaches to the problem of justification are presented: moral obligation (Kant), the consequences of one's actions (Utilitarianism), and personal virtue (Aristotle), respectively. The course also includes discussions of meta-ethical issues concerning the relation between fact and value and the problem of justifying and then generalizing one's ethical judgments including the issue of moral relativism.

C. DIVISION OF TECHNOLOGY & SCIENCE

COMPUTER SCIENCE

Computer Science 101: Introduction to Computing

The course aims at making the student an effective computer user within the contemporary networked environment of both the office and the Internet. Students learn the usage of modern programs suitable for composition, calculation and presentation, as well as the facilities available for communicating and researching through the Internet. The fundamentals of how the computer and a network of computers work are discussed in order to provide a basic understanding of the modern computing environment.

Computer Science 151: Quantitative Computing

This course aims at increasing students' quantitative skills through extensive usage of popular spreadsheet programs. Students will be exposed to numerous basic concepts of computing, including data types and formats, spreadsheet programming and data structures. A variety of problem solving tasks will be presented at an introductory level, including data analysis, simple system modeling and simulation. Applications will be drawn from several disciplines, including business.

Computer Science 201: Business Computing

The course aims at presenting Business majors with the basic computing structures needed to support a company's management. Students will be exposed to data tables from a variety of business activities as well as the database techniques necessary to model and effectively process these data for the purposes of company assessment and planning. Examples of applications residing in the WWW will be presented, analyzed and subsequently implemented by students with the database medium used in the course.

Computer Science 206: Web Development

This course is designed for students who have a good knowledge of computer systems and familiarity with the World Wide Web. It provides an introduction to development for the Internet. The course involves the creation of both static and dynamic or interactive web pages using a range of tools from basic text editors, through HTML specific tools as well as a web development tool. Topics covered include Web page design issues, basic understanding of Web authoring and site management, HTML, Web development using specialized tools, and fundamentals of animation software.

Computer Science 207: Multimedia II

This course is the continuation of CS107. Advanced editing techniques of digital images and digital video will be presented, studied and practiced. Basic animation techniques (using Macromedia Flash) will be presented, studied and practiced. Students will acquire further skills on capture hardware (Photo, Video, Audio). Individual student capstone projects on Video and animation will be assigned at the end of the course.

Computer Science 222: Cisco Networking Fundamentals and Router Configuration

This course offers an introduction to computer systems and networking fundamentals based on the OSI network model and industry standards. The first part teaches the fundamentals of network design and the installation of cabling. Topics covered are network topologies, IP addressing, including subnet masks, networking components, and basic network design. In the second part of the course, students begin simple router configuration exercises and are introduced to LAN switching. Topics covered are routing theory and router technologies, router configuration, routed and routing protocols.

CS 444: Capstone Project: This is a set of linked courses to be taken in sequence over the course of the senior year. The course aims to give students the opportunity to work in a guided but independent fashion to explore a substantial problem in depth, making practical use of principles, techniques and methodologies acquired elsewhere in the program of studies. It also aims to give experience of carrying out a large piece of individual work and in producing a final project report. It has two distinct phases: the preparatory phase focusing on literature review, assessment of Technologies and Project Specification and the implementation phase focusing on project design, development, documentation and presentation.

Mathematics

Mathematics 100: Mathematics for Decision-Making

An introduction to selected areas of mathematics in familiar settings with the objective of developing students' conceptual and problem solving skills. The course includes a study of mathematical concepts selected from graph theory, planning and scheduling techniques, statistics, probability, game theory, growth patterns, coding information, voting systems and apportionment. May be taken as a Math and Statistics GER.

Mathematics 101: Elements of Finite Mathematics

This course places an emphasis on the role of functions (coordinate systems, properties, graphs and applications of polynomial, rational, logarithmic and exponential functions), solving systems of linear equations, matrix operations, mathematics of finance, and introductory counting techniques.

Mathematics 115: Calculus

This course covers: rate of change and introduction of the derivative for functions of one variable; applications of the derivative to graphing one-variable functions and to

optimization problems; introduction of functions of several variables and partial derivatives; problems of unconstrained and constrained multivariable optimization; applications of differential equations; integration of functions of one variable and applications, and advanced methods of optimization. Emphasis is placed on applications and problem solving through conventional and computer methods.

Statistics**Statistics 205: Statistics I**

This course introduces students to basic statistical concepts and techniques. Each technique is illustrated by examples, which help students to understand not only how the statistical techniques are used, but also why decision-makers need to use them. Topics covered include Frequency Distributions, Statistical Descriptions, Introduction to Probability Theory, Discrete Probability Distributions, Continuous Probability Distributions, Sampling and Sampling Distributions. Emphasis is given to problem solving with the use of statistical software.

SCIENCE COURSES

Ecology 110: Ecological Principles

The goal of the course is to introduce students to general ecology. It focuses on major ecological concepts in order to provide students with a robust framework of the discipline upon which they can build. Each discussion is organized around two or four major concepts to present the student with a manageable and memorable synthesis of the lecture and it is supported by case histories that provide evidence for the concept and introduce students to the research approaches used in the various areas of ecology. Special emphasis to local environmental problems countries face and the approaches they use in solving these problems. Laboratory included