AMERICAN COLLEGE OF THESSALONIKI – SPRING I 2019 TENTATIVE COURSE OFFERINGS*

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 I 2019 term. 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.

DIVISION OF BUSINESS

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. (3 credits)

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. (3 credits)

Business Administration 398: Undergraduate Internship in Business
This course aims towards junior or senior students so as to offer them an opportunity to apply their so far gained academic knowledge. This internship is an academic course and credit is awarded due to learning not just for working. The course's main goal is to provide students with an opportunity to gain work experience that will enhance and complement their academic learning. The course requirements are designed to provide a structure that will enable students to make connections between what they learn in the classroom and on the job, to further develop analytical and interpersonal skills, and to practice business writing skills. (3 credits)

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. (3 credits)

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. (3 credits)

Economics 332: 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.(3 credits)

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. (3 credits)

Finance 202: Entrepreneurial and Corporate Finance
This course will clearly focus on financing an existing family business, start-ups, corporations, and NGO's, including sound financial management practices. The course will go into depth on how to analyze financial statement, create financial forecasts, and evaluate the various ventures. Tools and methods used in determining how much money a venture actually needs in order to be viable will also be covered. Attention will be devoted to the different types of financing alternatives available to an entrepreneur. The venture capital market will be investigated in detail, including self-financing, debt financing, angel financing, and financing from venture capital firms. Students will be encouraged to understand financing issues and options from the vantage points of the entrepreneur, the lender, and the investor. In short, the course will explore the most important financial issues that an entrepreneur may face. (3 credits)

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. (3 credits)

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. (3 credits)

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. (3 credits)

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. (3 credits)

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. (3 credits)

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. (3 credits)

Marketing 214: Advertising
The primary objective of this course is to introduce students to the challenging world of advertising and promotion. Advertising is examined as a distinctive element of promotion, together with other communication tools. Current developments of advertising are discussed and an integrative perspective is adopted, due to rapid changes and metamorphoses in the advertising business. Emphasis is given to the role of modern marketing communications, the organizational needs and structure in the field of advertising and promotion, determining advertising objectives and budget, creative strategy, media planning, analysis of broadcast and print media, types of support media and other promotional tools. The large number of advertising techniques and applications, as well as students' everyday exposure to thousands of communication messages, recommend the use of cases, projects, real-world examples and class discussions. (3 credits)

Marketing 301: Marketing Strategy
An advanced marketing course that offers in-depth examination and analysis of the basic marketing principles gained in Marketing 101: Introduction to marketing. Students are taught what is being confronted in a marketing department and what the alternative procedures for carrying out various marketing projects are. A considerable effort is made to provide students with the elements of marketing thinking in structuring marketing strategies for various corporations. Supporting students' ability to think, express themselves, write, speak and argue in marketing terms also constitutes one of the main course objectives. Finally, students are prepared to work in the competitive and dynamic field of marketing and to become professionals with a global perspective. Case analysis and class discussions of current issues are among the important educational and learning tools used. (3 credits)

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. (3 credits)

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. (3 credits)

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. (3 credits)

DIVISION OF HUMANITIES & SOCIAL SCIENCES

Anthropology 349: Intercultural Communication in Theory and Practice (formerly Anthropology 249)
It is a module which provides students with basic knowledge on how communication practices are patterned by culture, leading students to acquire a reflexive approach to their own cultural identity and communication styles. It introduces students to a better understanding of the interaction between people coming from different cultures. In today's globalized world this seems to be central to our existence as responsible citizens. In using as background ACT's multicultural composition of the student body, and the host country's culture (Greek), we shall try to acquire knowledge and skills for more effective intercultural communication practices in different settings and situations (workplace, diplomacy, leisure, interpersonal relationships). (3 credits)

Art History 220: Ancient Greek Art and Architecture
This course surveys Ancient Greek art and architecture from the Early Iron Age through the Hellenistic period. Following an introduction to the nature of art, its various uses, and approaches to its interpretation, the course will provide a brief historical background for the major periods in Greek art. Each period will then be examined in detail, with particular attention to defining stylistic features, and to examining representative works in each of the genres (sculpture, painting, architecture, minor arts). (3 credits)

