



Bsc (Hons) in BUSINESS COMPUTING

In partnership with:



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1. WELCOME AND INTRODUCTION

WELCOME!

Dear Student,

This Handbook is intended to provide a concise reference and guide for all Anatolia American University ULE (AAU) students. Included herein are brief statements of the university's policies applicable to and of interest to all university constituencies.

This guide is intended to address some of the common academic and student life questions and concerns that are likely to arise during your years at AAU. Its purpose is not merely to lay out the policies of academic life, but also to point out ways of thinking about your education. Planning carefully and looking ahead will enable you to maximize your opportunities at the university. Knowing when and where to find guidance and counsel is important in ensuring that your educational choices are well-considered and make sense in the context of your larger academic goals.

We do assume, however, that you will seek out the help you need. This guide has been designed to help you do just that. Please read it, keep it, and use it as a reference throughout your academic career.

With best regards,

Dr. Stamos Karamouzis
AAU Provost

2. LIST OF PROGRAMME DIRECTOR AND ACADEMIC STAFF

INTERIM CHAIR

Dr. Vagelis Chatzistavros

Assistant Professor (Computer Science)

Dipl,Electrical and Computers Engineering, Democritus University of Thrace; MSc, Communication Network, Democritus University of Thrace; PhD, Electrical and Computers Engineering, Democritus University of Thrace

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ACADEMIC STAFF (ALPHABETICAL ORDER)

Dr. Astaras, Alexandros

Assistant Professor (Computer Science)

B.A. in Physics, Oberlin College, Oberlin, USA; PhD in Electronics Engineering, The University of Edinburgh, Edinburgh, Scotland, UK

Dr. Baglavas, Grigoris

Assistant Professor (Computer Science)

BSc, Mathematics, Aristotle University of Thessaloniki; MSc, Telematics, University of Sheffield; PhD, Computer Science, University of Macedonia

Mr. Christodoulou, Christos

Adjunct Instructor (Computer Science)

BSc., Physics, Aristotle University of Thessaloniki, Greece; MSc., Information Technology, University of Aston in Birmingham, Birmingham, U.K.

Dr. Daskalogiannis, Vasilios

Assistant Professor (Mathematics)

BS, Mathematics, Aristotle University of Thessaloniki, Greece; MSc in Pure Mathematics, Aristotle University of Thessaloniki, Greece; PhD, Mathematics, Department of Mathematics of the Aristotle University of Thessaloniki

Dr. Kanakoglou, Konstantinos

Assistant Professor (Mathematics - Physics)

B.Sc. in Physics, Aristotle University of Thessaloniki, Greece; M.Sc. in Pure Mathematics, Aristotle University of Thessaloniki, Greece; Ph.D. in Mathematical Physics, Aristotle University of Thessaloniki, Greece

Dr. Karamouzis, Stamos

Professor (Computer Science)

B.Sc. in Computer Science, Christopher Newport College, USA; M.Sc. in Computer Science, The College of William and Mary, USA; Ph.D. in Computer Science, The College of William and Mary, USA

Dr. Victoratos, Iosif

Adjunct Professor (Computer Science)

BS.,MSC., Computer Engineering and Informatics, University of Patras, Greece; MSc., Informatics and Management, Aristotle University of Thessaloniki, Greece; Ph.D., Semantic Web Technologies, Aristotle University of Thessaloniki, Greece.

3. NAME, POSITION AND INSTITUTION OF THE EXTERNAL EXAMINER(S) INVOLVED IN THE PROGRAMME

- Dr. Antisthenis Tsompanas, University of the West of England
- Dr. Paul Neve, Kingston University London

4. INTRODUCTION TO THE PROGRAMME

The degree in Business Computing is a hybrid program that provides an excellent blend of Business knowledge and computing technologies. The program focuses on fundamental areas of Business (Management, Marketing, Accounting, Finance and Economics) and covers a breadth of Information Technologies (programming, databases, multimedia, networking, web development). Graduates of the program will have the skills and training needed to understand Business functions, to analyse business-user information needs and to design and implement information systems.

The B.Sc. in Business Computing prepares the student for a career in the field of Computer Science and its applications in the field of Business. The program develops broadly educated and competent graduates ready to pursue professional careers or graduate studies in either Business or Computer Science.

The program plays an emphasis on technology-based teaching. A Learning Management System (LMS) is used in a number of modules as communication, coordination and dissemination tools.

Training in research methods and a final year capstone project provide the theoretical and practical framework for successful performance of program graduates in industry or academia.

The program serves the following fundamental aims:

- To provide knowledge and the cognitive foundation expected of a graduate of higher education entering the industry or continuing in academia.
- To provide work opportunities in the fields of Business Studies and/or Computer Science by combining academic theory, practical implementation of skills and exposure to Information Technology.
- To develop knowledge, understanding, problem solving skills and where possible experience in the field of Business Studies with emphasis in the application of Information Technology.
- To provide exposure, training and experience in major fields of computing especially pertaining to the office and enterprise: electronic office, programming, databases, multimedia, networking and the Web.
- To develop appreciation, assessment, analysis, design, usage and programming skills applied to enterprise problem solving through Information Technology.
- To produce reflective, market-aware members of contemporary society through exposure to multiple disciplines, their interrelationship and a wider breadth of learning
- To instill lifelong values, ethos and responsibility surrounding professional practice.

5. PROGRAMME SPECIFICATION

About the Programme

The mission of the School of Technology & Science is to offer innovative, leading edge technology programs in computing and academically sound service modules in the areas of Mathematics, Statistics and Science. As computing is a rapidly evolving discipline we continuously adapt our curriculum and facilities to meet the changing demands of the computing profession.

The computing programs target:

- Students that are interested primarily in computing and Business with an emphasis in Information Systems
- Students or professionals that are interested to specialize in certain areas in computing. In particular the certificate and special programs provide training opportunities for the wider community.

Modules are designed to broaden students' perspectives on the role of computing, mathematics, statistics and science in the modern world, while equipping them with both computer literacy and quantitative skills. A broad range of computing modules is offered, the majority having a strong laboratory component with emphasis on application.

The duration of study at AAU leading to the award of the Undergraduate Diploma is set at a minimum of four (4) years, which includes the time required for the preparation and evaluation of the undergraduate thesis. Students have the option to enroll in a maximum of two (2) courses during the summer study period. Depending on their professional pathway and career interests, students may choose to do an internship through Practicum 300, an elective module at Level 6 (common for all programs)

The Business Computing curriculum consists of four course levels: Enhancement, Level 4, Level 5 and Level 6. To obtain the degree, students are required to complete 40 courses, including free electives. During the final three (3) academic terms, students may participate in the Internship Course (PRAC 300). The undergraduate thesis is completed during the final year of study. Bachelor of Science in Computer Science.

Programme goals and competencies

The Programme aims to:

- Provide education in Business Computing, suitable either for a career in industry or for postgraduate studies. This education covers a broad range of knowledge and understanding across all relevant areas of the curriculum and enhances problem-solving skills and information literacy.
- Offer employment opportunities in the fields of Business Administration and/or Information Technology by combining academic theory, practical skill application, and exposure to Information Technology.
- Assist students in developing knowledge, understanding, problem-solving skills, and, where possible, experience in the field of Business Computing, with an emphasis on the application of Information Technology.

- Provide exposure, training, and experience in key areas of computing primarily related to office and business environments: office applications, programming, databases, multimedia, networking and the internet, and security.
- Contribute to the development of skills in evaluation, assessment, analysis, design, use, and programming, applied to solving business problems through information technology.
- Produce thoughtful, informed members of modern society through exposure to and interaction with multiple disciplines.
- Instill lifelong values, ethics, and responsibility regarding professional practice.

AAU Degree Competitive Advantage

An AAU graduate with the BSc (Hons) in Business Computing will have obtained a theoretical and practical adequacy in the field of IT application and design, a sound business domain knowledge and directly marketable skills through the ability to further obtain certifications popular technologies (CCNA, ORACLE).

Graduates of the program will be able to pursue careers in the areas of

- Software Development
- Database Management
- Information's Systems Analysis
- Business Processes

Special Features

The program does not concentrate only on the latest technologies, which at some point will become outdated, but provides students with excellent critical skills and systematic thinking that will allow them to become lifelong learners and succeed in a wide variety of technical and managerial positions. Students are prepared for a successful career in the field of computing and its applications and/or additional study in computing or Business at the graduate level.

Computing and Teaching Facilities

- Modern computer facilities available to the students.
- All the necessary software for programing, multimedia, web-development and instruction is available in the labs for you to use.
- Students have access to printing and scanning devices.
- Spacious classrooms, equipped with a PC and projector. All classrooms are connected to a high-speed campus network and are connected to the internet.
- Students have abundant personal and secure server storage area, accessible from campus and home and are provided with email and Moodle accounts.

- Wi-Fi is available around the campus for laptop and mobile internet access.
- Hardware and software technical support is available and is of first-rate level

6. PROGRAMME OF STUDY AND INTENDED LEARNING OUTCOMES

Programme structure and learning outcomes

Enhancement modules

These modules ensure that students receive a well-rounded, skills-based education and may also include modules that enhance knowledge and skills in their subject area. Employers look for candidates who can analyze information, collaborate and adapt. The Enhancement modules equip students with highly desirable skills that maximize their learning experience and enhance both personal and professional growth, preparing them to navigate an ever-changing world. As part of their co-curricular studies, students are expected to master foundational skills that:

Develop Critical Skills

The Enhancement module build essential skills like critical thinking, communication, problem-solving, and analytical reasoning.

Encourage Interdisciplinary Thinking

By taking modules in sciences, humanities, and social sciences, students learn how different fields connect, making them more adaptable and innovative thinkers.

Boost Career Readiness

Employers look for well-rounded candidates who can analyze information, collaborate, and adapt—skills reinforced through general education modules.

Promote Lifelong Learning

These modules expose students to new subjects they might not have explored otherwise, helping them become more curious and engaged learners.

Indicative list (not limited to) of the Enhancement modules, including free electives:

- English 101: Composition I
- Nutrition 130: Fundamentals of Human Nutrition

- Art 130: Introduction to Photography, from the analog to digital era
- Business 241: International Business Law
- Accounting 101: Financial Accounting
- Accounting 102: Managerial Accounting
- Computer Science 180: Discrete Structures
- Philosophy 203: Ethics

Programme Structure – Enhancement Modules

Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
MATH 101 – Elements of Finite Mathematics	15			N/A	Varies by students cohort entrance (Fall or Spring)
PHIL 101 - Introduction to Philosophy and Critical Reasoning	15				
ENG 102 - Composition II	15				
CSC 192 – Object Oriented Programming with Python	15				
POL 101 - Contemporary Politics	15				
ENG 204 - Business/Professional Communication	15				
PSY 101 - Introduction to Psychology	15				
HIS 120 - Contemporary Politics	15				

Learning Outcomes

3A. Knowledge and understanding

Learning outcomes:	Learning and teaching strategy/ assessment methods
Upon completion of the level, students will demonstrate: A1. An awareness of foundational concepts, key theories, and terminology in relevant subject areas (including mathematics, digital technologies, humanities, and social sciences). A2. An understanding of how people think, learn and behave, and how societies organize and govern themselves.	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts

Programme Structure – Enhancement Modules

Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
		- directed readings from textbooks and papers - Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: - self-assessment questions and exercises, included in the teaching texts - programming tasks, computer-based investigations and open-ended project work - feedback and guidance from an instructor; tutorials, revisions and in-class activities - e-mail and individual instructor-learner conferences - Study and project guides. Assessment of learning: An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken. Tools to be used to achieve this will include some or all from the following: - Instructor-Marked summative formal examinations - Instructor-Marked summative projects - Instructor-Marked summative presentations - Instructor-Marked formative assignments/assessment - Instructor-Marked formative projects			

3B. Cognitive skills

Learning outcomes:	Learning and teaching strategy/ assessment methods
Upon completion of the level, students will be able to: B1. Interpret information, data and arguments critically, drawing on both quantitative and qualitative reasoning. B2. Evaluate different perspectives, theories, or solutions and make informed judgements	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work • feedback and guidance from an instructor; tutorials, revisions and in-class activities • e-mail and individual instructor-learner conferences • Study and project guides. Assessment of learning:

3B. Cognitive skills

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

3C. Practical and professional skills

Learning outcomes:

Upon completion of the level, students will demonstrate:

C1. skills to assess and use a basic set of digital tools (e.g., word processing, spreadsheets, research databases) for academic, research, or professional projects.

C2. skills to follow discipline-specific procedures (e.g., mathematical modeling, experimental methods, information retrieval) and apply them in practical contexts.

C3. an ability to produce well-organized, professional-quality communications (written, oral, visual)..

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material.

Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

3C. Practical and professional skills

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

3D. Key/transferable skills

Learning outcomes:	Learning and teaching strategy/ assessment methods
Upon completion of the level, students will be able to: D1. Plan and review study plans while collaborating effectively in diverse teams, showing adaptability and interpersonal communication. D2. Comprehend and communicate ideas clearly in both writing and speaking, tailoring language for academic, professional, and interdisciplinary audiences. D3. Demonstrate an understanding of the role of professional bodies and lifelong learning strategies, self-reflection, and adaptability to new challenges.	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work • feedback and guidance from an instructor; tutorials, revisions and in-class activities • e-mail and individual instructor-learner conferences • Study and project guides. Assessment of learning:

3D. Key/transferable skills

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

Programme Structure - LEVEL 4

Compulsory modules	Credit points	Optional modules	Credit points
CSC 105 - Structured Programming	15		
CSC 106 - Object Oriented Programming	15		
CSC 205 - Business Data Management	15		
CSC 215 - Data Structures	15		
MATH 115 - Business Calculus	15		
STAT 210 - Statistics with R	15		
ECON 101 – Introductory Macroeconomics	15		
MNGT 101 – Introduction to Management	15		

Intended learning outcomes at Level 4 are listed below:

Learning Outcomes – LEVEL 4

3A. Knowledge and understanding

Learning outcomes:	Learning and teaching strategy/ assessment methods
A. Knowledge and understanding – On completion of this level you will have: 1) an understanding of some fundamental principles, concepts and techniques underlying Business Computing; 2) an awareness of the range of models and languages to support the analysis and design of Business Computing systems; 3) an awareness of the range of situations in which Business Computing systems are used and the ways in which people interact with them; 4) an awareness of the ethical, social and legal issues that can be associated with the deployment of Business Computing systems; 5) an awareness of major trends in Business Computing and of the implications of these trends. 6) an awareness of Business Processes and be able to demonstrate understanding in the areas of: Accounting, Finance, Management and Marketing	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work • feedback and guidance from an instructor; tutorials, revisions and in-class activities • e-mail and individual instructor-learner conferences • Study and project guides.

Learning Outcomes – LEVEL 4

3A. Knowledge and understanding

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3B. Cognitive skills

Learning outcomes:

Learning and teaching strategy/ assessment methods

B. Cognitive skills – On completion of this level you will be able to:

- 1) apply key concepts from Business Computing in specified contexts;
- 2) apply appropriate techniques and tools for, problem-solving, designing and testing Business Computing systems;
- 3) carry out a project in Business Computing that applies and extends your knowledge and understanding;

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material.

Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers

3B. Cognitive skills

- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3C. Practical and professional skills

Learning outcomes:

C. Key skills – On completion of this level you will be able to:

- 1) communicate information, arguments ideas and issues clearly and in appropriate ways;
- 2) work in a group, communicating effectively in a distance setting where the communication is computer-mediated;
- 3) work independently, planning, monitoring, reflecting on and improving your own learning;
- 4) find information from a variety of sources, using information technology where necessary;
- 5) use appropriate numerical techniques to solve problems.
- 6) apply suitable techniques to solve simple Business Computing problems.

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material.

Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

3C. Practical and professional skills

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

3D. Key/transferable skills

Learning outcomes:

D. Practical and/or professional skills – On completion of this level you will be able to:

- 1) develop and test technology simple Business Computing systems;
- 2) plan and organise yourself and your work appropriately;
- 3) undertake on-going learning in order to keep up to date with Business Computing;

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material.

Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

3D. Key/transferable skills

4) identify the ethical, social and legal issues that may arise during the development and use of Business Computing systems;

5) use appropriate professional ICT tools, as appropriate, to help you learn effectively.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

Programme Structure - LEVEL 5			
Compulsory modules	Credit points	Optional modules	Credit points
CSC 206 - Web Development	15		
CSC 306 - Advanced Web Development	15		
CSC 312 - Database Management Systems	15		
CSC 340 - Artificial Intelligence	15		
CSC 450 - System Analysis and Design	15		
FIN 201 - Financial Management	15		
MNGT 201 - Organisational Behaviour	15		
RES 299 - Research Methods	15		

Learning Outcomes – LEVEL 5

3A. Knowledge and understanding

Learning outcomes:	Learning and teaching strategy/ assessment methods
A. Knowledge and understanding – On completion of this level you will have: 1) a knowledge and understanding of relevant principles and concepts underlying Business Computing; 2) an ability to apply correctly common techniques for the design and development of Business Computing systems; 3) an awareness of the range of situations in which Business Computing systems are used and the ways in which people interact with them; 4) an appreciation of the ethical, social and legal issues that can be associated with the deployment of Business Computing systems; 5) an awareness of major trends in Business Computing and of the implications of these trends; 6) the ability analyse Business Processes and be able to apply	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work

Learning Outcomes – LEVEL 5

3A. Knowledge and understanding

understanding in the areas of: Accounting, Finance, Management and Marketing.

- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3B. Cognitive skills

Learning outcomes:

Learning and teaching strategy/ assessment methods

B. Cognitive skills – On completion of this level you will be able to:

- 1) apply correctly key Business Computing concepts in a range of contexts;
- 2) apply appropriate techniques and tools for abstracting, modelling, problem-solving, designing and testing Business Computing systems;
- 3) compare and contrast, specifications and implementations of Business Computing systems and simple hardware systems;
- 4) reflect on what you achieve in your studies, and how you might improve your performance.
- 5) understand the fundamental commercial and economic concepts and managerial techniques throughout the lifecycle of an information system

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

3B. Cognitive skills

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3C. Practical and professional skills

Learning outcomes:

- C. Key skills** – On completion of this level you will be able to:
- 1) communicate information, arguments and ideas effectively, using the styles and language appropriate to your subject, purpose and audience;
 - 2) work in a group, communicating effectively in a distance setting where the communication is computer-mediated;
 - 3) work independently, planning, monitoring and reviewing your own learning;
 - 4) find, assess and use information from a variety of sources, using information technology where necessary;
 - 5) use appropriate numerical and analytical techniques to solve problems;

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

3C. Practical and professional skills

- 6) understand a range of technological problems and apply suitable techniques for solving them.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3D. Key/transferable skills

Learning outcomes:

D. Practical and/or professional skills – On completion of this level you will be able to:

- 1) analyse, design, evaluate and/or test Business Computing systems;
- 2) recognise and record your skills and knowledge to support your personal and/or your career goals;
- 3) demonstrate the ability to undertake ongoing learning in order to keep up to date with Business Computing;
- 4) identify and explain the ethical, social and legal issues that may arise during the development and use of Business Computing systems;

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

3D. Key/transferable skills

- 5) use appropriate professional ICT tools to help you learn effectively.
- 6) work as a member of a team consisting of members with distinctive roles

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

Programme Structure - LEVEL 6

Compulsory modules	Credit points	Optional modules	Credit points
CSC 322 - Computer Networks I	15	CSC 219 - Video Game Design	15
CSC 325 - Distributed Applications	15	CSC 321 - Operating Systems	15
CSC 443 - Thesis I	15	CSC 330 - Introduction to Mobile Robotics	15
CSC 444 - Thesis II	15	CSC 333 - Computer Networks II	15
MNGT 312 - Operations Management	15	CSC 412 - Object Oriented Design Patterns	15
		CSC 421 - Computer Systems Security	15
		CSC 422 - Advanced DBMS	15
		ECON 332 - International Economics	15

		FIN 220 - Investment and Portfolio Management	15
		FIN 232 - International Finance	15
		MKTG 301 - Entrepreneurial and Corporate Market	15
		MKTG 303 - Tourism e-business	15
		MKTG 318 - Global Marketing	15
		MKTG 320 - Marketing Research	15
		MKTG 324 - e-Marketing	15
		MKTG 330 - Consumer Behaviour	15
		MAN 302 - Revenue Management	15
		MAN 303 - Events Management	15
		MAN 305 - HR in Hotel and Tourism	15
		MAN 306 - Tourism and Real Estate Management	15
		MAN 341 - Business in Greece and the EU	15
		PRACTICUM 300 - Practicum	15

Intended learning outcomes at Level 6 are listed below:

<u>Learning Outcomes – LEVEL 6</u>	
3A. Knowledge and understanding	
Learning outcomes:	Learning and teaching strategy/ assessment methods
A. Knowledge and understanding – On completion of this level you will have: 1) a broad critical understanding of the fundamental principles, concepts and techniques underlying Business Computing; 2) an understanding of a range of models and languages to support the analysis and design of Business Computing systems; 3) an understanding of the range of situations in which Business Computing systems are used, the ways in which people interact with them, and the possibilities and limitations of such systems; 4) a critical awareness of the ethical, social and legal issues that can be associated with the development and deployment of Business Computing systems; 5) an awareness of major trends in Business Computing and of the implications of these trends. 6) a critical understanding of Business Processes and be able to demonstrate understanding in a broad set of: Accounting, Finance, Management and Marketing areas	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work • feedback and guidance from an instructor; tutorials, revisions and in-class activities • e-mail and individual instructor-learner conferences • Study and project guides. Assessment of learning: An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken. Tools to be used to achieve this will include some or all from the following: • Instructor-Marked summative formal examinations • Instructor-Marked summative projects

Learning Outcomes – LEVEL 6

3A. Knowledge and understanding

- Instructor-Marked summative presentations
 - Instructor-Marked formative assignments/assessment
- Instructor-Marked formative projects

3B. Cognitive skills

Learning outcomes:	Learning and teaching strategy/ assessment methods
B. Cognitive skills – On completion of this level you will be able to: 1) apply and critically evaluate key Business Computing concepts in a range of contexts; 2) select and apply appropriate techniques and tools for abstracting, modelling, problem-solving, designing and testing Business Computing systems, and be aware of the limitations involved; 3) compare, contrast, critically analyse and refine specifications and implementations of Business systems and simple hardware systems; 4) devise and carry out a project in Business Computing that applies and extends your knowledge and understanding, and critically reflect on the processes involved and the outcomes of your work. 5) demonstrate competence in the choice and use of complex and specialised material for advanced writing on a final empirical project 6) understand advanced commercial and economic concepts and managerial techniques throughout the lifecycle of an information system	Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work. Tools to be used to achieve this will include some or all from the following: • printed and online teaching texts • directed readings from textbooks and papers • Specialised software tools. Support of learning: Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor. Tools to be used to achieve this will include some or all from the following: • self-assessment questions and exercises, included in the teaching texts • programming tasks, computer-based investigations and open-ended project work • feedback and guidance from an instructor; tutorials, revisions and in-class activities • e-mail and individual instructor-learner conferences • Study and project guides. Assessment of learning:

3B. Cognitive skills

- 7) identify and assess possible security issues throughout the lifecycle of an information system

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3C. Practical and professional skills

Learning outcomes:

C. Key skills – On completion of this level you will be able to:

- 1) communicate information, arguments, ideas and issues clearly and in appropriate ways, bearing in mind the audience for and the purpose of your communication;
- 2) work in a group, communicating effectively both using digital communication and in face-to-face contexts;
- 3) work independently, planning, monitoring, reflecting on and improving your own learning;
- 4) find, assess and apply information from a variety of sources, using information technology where necessary;
- 5) select and use accurately, appropriate numerical and analytical techniques to solve problems;
- 6) recognise and understand a range of technological problems and select suitable techniques for solving them.
- 7) demonstrate the ability to carry out an empirical study involving various methods of data collection (experiments, observation, questionnaires, interviews etc.), set-up a major project and write an argument

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences
- Study and project guides.

3C. Practical and professional skills

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

3D. Key/transferable skills

Learning outcomes:

D. Practical and/or professional skills – On completion of this level you will be able to:

- 1) analyse, design, evaluate and/or test Business Computing systems, using appropriate simulation and modelling tools where appropriate;
- 2) plan and organise yourself and your work appropriately, including keeping systematic records of work in progress and outcomes;
- 3) demonstrate the ability to undertake on-going learning in order to keep up to date with Business Computing;
- 4) identify and address the ethical, social and legal issues that may arise during the development and use of Business Computing systems;
- 5) use appropriate professional ICT tools to support your work.
- 6) work as a member of a team consisting of members with distinctive roles

Learning and teaching strategy/ assessment methods

Guided teaching environment (Lectures & labs) is the principal method of delivery for the concepts, principles and skills involved in the outcomes. Students are also directed to reading from textbooks, academic papers and other relevant material. Understanding is reinforced by means of exercise classes, discussion groups, laboratories, assignments and project work.

Tools to be used to achieve this will include some or all from the following:

- printed and online teaching texts
- directed readings from textbooks and papers
- Specialised software tools.

Support of learning:

Learning is supported outside the classroom with the use of the learning management system Moodle, instructor office hours, sample answers to assessment and extra lectures as seen appropriate by the instructor.

Tools to be used to achieve this will include some or all from the following:

- self-assessment questions and exercises, included in the teaching texts
- programming tasks, computer-based investigations and open-ended project work
- feedback and guidance from an instructor; tutorials, revisions and in-class activities
- e-mail and individual instructor-learner conferences

3D. Key/transferable skills

- Study and project guides.

Assessment of learning:

An assessment of the understanding of underlying concepts and principles forms part of the overall assessment of final exams/projects submitted/taken.

Tools to be used to achieve this will include some or all from the following:

- Instructor-Marked summative formal examinations
- Instructor-Marked summative projects
- Instructor-Marked summative presentations
- Instructor-Marked formative assignments/assessment

Instructor-Marked formative projects

7. CURRICULUM MAP BUSINESS COMPUTING

This table indicates which study units assume responsibility for delivering and assessing particular programme learning outcomes.

Level	Study module/unit	Programme outcomes														
		A 1	A 2													
Enhancement modules	Politics 101	✓	✓													
	CS 192	✓														
	History 120	✓	✓													
	English 102	✓														
	English 204	✓	✓													
	Math 101	✓	✓													
	Philosophy 101	✓	✓													
	Psychology 101	✓	✓													

Level	Study module/unit	Programme outcomes														
		A 1	A 2	A 3	A 4	A 5	A 6		B 1	B 2	B 3					
4	CSC 105 - Structured Programming	✓	✓	✓						✓						
	CSC 106 - Object Oriented Programming	✓	✓	✓		✓			✓	✓	✓					
	CSC 205 - Business Data Management	✓	✓	✓					✓	✓	✓					
	CSC 215 - Data Structures		✓	✓					✓	✓						
	MATH 115 - Business Calculus	✓								✓	✓					
	STAT 210 - Statistics with R	✓				✓			✓	✓						
	ECON 101 - Introductory Macroeconomics	✓				✓			✓							
	MNGT 101 - Introduction to Management	✓					✓									