Comm 217 – Media in Transition
The course offers an overview of the historical development of media as industrial and cultural institutions, as well as the ethical and legal framework of their operation. Covering both print (newspapers, magazines, books) and audio/visual media (photography, cinema, sound-recording, radio, television, internet, mobile media) the course explores how changes in communication technology interrelate with the changing roles and fortunes of media industries and media audiences/users, and pays special attention to the digital revolution and to its transformative consequences over the whole of the media/cultural industry landscape. (3 credits)

Comm 233- Introduction to Journalism
The course provides students with an overview of the fundamental concepts of journalism. It will bring them closer to the profession of journalism by engaging them with work across all media platforms – print, broadcast and online – and helping them to acquire basic journalistic skills. Students will explore the profession of journalism both at a theoretical but also at a highly practical level and will discover new ways to tell a story. Techniques, methods and models guiding the contemporary practice of journalism will be given particular emphasis.(3 credits)

English 101: Composition I
This course reviews the basic principles of paragraph writing and introduces the major rhetorical modes of narration, description and exposition through discussion of theory, examination of model essays, and writing practice. In addition, students are introduced to information literacy by spending seven two-hour sessions in the library, developing effective search strategies, understanding the differences between types of resources, and using critical skills with which to evaluate resources. (3 credits)

English 102: Composition II
This course builds upon the expository writing skills presented in Eng 101. First, it introduces students to the mode of argumentation by analyzing various types of arguments and presenting the essential tactics used in definition, cause, evaluation, refutation and proposal. 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. (3 credits)

English 204- Business/Professional Communication
The course instructs students in all aspects of professional communication including writing, reading, speaking and listening. It offers business and computer science students in particular opportunities for vocabulary enrichment and structural improvement specific to their own professional communication. Through the use of a variety of different teaching and learning methods the course gives students the opportunity to practice and improve their overall use of professional communication skills, both orally and in writing. The overall aim of the course is to enable students to realize their full potential in terms of the sophistication, relevance and fluency of their professional communication skills. (3 credits)

English 221: Short Fiction
This course focuses on in-depth critical reading of and writing about short fiction (short stories and/or novellas) within the context of the traditions and innovations which have concerned these genres, and with respect to the standard elements of short fiction. Texts are read, analyzed and interpreted with the assistance of secondary sources selected from among a variety of literary-critical interpretative perspectives. Indicative writers include Philip Roth, Herman Melville, Alice Munro, Gabriel Garcia Marquez, Henry James and Edith Wharton. (3 credits)

English 259: Topics in Contemporary World Literature
The course will consider contemporary literary texts from around the world (written or translated into English) which respond to cultural, political and social issues of today. In addition to approaching contemporary literature as an index of distinct cultures but possibly also cultural interaction, it will examine the literary features of each book to define its contemporariness, both thematically but also stylistically. When applicable, the course will also explore the role of literary prizes and other marketing factors in helping a book travel beyond its place of origin and become a "contemporary classic". As a critical reading and writing course, it will offer students the opportunity to compare cultures while familiarizing themselves with some of the world's interesting and challenging literary texts. Exposing students to cultural and literary traditions around the world will help them realize what sets us apart and what brings us together as humans. (3 credits)

English 268: Women and Literature
This course examines the evolution of women's literature from the 19th to the 20th century in an attempt to assess the implications of gender in the production and consumption of literature through a study of selected texts by Anglophone women writers. Coventry Patmore's "The Angel in the House" (the only text studied written by a man) serves as the background against which we will study a variety of texts written by women writers that respond to and deconstruct this female portrait, gradually "killing the Angel" and working to create new fictional portraits and a new discourse for women and women's literature. 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. (3 credits)

English 273: Introduction to Linguistics
The course Introduction to Linguistics gives a selective overview of linguistic studies from various branches, such as anthropological linguistics, cognitive linguistics, functional linguistics, formal linguistics, psycholinguistics, and second language acquisition. The focus is on language as a dynamic set of symbolic resources with many levels of expression: an acquired system of communication among the human species, an interactive system for expressing and creating both individual and socially constructed meanings, and an orthographic system for developing literacy. During the semester, the global, social, and personal meanings of language will be considered. (3 credits)

English 325-Second Language Acquisition
The course explores the theory of second language acquisition (SLA) in general and its implications for teaching and learning in particular. It reviews general linguistic theory, explores aspects of morphology, phonology, semantics and syntax, theories of 1st and 2nd language acquisition, L1 interference in L2 acquisition and language universals. Further topics include error analysis, language variations and disorders, sociolinguistics, bilingualism, and application of theory to 2nd language teaching methodology.(3 credits)

English 340: Comparative Literature
The course aims to engage students in a comparative study of literary representations of sexuality from antiquity to present times. Terms such as 'sex' and 'sexuality' are often used interchangeably, without considering their many different connotative meanings at different historical periods, or in different cultural contexts. The course is divided into three parts: a) philosophy and sexuality, b) class, gender, sin, and sexuality, and c) Freud, psychoanalysis and sexuality, which will bring us back to philosophy. Works in translation will help us reveal the nuanced role of language itself in terms of constructing sexuality.(3 credits)

English 350: Advanced Writing: Writing for Social Change
The aim of 'Writing for Social Change' is to allow students to explore the genres and forms of writing that have influenced social change, and to practice writing for social change in today's complex, multi-faceted world. Practical themes include; writing for advocacy; how to write to influence opinion and provoke action (use of language and understanding of rhetoric,) print and broadcast op-ed reporting, the language of politics, protest and persuasion and the use of citizen journalism (including petitions, grass-roots manifestoes, letter writing campaigns, open letters to newspapers, etc.). Students will be expected to write creatively and persuasively about social change and think about issues such as: what role should writers play in the framing and mediation of issues, social norms and negotiating the relationship between the personal and the political? (3 credits)

English 395: Senior Thesis II
This is the second part of a course in which the students are required to write a 8,000-word thesis, or a 6,000 word thesis if accompanied by a strong multimedia component. It forms a fundamental component of the BA Hons in English curriculum, serving both its pathways, which offers students the opportunity to cultivate the abilities and skills necessary for the realization of a medium-scale research project, from the formulation of the initial research question to its final submission. The course offers an integrative, project-focused approach deemed particularly useful both to a wide variety of professional settings and to the advancement to graduate studies. (3 credits)

European Studies 210: Foundations of European Integration
This module will expose students to the historical, political and institutional developments of the European Union. It introduces key developments, institutions and policies, examines the theoretical framework of European integration, and studies the European Union as a global actor, with specific reference to its enlargement process and external relations. (3 credits)

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. (3 credits)

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. (3 credits)

History 221: Global Modernities: World History Since 1900
This course examines global history from 1900's to the present, addressing key themes and trends in the political, cultural, social, and intellectual landscapes of the period. While emphasis will be on interpreting the century's historical trajectories, the course will also seek to historicize globalization, evaluate the concepts of globality and transnationalism, and study critical responses to globalization. (3 credits)

History 301: History of Ancient Greece
This course presents a survey of ancient Greek history from the Minoan through the Hellenistic period. The course follows a broad chronological account, but at the same time strongly emphasizes thematic trends and various aspects of social, economic and ideological history, including such institutions and values as political ideas, drama, city states, scientific and philosophical inquiry, trade, colonies, daily life, and gender. A variety of primary and secondary source materials will be employed to explore better who the ancient Greeks were and what their legacies have been. (3 credits)

Humanities 120: Understanding Greek life and culture
The course provides an understanding of contemporary Greek life and what it means to be Greek. It does so by examining the practices and creations of Greek culture, as well as by identifying and understanding the main figures of Greek life and the political scene through time. In addition, it develops students' intercultural and communicative competency so that they can interact both locally in Greece and in the global community. Indicative content areas: Modern Greek language (acquisition of effective Modern Greek communication skills for daily use), Greek culture (language, art, cinema, music and customs), the Modern Greek state structure (background, historical development, public administration, and political parties), figures and Institutions, Greece as pluralistic society(the Orthodox church, family, community and values, migration, minorities), national identity (nation-building, ethnicity, and Greeks within Europe, the Balkans and the world) (3 credits)

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. (3 credits)

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. (3 credits)

Politics 101: Contemporary Politics
The purpose of this course is threefold. First, it explores various dimensions of what political scientists call "governance" and what psychologists call "Machiavellian Intelligence," namely those instances in our daily lives where humans, by their very nature, engage in activity one might call "political." Second, the course examines different aspects of the formal, systematic study of political phenomena, commonly known as the academic discipline of political science. Finally, it considers basic elements of negotiation, from simple exchanges with neighbors to formal diplomatic relations in contemporary international relations. (3 credits)

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. (3 credits)

Politics 202: Political Theory
The purpose of this course is to introduce students to political ideas and their different interpretations in modern times. The course will also focus on various key themes and concepts, such as freedom, justice, rights, and sovereignty, and on classic modern schools of political thought. Emphasis will be given to expositions of theory in its historical, social, economic and political context. (3 credits)

Politics 350-351: Senior Thesis
An intensive, two-semester research project guided by one or more ACT faculty.