Level	Study module/unit	A 1	A 2	A 3	A 4	A 5	A 6		B 1	B 2	B 3	B 4	B 5		C 1	C 2	C 3	C 4	C 5	C 6		D 1	D 2	D 3	D 4	D 5	D 6
5	CSC 206 - Web Development	✓	✓			✓			✓	✓	✓				✓		✓			✓		✓		✓			
	CSC 306 - Advanced Web Development	✓	✓			✓			✓	✓	✓				✓		✓			✓		✓		✓			
	CSC 312 - Database Management Systems	✓	✓			✓			✓	✓	✓				✓		✓			✓		✓		✓			
	CSC 340 - Artificial Intelligence	✓	✓			✓			✓	✓					✓		✓	✓	✓	✓	✓	✓	✓				
	CSC 450 - System Analysis and Design	✓	✓		✓	✓			✓	✓	✓						✓	✓		✓	✓	✓	✓			✓	
	FIN 201 - Financial Management						✓			✓										✓	✓						
	MAN 201 - Organisational Behaviour											✓	✓			✓	✓										
	RES 299 - Research Methods											✓	✓		✓	✓	✓	✓	✓	✓	✓			✓	✓		

Level	Study module/unit	Programme outcomes																												
		A 1	A 2	A 3	A 4	A 5	A 6		B 1	B 2	B 3	B 4	B 5	B 6	B 7		C 1	C 2	C 3	C 4	C 5	C 6	C 7		D 1	D 2	D 3	D 4	D 5	D 6
6	Compulsory Modules																													
	CSC 322 - Computer Networks I	✓	✓	✓		✓				✓	✓	✓			✓				✓		✓	✓			✓					
	CSC 325 - Distributed Applications	✓	✓	✓		✓			✓	✓		✓			✓				✓			✓			✓	✓				
	CSC 443 - Thesis I	✓	✓	✓		✓			✓	✓	✓	✓					✓		✓	✓		✓			✓	✓				
	CSC 444 - Thesis II	✓	✓	✓		✓			✓	✓	✓		✓				✓		✓	✓		✓	✓		✓	✓				
	MAN 312 - Operations Management						✓												✓		✓	✓			✓	✓				
	Optional Modules																													
	CSC 219 - Video Game Design	✓	✓	✓		✓				✓		✓							✓			✓							✓	
	CSC 321 - Operating Systems	✓	✓	✓		✓			✓	✓	✓				✓				✓		✓	✓			✓	✓				
	CSC 330 – Introduction to Mobile Robotics	✓	✓	✓		✓				✓	✓	✓						✓	✓	✓		✓	✓			✓				

[illegible]

8. MODULE SPECIFICATIONS

1. 1. Factual information			
Module title	English 102: Composition Writing II		
Module tutor	Dr. Filio Chasioti	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		
2. Rationale for the module and its links with other modules			
English 102 is designed to further critical reading and writing whilst emphasizing critical inquiry and research. In the first part of the module, students engage in reflective writing, conduct primary research and learn how to produce research based writing in formats appropriate to content, purpose, genre and audience. Working as researchers, class members will locate, read, evaluate, analyse, and synthesise appropriate sources as they develop and refine their research projects. To this end, research is emphasized as the path of inquiry not just information that comes from the library but also through observations, interviews and personal experience. In the second half of the module, students will be introduced to the mode of argumentation and argumentative strategies whilst demonstrating critical thinking and logical reasoning. In this part of the module, students are encouraged to take a stance on issues of public concern, so as to begin to view themselves as engaged citizens.			
3. Aims of the module			
Students in English 102 will develop writing and critical thinking abilities requisite to planning, elaborating and completing research papers. By the end of the module, students will be able to identify valid issues for research purposes and employ research methods to locate and record accurate, valid information relevant to an academic research project. In addition to developing common academic writing practices such as summarizing and paraphrasing, students will be able to judge the value of information including distinguishing between primary and secondary sources.			
4. Pre-requisite modules or specified entry requirements			
NA			
Indicative content			
English 102 is designed to improve academic writing and extend critical thinking skills developed in English 101. Students are requested to work as researchers and learn how to create logical arguments and write persuasively about an issue not only for their class members, but also for audiences beyond the classroom setting. It is assumed that all students will invest substantial time on self-study and language improvement. Module readings/sample research projects are provided to generate topics and to study as models for structure and style in composition.			

1. 1. Factual information			
Module title	ENGLISH 204: Business/Professional Communication		
Module tutor	Dr. Ian Kehoe	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		
2. Rationale for the module and its links with other modules			

This is a required module for all students. Students are given the opportunity to acquire essential professional communication skills, both oral and written in order for them to communicate effectively in their major field of study as well as preparing them for communication in the business world.
3. Aims of the module
This module aims to help students with professional writing and oral communication skills, guiding them through the principles of business and professional communication. Basic principles of email writing in various forms (e.g. to persuade, to complain, to instruct) as well as focus on business reports and proposals are covered. Students are encouraged to participate in class activities in order which further their spoken language abilities as well as to present an individual oral presentation on a subject of their choice.
4. Pre-requisite modules or specified entry requirements
English 102
Indicative content
The module focuses on professional reading writing and speaking skills and provides instruction in drafting and revising various forms of business and professional communication such as emails, proposals and reports. Through class discussions and other oral activities, students will have the opportunity to enhance their public speaking skills. The module covers all fundamental principles of professional writing, including a focus on appropriate grammar, mechanics and usage. Module readings/samples of professional writing are provided to generate topics and to study as models for structure and style in professional writing.

1. 1. Factual information			
Module title	History 120: The Modern World		
Module tutor	Dr. Joe Gratale	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		
2. Rationale for the module and its links with other modules			
This Module is part of the Humanities and Fine Arts Enhancement Requirements required for all students. It introduces students to major global historical developments from the 16 th century to the present, allowing them to acquire a broad understanding of the shaping of the modern world.			
3. Aims of the module			
This module sets out to explore and investigate a wide range of developments relating to modern global history. The module begins in the 1500s with the growing interaction among the world’s peoples, and concludes in the early twenty-first century with today’s highly integrated, but also uneven and divided world. In the main, we will consider the contributions of various individuals, societies, cultures, and communities to what is a seemingly endless flow of ‘stories’ and narratives. We will focus on an array of topics and themes such as: social change and revolution; patterns of cultural development and cross-cultural exchange; intellectual thought and systems of knowledge; forms of political organization and the politics of power; aspects of economic relations and technological advances; as well as issues related to war, justice, and peace. In order to constructively engage with such material this module will embrace a cross-disciplinary approach, embracing a range of domains from the social sciences and humanities. Alongside analyses of written texts, we will also consider various visual forms and media including photography, film, documentary, painting/sculpture, and architecture in order to locate different perspectives and responses to what constitutes the global historical experience.			
4. Pre-requisite modules or specified entry requirements			
No			
Indicative content			

week 1

Change in history: how is the contemporary world different from the one 500 years ago?

Columbus and the “discovery” of the Americas. Slavery in the New World.

week 2

The fall of the Byzantine Empire, and the rise of the Ottoman Empire. Muslims, Christians, and Jews in the Ottoman Empire

The Reformation and Counter-Reformation in Europe. The Thirty Years War (1618-48) and the birth of the modern states system

week 3

The Age of Absolutism. The Scientific Revolution and the Enlightenment. 18th century Europe and the French Revolution (I)

The French revolution (II). Napoleon; and the Napoleonic wars. The Congress of Vienna (1815) (I)

week 4

The Industrial Revolution. Europe and the World in the Age of Revolutions (1815-1848)

The Congress of Vienna (1815) (II); Europe and the World in the Age of Revolutions and Empires (1815-1914)

(deadline to submit writing assignment; by Sunday, 23:59)

week 5

“New Imperialism” and colonialism in Africa and Asia

Interstate rivalries in Europe, 1870-1914; the First World War (1914-18)

week 6

The “Greater War” (1918-23); peace at the end of WWI (1918-19); **1st short in-class test**

week 7

The Russian Revolution of 1917; the rise of communism; and the Russian civil war

Europe and the world in the interwar era: the “roaring ‘20s”; and the rise of totalitarianism: Fascism; Nazism; Stalinism

Week 8

The Second World War and its origins; genocide; and the Holocaust

The postwar world: The origins of the Cold War in Europe and the world

Week 9

Decolonization and the Cold War in the Third World

Postwar culture in the West: Sex, drugs and rock’n’roll; socialist societies (1950s-1980s)

Week 10

The late phase and end of the Cold War; global (dis)order in the 1990s and after 9/11

Class presentations

Week 11

Class presentations

Module overview and revision; **2nd short in-class test**

1. Factual information

Module title			
PHILOSOPHY 101- Introduction To Philosophy And Critical Thinking			
Module tutor		Level	Enhancement
Dr. Ian Kehoe			
Module type		Credit value	15
100% Face to face			
Notional learning hours: 150		Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours	

2. Rationale for the module and its links with other modules

The rationale of this module is to equip the students with the ability to see the fundamental questions that motivate the different disciplines in both social and positive sciences.

3. Aims of the module

The purpose of this module is to introduce students to the essential questions of philosophy and the varied ways in which philosophers have posed and answered these questions. They will be familiarized with asking questions about the fundamental dimensions of being and reality; questioning aspects of existence that we take for granted, While the module focused on the Western philosophical traditions, the class also introduces the ideas from the non-Western traditions such as Hinduism and Buddhism.

4. Pre-requisite modules or specified entry requirements

N/A

Indicative content

- 1. Introduction: What is philosophy? Subfields of philosophy. Open and closed questions.
- 2. Epistemology: How is knowledge possible? Belief, science and truth. The Skeptic's challenge.
- 3. Mind and Body: How are they related? Can computers think?
- 4. Self: What is the self? Consciousness and the subconscious. The question of personal identity.
- 5. Freedom and determinism: To what extent are we free? Reasons and causes.
- 6. God: Arguments for and against God's existence.
- 7. Essence and existence. Objective values and relativism.
- 8. The meaning of life.