Psychology 204: Social Psychology
This course aims to help students understand interaction – how we are influenced to think, act, and feel in order to gain greater awareness of how the social animal man is driven. Topics include group processes and influences, persuasion and its techniques, how we conform, and tactics of conformity. Concepts presented will be exemplified through evidence from everyday life. Communication and non-verbal communication, their significance, and techniques employed for both are considered. Students are given the opportunity to understand concepts presented through experimentation and are also required to undertake questionnaire surveys. Research conducted in both the United States and Europe is presented. (3 credits)

DIVISION OF TECHNOLOGY & 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. (3 credits)

Computer Science 106: Introduction to Programming II – Object oriented programming
The course provides a systematic coverage of Object Oriented Modelling and Applications. Topics include Object Models, Object Class Design, Inheritance and Polymorphism, Software Reuse with Classes, Application Modelling, Simulation with Object Classes, and Business Process Modelling with Objects. Object-oriented programming (OOP) is a revolutionary concept that changed the rules in computer program development. OOP is organized around "objects" rather than "actions", data rather than logic. Historically, a program has been viewed as a logical procedure that takes input data, processes it, and produces output data. The programming challenge was seen as how to write the logic, not how to define the data. Object-oriented programming takes the view that, "what we really care about:", are the objects we want to manipulate rather than the logic required to manipulate them.(3 credits)

Computer Science 107: Multimedia I
This course is an introduction to digital multimedia. All media components (digital pictures/graphics, text, animation, sound and digital video) are introduced and their parameters defined and studied. Software multimedia development tools necessary for the creation or capture of digital media are presented, and students acquire hands-on experience with a package for each media category. Hardware essential for the capture/creation of the media is also presented. Multimedia project design parameters are examined and applied to a student capstone project. (3 credits)

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. (3 credits)

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. (3 credits)

Computer Science 206: Web Development
COMP SCI 206 is an introductory course for beginning web designers. We will explore some essential concepts related to the creation of effective web sites. In the last portion of the course we will concentrate on client-side scripting using the programming language JavaScript. This course aims at introducing students the basic web design guidelines, Fundamentals of Hyper Text Markup Language (HTML), and how to use a Simple HTML Editor as well as Web Authoring Tools. Also, one of the main goals of the course will be to understand what scripting languages are and to be able to develop scripts. (3 credits)

Computer Science 215: Data Structures
This course provides an introduction to modeling with data structures, and considers principles of structured and object oriented programming as well as introducing algorithms used for data structures. Topics include Object Class Hierarchies, Procedural Programming with Objects, Management of Data Structures, Introduction to Modeling and Simulation, and Object Class Programming. (3 credits)

Computer Science 230: Introductory Systems Programming
The course continues from CS105, Structured Programming, aiming to making students familiar with a variety of fundamental software engineering challenges which can be solved by developing the appropriate software algorithms. The course furthers algorithmic skills with increased emphasis on systems programming. More elaborate data structures are manipulated and the role of libraries accessing Operating System resources (Disk, I/O) is examined. In this manner the course serves as a bridge between the Programming Fundamentals and the Computing Systems program threads. The course employs a high-level language (C++) and investigates structured programming as follow-up to the introductory course in programming. More elaborate structures are learned and employed, in order to solve a wide range of tasks. Intricacies of the C/C++ languages are investigated and related to computer architecture (pointers, variable addresses, memory allocation). The course, in addition to furthering algorithmic thinking skills, also serves as the introductory course for the Computing Systems program thread, as the relationship of the high level language with the underlying computer system is investigated and applied to system programming tasks involving I/O with a variety of external devices (user interaction, storage, microcontrollers). (3 credits)

Computer Science 312: Database Management Systems
This course offers a systematic coverage of modern Database Computing theory and technology. Topics include Relational Algebra, Data Modeling, Database Design, Concurrency and Locking, Client-Server Database Management Systems, Interface Design, trends in Database Systems, combination of Object Oriented Modeling, and Relational Databases. The course is based on a modern client design tool and requires Event-Driven Programming. (3 credits)

Computer Science 321: Operating Systems
This course deepens understanding of how contemporary computing systems are structured and, in particular, supported by an Operating System. It is a culmination course within the Computing Systems programme thread. Operating Systems are the brain of any computing system. They handle the body/DNA (hardware) as well as behavior (usage of system by user). Following rapid to revolutionary technological developments the field of Operating Systems also undergoes tremendous changes, which constantly evolve the conception of an OS and of course the technological challenges involved in its implementation. The course aims at outlining the role of an OS in a diachronic way while comparing and contrasting design choices spanning the evolution of the field. It aims at defining fundamental needs that a von Neumann machine has from the Operating System in order to be functional, optimal and attractive to the user. The course explains Operating Systems architecture and examines trade-offs involved in different, evolving systems. It further examines diachronic as well as contemporary issues involved in Operating System design by comparing and contrasting relevant design and algorithmic choices. The course involves lab work: Communication with the OS at a low level via a Linux shell and programming tasks addressing aspects of Operating System design and implementation. (3 credits)

Computer Science 350: Software Engineering
After successfully finishing this course students are expected to have in-depth knowledge of all phases of the software engineering lifecycle, i.e. requirements engineering and software design, software design, implementation, verification and validation, quality assessment, software re-engineering, and software reverse engineering methods. In addition to that, students are expected to acquire skills related to communication with the customer, teamwork, time management and global software development.(3 credits)

Computer Science 412: Object Oriented Programming
The course revisits Object Oriented application development methodology at the Senior level, examining its effectiveness in the life cycle of professional applications and software reuse through the adoption of Object Oriented Design Patterns. It presupposes the knowledge earned through the introductory line of the Programming Fundamentals program thread and follows level 5 modules relating to Data Modeling (CS 312) and Systems Design (CS450) while specializing them within the context of Web Development. Currently CSC 325 (Distributed Systems) is a necessary prerequisite concerning web deployment technologies. The module mostly emphasizes the employment of OO concepts to Web Development yet it is of general enough nature for a level 6 module as the design patterns examined are applicable to a wide range of technologies and application domains.(3 credits)

Computer Science 450: System Analysis and Design
The module introduces the waterfall model for system/application development and the formal tools employed in its various stages. The objectives of the module are to:
• Provide formal tools for functional and non-functional requirements collection and documentation (ERD, UML, DFD, STD's)
• Define the role of the systems analyst and designer.
• Build project management and interpersonal communication skills that the system analyst must have.
• Explain the methodologies that are used for systems analysis and design.
• Follow through the waterfall model (and discuss deviations therefrom), presenting the relevant tools at each stage.
• Provide the problem solving background for resolving trade-offs inherent in design.
• Present principles of quality and correctness testing.
• Provide students the opportunity to work as a team of analysts and designers in a project to implement the taught methodologies.
Students develop technical, analytical and business skills that support the pursuit of professional careers and advanced computer science studies.(3 credits)

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. (4 credits)

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. (3 credits)

Mathematics 115: Business 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. (3 credits)

Mathematics 120: Calculus I
This course provides a solid foundation in Calculus concepts, tools and techniques for the student entering Science and Engineering fields. The course covers definition, calculation, and major uses of the derivative, as well as an introduction to integration. Topics include limits; the derivative as a limit; rules for differentiation; and formulas for the derivatives of algebraic, trigonometric, and exponential/logarithmic functions. Also discusses applications of derivatives to motion, density, optimization, linear approximations, and related rates. Topics on integration include the definition of the integral as a limit of sums, anti-differentiation, the fundamental theorem of calculus, and integration by the U-substitution and Integration by parts technique. The course emphasizes conceptualization, modeling, and skills. There is a concentration on multiple ways of viewing functions, on a variety of problems where more than one approach is possible, and on student activity and discussion. (3 credits)

Sea Sail 101: Introduction to Sea Sailing

The aim of this course is to provide the basic yachting skills so that successful students will be safety conscious, have a basic knowledge of sailing and be capable of taking a yacht out without an Instructor on board in light winds in protected waters. (3 credits)