1. Factual information

Module title	POLITICS 101: Contemporary politics		
Module tutor	Dr. Pavlos Koktsidis	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The purpose of this module 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.

3. Aims of the module

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. This module is concerned with contemporary politics on two distinct levels. First, it deals with those activities and issues of importance to anyone who is a member of a modern liberal democratic polity -- rights and responsibilities, voting and political participation, power, authority, and legitimacy, ideology and culture -- in short, political socialization and citizenship. Second, it examines how polities govern themselves and relate with other polities, through a study of the branches of government, of political parties and interest groups, and of different actors in international relations.

4. Pre-requisite modules or specified entry requirements

No

Indicative content

The module begins by recapitulating the work, methods and subfields of political science, major political ideologies, the concept of political culture, political communication and the processes of political socialization. The module then moves on to consider the parameters of political participation, the individual and the citizen in the political process, to the understanding of political groups (interest groups, political parties) as well as international politics and conflict resolution. It then considers lawmaking and the division of power, government at work, executives and bureaucrats, public policy and policy formation and the notion of justice

and legal cultures. It finally discusses different types of local, regional, provincial and federal governments, international government, the contemporary international system as well as political and economic globalisation and the prospects for global democracy.

Indicative readings from the textbook (see below):

Chapter 1 Politics, Setting the stage, pages 7-21

Chapter 3 The modern State, pages 65-77

Chapter 8 Political Culture and Political Socialization, pages 198-209

Chapter 11 Political Parties, pages 263-273

Chapter 12 Interest groups, pages 295-303

Chapter 14 Parliamentary government pages 327-339

Chapter 15 Presidential government pages 350-363

And readings uploaded on Moodle.

1. 1. Factual information			
Module title	PSY 101: Introduction to Psychology		
Module tutor	Dr. Chalkia Anastasia	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		
2. Rationale for the module and its links with other modules			
This is a required introductory level for both psychology and non-psychology majors.			
3. Aims of the module			
This module aims at providing a comprehensive introduction to the essential principles of the academic discipline of psychology by addressing such important topics as the history and evolution of psychology, biological basis of behaviour, memory and intelligence, personality, mental disorders and treatment, stress, coping and health and finally research methods and ethics in psychology. For each of the above topics the major theoretical approaches, research findings, and historical and contemporary trends in the science of psychology will be presented and explained. Students are encouraged to assess the contribution and applicability of psychological research to daily life through class discussions, presentations and written assignments.			
4. Pre-requisite modules or specified entry requirements			
N/A			
Indicative content			
– Introduction to the science of Psychology – Psychology Research – Biology and Behavior-The Brain – Developmental psychology – Sensation, perception, consciousness – Learning & memory – Decision Making I Cognition, Language, & Intelligence – Emotion & Motivation Culture – Social psychology – Personality – Psychological Measurement			

- Psychological Disorders & Therapies
- Psychological Health Positive Psychology
- Other areas of Psychology Current and future issues in Psychology

1. 1. Factual information

Module title	CSC 192: Object Oriented Programming with Python		
Module tutor	Dr. Chatzistavros Evangelos	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

This module serves as a foundational programming module with a strong emphasis on object-oriented programming (OOP) and software design principles. It is designed to equip students with practical software development skills using Python, one of the most versatile and widely-used programming languages in industry. The module addresses the growing demand for programming literacy across various professional fields, from data analysis to web development and scientific computing.

The module's placement within the degree scheme is strategic, serving as:

- A gateway to advanced programming concepts and specialized technical modules.
- A practical foundation for students pursuing careers in software development, data science, or technical analysis.
- An essential skill-building component for modern technological literacy.

Learning Context

This module emphasizes hands-on learning through practical coding exercises and real-world problem-solving. The structure allows for extensive practice and progressive skill development, moving from basic syntax to more complex programming concepts, with a strong focus on object-oriented design and software engineering practices.

3. Aims of the module

The primary aims of this module are to:

- 1. Develop Fundamental Programming Skills**
 - Master Python syntax and basic programming concepts.
 - Understand and apply computational thinking principles.
 - Develop problem-solving strategies using programmatic solutions.
- 2. Build Practical Software Development Capabilities**
 - Write clean, readable, and maintainable code using object-oriented principles.
 - Implement error handling and debugging techniques.
 - Use design patterns for class and data manipulation.
- 3. Enable Data Manipulation and Analysis**
 - Work with various data types and structures.
 - Process and analyze data using Python libraries.
 - Implement file handling operations for data input/output.
- 4. Foster Professional Programming Practices**
 - Develop a systematic approach to program design.
 - Apply best practices in code documentation.
 - Understand and implement basic software development methodologies.
- 5. Create Foundation for Advanced Programming**

- Introduce object-oriented programming concepts (classes, inheritance, polymorphism, encapsulation).
- Establish a basis for learning other programming languages.
- Prepare for advanced software development modules.

6. **Cultivate Real-World Application Skills**

- Solve practical programming challenges.
- Develop mini-projects based on real-world scenarios.

Learn to use third-party libraries and APIs effectively.

4. Pre-requisite modules or specified entry requirements

N/A

Indicative content

Course 1: Programming Fundamentals

Introduction to Python Basics

- Module overview and Python environment setup
- Variables, data types, and basic operators
- Input/output operations
- Writing and running simple programs

Control Structures

- Conditional statements (if, elif, else)
- Boolean expressions and logical operators
- Loops (while and for)
- Loop control statements
- Exceptions
- Practice exercises with basic algorithms

Functions and Basic Programming

- Function definition and parameters
- Lambda functions
- Built-in functions
- Practice exercises with function-based problem-solving

Course 2: Object-Oriented Programming

Introduction to Classes and Objects

- Defining classes and creating objects
- Understanding instance variables and methods
- The significance of the self parameter

Attributes and Methods

- Class attributes vs. instance attributes
- Defining and calling methods
- Modifying attributes within methods

Constructors and Destructors

- The __init__ method for initialization
- The __del__ method for cleanup
- Resource management within classes

Inheritance and Polymorphism

- Single and multiple inheritance
- Overriding methods in subclasses
- Using the super() function
- Polymorphic behavior in Python

Encapsulation and Abstraction

- Public, protected, and private access modifiers
- Implementing getter and setter methods
- Abstract classes and methods

Interfaces

- Defining and implementing interfaces in Python
- The role of interfaces in achieving polymorphism

Magic Methods and Operator Overloading

- Understanding dunder (double underscore) methods
- Overloading operators (e.g., __add__, __str__)
- Enhancing class functionality with magic methods

Class and Static Methods

- Defining and using @classmethod and @staticmethod decorators
- Differences between class methods, static methods, and instance methods

Property Decorators

- Using @property for attribute access control
- Creating read-only and write-only properties

Practice with OOP Concepts

- Hands-on exercises and projects to apply OOP principles
- Building real-world applications using OOP

Course 3: Data Structures and Algorithm Implementation

Basic Data Structures

- Lists and list comprehensions
- Tuples and their applications
- Dictionaries and dictionary comprehensions
- Sets and set operations

Algorithm Implementation

- Sorting algorithms (e.g., bubble sort, quicksort, merge sort)
- Searching algorithms (e.g., linear search, binary search)
- Optimization with Python libraries (e.g., itertools, functools)
- Practice exercises with algorithm implementation

Course 4: Design Patterns

Introduction to Design Patterns

- Understanding the importance of design patterns
- Categories of design patterns: Creational, Structural, Behavioral

Creational Patterns

- Singleton Pattern: Ensuring a class has only one instance
- Factory Method Pattern: Creating objects without specifying the exact class
- Abstract Factory Pattern: Providing interfaces for creating related objects
- Builder Pattern: Constructing complex objects step by step

Structural Patterns

- Adapter Pattern: Allowing incompatible interfaces to work together
- Decorator Pattern: Adding behavior to objects dynamically

Behavioral Patterns

- Observer Pattern: Defining a subscription mechanism to notify multiple objects of state changes
- Strategy Pattern: Defining a family of algorithms and making them interchangeable
- Command Pattern: Encapsulating requests as objects
- Template Method Pattern: Defining the skeleton of an algorithm in a method, deferring some steps to subclasses

Applying Design Patterns in Python

- Implementing design patterns using Python's features
- Model-View-Controller (MVC) paradigm as a design pattern.
- Real-world examples and case studies
- Best practices and common pitfalls

Course 5: Python Libraries for Data Manipulation

NumPy Fundamentals

- Arrays and array operations
- Mathematical functions
- Array indexing and slicing
- Linear algebra operations
- Basic optimization techniques

Pandas Basics

- Series and DataFrames
- Data importing and exporting
- Indexing and selection
- Data transformation and basic cleaning

Course 6: Python Libraries for Data Visualization

- Matplotlib fundamentals: basic plotting, customizing plots, saving/exporting plots
- Seaborn for statistical data visualization: distribution plots, regression plots, categorical plots
- Heatmaps and advanced visualizations

Course 7: Review and Final Project Delivery

- Review
- Project presentation and documentation

1. 1. Factual information

Module title	MATH 101: Elements of finite mathematics		
Module tutor	Dr. Daskalogiannis Vasilis	Level	Enhancement
Module type	100% Face to face	Credit value	15
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

This course consists of studies in functions, matrices, systems of equations, linear programming, set theory, probability, and mathematics of finance with applications to the field of computing and business. The course will be problem oriented and emphasis will be given to applications (Modeling-Optimization etc.).

3. Aims of the module

This course seeks to develop a further understanding of the process of learning mathematics. It will also provide:

- The foundation in elementary functions necessary for future math courses.
- The knowledge of the basic matrix operations as well as their use in mathematical modeling.
- Basic knowledge of different Number representations (binary, hexadecimal, etc.)
- Theory and practice on how to perform mathematical optimization, specifically linear programming.
- Foundations of the mathematics of finance, computational tools to the various forms of interest computation, annuities and loan balance.
- Foundations of Logic and Circuits
- Foundations of the mathematics of probability and counting Techniques.

4. Pre-requisite modules or specified entry requirements

N/A

Indicative content

Functions and Applications
 The mathematics of Finance
 Systems of Linear Equations
 Matrix Algebra and Applications
 Linear Programming
 Sets and Counting
 Probability
 Circuits & Logic
 Number representations

1. Factual information

Module title	COMPUTER SCIENCE 105: Introduction to Programming I – Structured Programming		
Module tutor	Dr. Astaras Alexandrow	Level	4

Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

This is an introduction to computing and computer programming using the Java language. It is one of the two options available for all students to satisfy the mandatory 1st year computing course requirement (the other option is CS101). It is the only option for those students interested in keeping their options open towards pursuing a major in Computer Science. This course is designed for students who have no prior experience in programming, just some basic exposure to computing devices as users.

3. Aims of the module

Students are introduced to the basic elements of computing hardware, information technology and computer programming. Programming is explained, demonstrated and practiced using the Java programming language. Ultimately the course aims to advance beyond basic computing skills towards software engineering, instructing students to develop autonomy as sophisticated computer users and programmers.

4. Pre-requisite modules or specified entry requirements

None. It is expected that students have already had some exposure to a windows-based graphical user interface computing environment (Microsoft Windows, Apple OS, Linux/Unix or equivalent).

5. Is the module compensatable?

N/A

8. Indicative content.

Hardware and Software (approx. 2 weeks)

- General computer science topics.
- Analog and binary signals.
- Machine language and high level languages.

Theory of Programming (approx. 2 weeks)

- Compilers
- Algorithms
- Problem Decomposition – Stepwise Refinement

Java Programming (rest of the semester)

- How to run Java programs.
- Translating Java source code into bytecodes.
- How byte codes are interpreted.
- How to create a Java program.
- Writing a program
- Java variable types
- Storing and changing values in variables
- Selection statements
- Repeating actions with loops
- Using arrays
- User input error trapping

1. Factual information

Module title	COMPUTER SCIENCE 106 – Object Oriented Programming		
Module tutor	Dr. Iosif Victoratos	Level	4
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The course aims to refine the participants' fundamental programming skills. It builds upon CS105 (Introduction to Programming I) and serves as preparation for CS215 (Data Structures). It is based on the Java programming language.

3. Aims of the module

The module covers of Object Oriented Modeling and Applications. Topics include Object Models, Object Class Design, Inheritance and Polymorphism, Software Reuse with Classes, Application Modeling, Simulation with Object Classes, and Business Process Modeling with Objects. Additionally introduces Integrated Development Environments and Version Control Systems.

Object-oriented programming (OOP) was 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 set up the logic, not how to define the data. Object-oriented programming adopts the viewpoint that “what we really care about” are the objects we want to manipulate rather than the logic required to manipulate them.

Modern software development requires to maintain the source code in secure repositories, where the changes done by developers can be identified. A Version Control System (VCS) allows the developer to essentially backup the locally changed source code into the repository and restore the changes to another development workstation. The module aims to familiarize students with the importance of backup in Information Security, and also accountability, by including VCS practices. Some basic security practices that are done in a VCS, is maintaining credentials for authenticating to different VCS servers, understanding shared/private access control, and logging of changes. Moreover, it aims to provide a simplistic approach to the advanced concept of Disaster Recovery (DR), by allowing students to restore code and continue working in another system and/or rolling back changes that created software defects.

The module expands on the material covered in CS105 with the following aims:

- Further cultivation of algorithmic thinking and refinement of procedural programming skills.
- Familiarization with the Object-Oriented programming methodology.
- Exposure to Java classes for building graphical interfaces and other extensions.
- Introduction to basic IT security through operations of a Version Control System.

4. Pre-requisite modules or specified entry requirements

CS105

5. Is the module compensatable?

8. Indicative content

Functions and modules

- *Methods*
- *Libraries and clients*
- *Recursion*

Object Oriented Programming Methodology

- *Data types*
- *Creating data types*
- *Inheritance*
- *Variable access control*
- *Polymorphism and Interfaces*
- *Testing and debugging*
- *Exception handling*

Interface design

- *Event handling*
- *Listeners*
- *Layout classes*
- *Inheritance*

1. Factual information

Module title	COMPUTER SCIENCE 205 – Business Data Management		
Module tutor	Mr. Christodoulou Christos	Level	4
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The purpose of COMP SCI 205 is to introduce the idea of business data management, data modelling, and processing methodologies with the use of standalone design tools and personal databases. It aims at fostering proper data design through the relational methodology and developing all necessary data processing and presentation skills.

3. Aims of the module

The aims of this module are to:

Define the role of Systems Analyst and Database designer.

Explain System Analysis and interpersonal communication skills that the System Analyst must have

Explain Project Management and discuss tools that the system analyst must have

Explain the Methodologies that are used for Systems Analysis and Database Design

Explain the various tools that certain methodologies use

Provide students the opportunity to work on the most popular database (Oracle), in a project in order to implement the taught methodologies.

4. Pre-requisite modules or specified entry requirements
CS 105.

5. Is the module compensatable?
N/A

8. Indicative Content
This module deals with numerous forms of Business Data employed in monitoring business operations, including Data Analysis, Data Design, Table Design and learning how to implement them using two popular database programs.

1. Factual information			
Module title	COMPUTER SCIENCE 206 – Web Development		
Module tutor	Dr. Viktoratos Iosif	Level	5
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments. study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements
COMP SCI 206 is an introductory module for beginning web designers. We will explore some essential concepts related to the creation of effective web sites. In the last portion of the module we will concentrate on client-side scripting using the programming language JavaScript.

3. Aims of the module
This module 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 module will be to understand what scripting languages are and to be able to develop scripts.

4. Pre-requisite modules or specified entry requirements
N/A

5. Is the module compensatable?
N/A

8. Indicative content.
Web Design Guidelines • What is the World Wide Web • Basic Design Principles • Interface & Navigation • Good & Bad Design • Colour on the WWW Validation & Assessment • Validating HTML and CSS • Accessibility & Usability

- Web site optimization
- HTML & CSS basics
- HTML source document, tags
 - Lists, Tables, Links, Images, Graphics
 - Intro to CSS
 - CSS value and Common CSS Properties
- HTML5 & CSS3
- New elements
 - Multimedia, Canvas element
 - Forms and Styles
- Web Authoring Tools
- Setting Up a Web site
 - Page Layout, CSS, Templates, Navigation
 - Working with Texts, Lists and Tables
 - Working with Images
 - Adding Interactivity (Flash, Forms)
 - Working with Online Data
 - Building Dynamic Pages with Data
 - Working with Code
 - Publishing to the Web
- JavaScript
- Introduction
 - Variables
 - Operators
 - Functions, Statements
 - Form validation

1. Factual information

1. Factual information			
Module title	Computer Science 215 – Data Structures and Algorithms		
Module tutor	Dr. Grigoris Baglavas	Level	4
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The purpose of CS215 is to introduce students to the main concepts and implementation principles of data structures, using object oriented programming principles and Java as the programming language. This module builds on the knowledge and skills acquired in CS105 – Introduction to Programming I and CSC106 - Introduction to Programming II: Object Oriented Programming.

3. Aims of the module

The module starts with a fast paced review of object-oriented programming using Java, re-enforcing the fundamental programming concepts learned in CS105 and CS106. Students are subsequently introduced to data structures, including arrays, lists, queues, stacks, trees, heaps, hash tables and graphs. Searching, sorting, inserting, deleting and other simple operations on these structures will also be discussed.

4. Pre-requisite modules or specified entry requirements
CS106

5. Is the module compensatable?
N/A

8. Indicative content.
• Java object oriented programming (review) • Object-Oriented Design • Stacks, Queues • Vectors and Lists • Big-O notation • Sorting algorithms • Trees • Heaps • Search Trees • Hash Tables • Sorting • Graphs

1. Factual information			
Module title	COMPUTER SCIENCE 219 - Video Game Design with Unity and 3ds Max		
Module tutor	TBA	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements
This module introduces the critical study of computer video games and the professional practice of game design. Through readings, discussions, research, and practical “hands-on” projects, students will better understand the current market for games and simulations and develop the fundamental skills necessary to enter the international computer games industry. Although the commercial video game pipeline will be discussed, the actual production framework for the class will mirror an 'Indie' game team "prototype game level" development.

3. Aims of the module
Students will be expected to fill multiple roles in the production process and gain hands-on experience in the collaborative processes of game design, project management, scripting, content creation pipeline, in game animation, and play-testing.

4. Pre-requisite modules or specified entry requirements
Computer Science 107

5. Is the module compensatable?
N/A

8. Indicative content.	
• Video Game Theory and Concepts • Game Types • Anatomy of a Game • The Key Components of Video Games • Structure of a Video Game	
• Design Components and Processes • The Stages of the Design Process • The Game Design Team Roles • The Game Design Documents	
• Gameplay as challenges and actions	
• Core Mechanics	
• Game Balancing	
• General Principles of Level Design	
• 3ds Max • 3d modeling and materials	
• The Game industry • Game Engines • Game delivery environments	
• Unity 3d Game Engine • Unity 3d concept • Unity3d User Interface (GUI) • The 3d workspace • Unity Game Physics • Scripting in Unity • Player Camera Controllers • Terrains • Prefabs • Audio • Animation • Particles • AI and Enemies	
• Game Assets in Unity 3d • Working with 3d assets in Unity • Imported Assets and Packages • Material and Textures	

1. Factual information			
Module title	COMPUTER SCIENCE 306 – Advanced Web Development		
Module tutor	Dr. Viktoratos Iosif	Level	5
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules
COMP SCI 306 builds upon the skills and knowledge about creating and publishing Web pages and sites taught in CS 206. It also introduces students to advanced web development areas, required for students interested in pursuing a career in web site design.

3. Aims of the module

This module aims mainly on client-side scripting using the programming language JavaScript. The objective will be to understand what scripting languages are and to be able to develop scripts. The module will also offer an introduction to jQuery library, Asynchronous JavaScript and XML (AJAX), basically showing the benefits of their use and applying it to certain programming tasks. In the last portion of the module, students will gain a practical knowledge on advanced issues of the mostly used web development language, namely PHP. By combining lectures with seminar discussions and extensive hands-on experiences the course will introduce the students both to the applied aspects of web application development technologies, but also to the theoretical issues involved. Security aspects during the design of and development of a web application will also be discussed.

4. Pre-requisite modules or specified entry requirements

CSC 206

5. Is the module compensatable?

N/A

8. Indicative content.

JavaScript

- Advanced Techniques
- Detect visitor's Browser & Platform
- JavaScript Validation
- jQuery library
- jQuery UI & plugins

Asynchronous JavaScript and XML

- Basics
- Ajax Frameworks
- XML/CSS into Ajax Applications

Advanced PHP

- Object-Oriented PHP
- Design Patterns for the Web

1. Factual information

1. Factual information			
Module title	COMPUTER SCIENCE 312 – Database Management Systems		
Module tutor	Mr. Christos Christodoulou	Level	5
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The purpose of COMP SCI 312 is to offer a systematic coverage of modern Database Computing theory and technology. Topics include Relational Algebra, Data Modelling, Database Design, Client-Server Database

2. Rationale for the module and its links with other modules

Management Systems, Interface Design, trends in Database Systems, combination of Object Oriented Modelling and Relational Databases.

This is a module in continuance of the CS 205 Business Data and it educates students how to create and maintain a fully functional relational database. This knowledge will be applied on CS 325, CS412, CS 422 and CS 444 where students are required to create and/or alter various databases, used along for programming assignments.

3. Aims of the module

The aims of this module are to:

Teach students what Client-Server Database Management System is, and

To use simple and advanced SQL along with PL/SQL programming features such as IF statements, loops, stored functions, procedures, tables, cursors, packages, triggers

To create and maintain an oracle database.

Microsoft Access and/or SQL Navigator for browsing objects and databases.

ERDPlus is used for ERD's.

Apex, SQL Plus and SQL Navigator are used as user interface of the oracle database

Students develop technical, analytical, and business skills that support the pursuit of professional careers and advanced computer science study.

4. Pre-requisite modules or specified entry requirements

CS 205 or permission by the Department.

5. Is the module compensatable?

N/A

8. Indicative Content

The module focus is on teaching SQL and PL/SQL programming languages for oracle databases. Advanced query capabilities and procedural constructs are described using Oracle SQL and PL/SQL. The theoretical foundation for using these capabilities is presented. Performance issues are discussed including indexing, key definitions, DE normalized databases and triggers, and data constraints. The role of application development in ease of use, query optimization, and system performance is discussed

1. Factual information

Module title	COMPUTER SCIENCE 321 – Operating Systems		
Module tutor	TBA	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The module deepens understanding of how contemporary computing systems are structured and, in particular, supported by an Operating System (OS). It is a culmination module within the Computing Systems programme thread.

The module follows CS230-Introduction to Systems Programming and CS310 – Computer Architecture. The module is frequently updated in view of rapid technological developments and their implications.

The module is followed by CS421 – Systems Security as well as any future module covering the subject at the advanced level.

3. Aims of the module

Operating Systems are the brain of any computing system. They handle the body/DNA (hardware) as well as behaviour (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. As such, virtualization technologies are presented, with virtual machines used in class, along with advanced virtualization techniques, such as containers. The effects of the OS architecture and how the OS implementation affects computer system security is also covered. Finally, cloud services are presented and utilized as yet another method to implement an OS.

The module 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 without compromising system integrity or security.

The module 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 module 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.

4. Pre-requisite modules or specified entry requirements

CS 215, CS230, CS 310, STAT 210 or permission by the Department

5. Is the module compensatable?

N/A

8. Indicative content.

- Computer System Structures
- Operating System Structures
- Processes
- Threads
- CPU Scheduling
- Process Synchronization
- Deadlocks
- Memory Management
- Virtual Memory
- File-System Interface
- File-System Implementation
- I/O Systems
- Mass-Storage Structure
- Virtual Machines & virtualization
- Containers

1. Factual information			
Module title	COMPUTER SCIENCE 322 – Computer Networks I		
Module tutor	Dr. Baglavas Grigorios	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements
COMP SCI 322 will address the principles, architectures and protocols that have gone into the development of modern networks from Local Area Networks to the Internet.

3. Aims of the module
This module aims to provide the student with the knowledge of how computer networks are designed, engineered and operated. This includes knowledge of the fundamental algorithms used in the management of both resources and traffic and how these algorithms may interact with application programs. Instruction includes, but is not limited to network terminology and protocols, network standards, LANs, WANs, OSI models, cabling, cabling tools, routers, router programming, star topology, and IP addressing. The student will study and design networks using Ethernet, TCP/IP Addressing Protocol, dynamic routing and network security. Particular emphasis is given to the use of decision-making and problem-solving techniques in applying science, mathematics, communication, and social studies concepts to solve networking problems.

4. Pre-requisite modules or specified entry requirements
CSC 215.

5. Is the module compensatable?
N/A

8. Indicative content.
• Client-server and peer-to-peer networks, network applications and protocols, hardware and topologies, OSI model, troubleshooting • Networks and cabling, network diagrams • MAC Address and functionalities, TPC/IP configurations and subnetting, DNS and name resolutions, command-line troubleshooting problems • TCP/IP core functions, communications' management, TCP/IP utilities • Data transmission concepts and metrics, cables physical characteristics, various networking media • Wireless networking: theoretical background and implementation • Subnets and VLANs: subnet implementation and vlan operation • Network security

1. Factual information	
Module title	COMPUTER SCIENCE 325 – Distributed Applications

Module tutor	Dr. Veloudis Simeon	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The purpose of CS 325 is to examine in detail the software and hardware technologies prevalent in the Internet and provide an introduction to the principles and methods for creating distributed on-line client/server applications that are the basis for electronic commerce as it is conducted over the Internet. Methods and tools such as HTML, the Common Gateway Interface, PHP, database connectivity tools and MySQL are presented. Coverage is also given to emerging standards for information exchange, encryption and validation.

3. Aims of the module

The aims of this module are to teach students the technological background as well as programming languages useful in developing and deploying internet-based applications with dynamic content. Students will learn the difference between server-side and client-side programming, the overall architectural framework of such application systems and the differences between emerging distributing technologies.

4. Pre-requisite modules or specified entry requirements

CS 105

5. Is the module compensatable?

N/A

8. Indicative content.

Distributed Systems:	Introduction to Distributed Systems, Resource sharing and the Web Architectural Models, Fundamental Models Networking and InterNetworking, Network Principles, Internet Protocols Network Cases (Ethernet, Mobile, ATM)
PHP:	Variables, Data types, Operators, Expressions Control flow statements, Functions Arrays, Objects
MySQL:	MySQL Data types Basic sql statements Transactions and Stored Procedures Integration with PHP

1. Factual information

Module title	COMPUTER SCIENCE 330: Introduction to Mobile Robotics		
Module tutor	Dr. Alexander Astaras	Level	6

Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

Autonomously navigating mobile robots face the challenge of acquiring data from their surroundings, selecting their own navigation waypoints and dynamically altering their course of action to account for obstacles, power supply restrictions and unexpected events. In this course theoretical instruction is combined with experiential learning and challenge driven software development. Students participating in this course are challenged individually and in teams to build the hardware chassis and software control algorithms for mobile robots. An introduction to robotics fundamentals is followed by guided programming for automation (C, RobotC); basic electronics circuit design and troubleshooting; microcontroller programming; sensor data acquisition algorithms; actuator control; robotic navigation and obstacle avoidance; basic sensor data fusion; and concludes with a final robotic design challenge which integrates all aforementioned knowledge and skills. This module builds on knowledge and skills acquired in CS230 – Introduction to Systems Programming.

3. Aims of the module

Students are guided through a series of lectures, experiments, design challenges and a final course project, learning to holistically design software, electronic circuits and mechanical constructions. Upon completion of the course, they are expected to be able to:

- build, program and troubleshoot mobile robots with a variety of roaming behaviours
- build and debug software to intelligently control mobile robotic systems using the Robot-C language
- design for unforeseen real-world circumstances, producing robust code and mechatronic designs which anticipate unknown changes in the robot's environment
- program a microcontroller board to automatically sample and control a variety of sensors and actuators
- design experiments which prove, characterize, extract and optimize performance parameters from each of their robot prototypes

4. Pre-requisite modules or specified entry requirements

CS230

5. Is the module compensatable?

N/A

8. Indicative content.

- Microcontroller programming using C
- Sensors and actuators
- Analogue circuit troubleshooting
- Robotic shell design using EV3
- Higher level programming for robotic control
- Mobile robotic algorithm design using Robot-C
- Mobile robotic control based on sensor data fusion
- Debugging and troubleshooting techniques
- Experimental characterization of robotic designs

1. Factual information

Module title	COMPUTER SCIENCE 333 – Computer Networks II		
Module tutor	Dr. Chatzistavros Evangelos	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

This module is offered as a Level 6 Elective to students that have passed module CS322 (Computer Networks I). The module builds on the material learned in CS322 and expands the students' knowledge and understanding to more advanced and complex network concepts and designs. The focus is mainly routing and switching in LANs and WANs, but other major areas of networks like wireless, security and Broadband technologies. Completing CS322 and CS 333 a student is eligible to take the exam for the Cisco CCNA certification.

3. Aims of the module

The aims of the module are to expand students' knowledge in modern day networks. There are three primary goals; expand the strong foundations for Local Area Networks built in CS322, introduce Wide Areas Network Design and Technologies, and provide the fundamentals of trending networking areas including, but not limited to, wireless and security.

4. Pre-requisite modules or specified entry requirements

CSC 322

5. Is the module compensatable?

N/A

8. Indicative content.

- Switching Fundamentals
- Advanced Routing Protocols
- Wide Area Network and Broadband Technologies
- Securing Connectivity
- Monitoring and Troubleshooting Networks
- Network security

1. Factual information

Module title	COMPUTER SCIENCE 340: Artificial Intelligence		
Module tutor	Dr. Karamouzis Stamos	Level	5
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The discipline of artificial intelligence (AI) is concerned with building intelligent algorithmic agents, computing algorithms which perceive their circumstances and take actions which maximize their chance of successfully achieving their goals. This includes machine learning algorithms, intelligent agents which

modify their function based on past encounters with input data, under either supervised or unsupervised training circumstances.

This course is designed for intermediate programmers who can already code using structured programming and object-oriented methodologies (in any computing language), as well as have some intermediate level understanding of data structures, search and sorting algorithms.

3. Aims of the module

This course is an introduction to the field of AI and more specifically Machine Learning, including an intensive initial introduction to the Python programming language. Indicative AI topics covered include knowledge representation, problem solving via search, logical and probabilistic reasoning and machine learning algorithms such as decision trees, neural networks, reinforcement learning and genetic algorithms.

4. Pre-requisite modules or specified entry requirements

CS215

5. Is the module compensatable?

N/A

8. Indicative content.

Introduction to the Python programming language (approx. 3 weeks)

- syntax, strings basic I/O commands
- variables, conditionals and basic control flow
- loops
- collections: lists, dictionaries, tuples, sets
- functions, libraries
- file I/O

Selected topics in Artificial Intelligence and Machine Learning (approx. 3 weeks)

- informed and uninformed search
- constraint satisfaction
- reinforcement learning
- probability
- Bayes networks
- artificial neural networks
- genetic algorithms

1. Factual information

Module title	COMPUTER SCIENCE 412 – Object Oriented Design Patterns		
Module tutor	TBA	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The module 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 programme thread and follows level 5 modules relating to Data Modelling (CS 312) and Systems Design (CS450) while specialising 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.

The module mostly emphasizes the employment of OO concepts in multi-layered architectures, that include logic, data, and user experience (presentation) layers. It is of general enough nature for a level 6 module as the core OO are applicable to a wide range of software applications and problem domains. Additionally, it expands to the MVC architectural pattern and service-oriented architectures. It discusses the applicability of OO in future intelligent software applications, explaining terms from the Artificial Intelligence (AI) and Internet of Everything (IoE) domains, while revisits existing data-driven systems like Enterprise Resource Planning (ERP) and web applications.

3. Aims of the module

Major aims of the module are, to teach Object Oriented Design and Development (OODD) for ad hoc and reusable/scalable class design, and to review the OODD methodology through specific source code paradigms. The target is to provide a clear understanding for the student, by experiencing the OO concepts in actual software implementation. In parallel, it presents the necessity of OODD for building reliable and cost-effective enterprise-level applications and the tools it provides for tackling complexity. This module will establish a link between UML formality and language specific OO implementation and will illustrate the use of OO Design Patterns for specific application development needs.

It aims to cover diverse development scenarios with a single programming language and a common framework that supports all aspects of OO development, while using an integrated-development environment (IDE) to accelerate the learning curve. The selection of C# with .NET framework can be used for the development of desktop, mobile, web and service applications, with a similar syntax to Java and the easy-to-use Visual Studio IDE. As a secondary gain, the student will experience business-oriented software development tools and processes, while building the ability to quickly learn new programming languages and frameworks, a useful skill for a software development career.

Modern software engineering considers all three pillars of Information Security in the design and development of OO applications. The module aims to familiarize the student with OO practices that increase the application security and overall quality. For Confidentiality, students must design proper encapsulation and member visibilities to prevent data leakage between objects. Organizing objects in tiered (layered) architectures, restricts unwanted object interactions, notably the objects that implement the interaction with the users cannot directly access data or other core objects. For Integrity, the module aims to focus on input validation and sanitization, that prevents invalid data entry and maliciously crafted input that attempts unauthorized data changes. For Availability, use of exception objects in error trapping prevents unexpected termination of the application and provides detailed logging that is useful for post-mortem examination and digital forensics. The students learn how automatic memory management via Garbage Collection (GC) in a modern OO application, prevents buffer overflows, that could allow arbitrary code execution and takeover of the host system.

4. Pre-requisite modules or specified entry requirements

CS 215, CS 312, CS325 or permission by the Department.

5. Is the module compensatable?

N/A

8. Indicative content.

- Review of Object-Oriented Concepts
- Advanced Object-Oriented Concepts and introduction to Design Patterns
- Design Patterns and Class Design guidelines
- Mastering Inheritance and Composition
- Frameworks and Reuse: Designing with Interfaces and Abstract Classes
- Designing with Interfaces and Abstract Classes
- Creating Object Models
- Objects and Portable Data: XML and JSON
- Persistent Objects: Serialization, Marshalling, and Relational Databases
- Objects in Web Services, Mobile Apps, and Hybrids
- Model, View and Controller issues of class design
- SQL injection and similar cyber security threats

1. Factual information

Module title	COMPUTER SCIENCE 421 – Computer Systems Security		
Module tutor	Dr. Veloudis Symeon	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The module examines security issues in networked and non-networked environments. It is a senior-level module (level 6) for the Computing Systems programme thread.

It follows CS321 – Operating Systems and CS322 – Network Operating Systems and Administration. The module provides the theoretical background and practical tools so that using the provided framework existing and future security threats can be analyzed and guarded against.

3. Aims of the module

The module aims at engaging a student's critical thinking in analyzing security threat scenarios and providing mitigation strategies. The theoretical and practical background concerning issues of security in modern, networked and non-networked systems is provided first. Then, the state of the art approaches are covered, focusing on current best practices. The module relies heavily on case studies and articles on recent news, so it is both current and relevant.

4. Pre-requisite modules or specified entry requirements

CSC 321, CSC 322 or permission by the Department.

5. Is the module compensatable?

N/A

8. Indicative content

- Securing data at rest and data in transit:
 - Essential Encryption Algorithms
 - Key management and credentials
 - Steganography and watermarking

- Human psychology
- Physical layouts
- Network security (network segmentation, VLAN, VPNs, jump servers, firewalls)
- Network Monitoring (HIDS, NIDS, CMDB, application-level firewalls, honeypots)
- Compliance (regional laws affecting audits & network design)
- Virtualization and security
- System Security Policies and Best Practices
- Threat models
- Software development
 - Agile Development
 - Coding practices
 - Software release practices
 - DevOps
- Cloud Computing security considerations

1. Factual information

Module title	COMPUTER SCIENCE 422: Advanced DBMS		
Module tutor	Mr. Christos Christodoulou	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The module expands and deepens understanding of DBMS extending beyond a first year of exposure to the fundamentals. It extends CS312, which has provided the foundations on SQL and PL/SQL. Theoretical issues are examined with the intention of performance optimisation. The module aims at better equipping programme graduates towards the competitive DB market.

3. Aims of the module

This module focuses on creating and manipulating databases using SQL and PL/SQL programming languages for Oracle databases. Advanced query capabilities and procedural constructs are described using SQL and PL/SQL. The theoretical foundation for using these capabilities is presented. Performance issues are discussed including indexing, key definitions, and data constraints. The role of application development in ease of use, query optimization, and system performance is discussed.

The module aims to teach students to use advanced SQL statements and PL/SQL programming features such as IF statements, Loops, Stored Functions/Procedures, Tables, Cursors, Stored Packages, Stored Triggers and creating and maintaining various databases. SmartDraw and Designer of Oracle is used for ERD's. APEX, SQL Plus and SQL Navigator, SQL Server Management Studio are used as user interface of the databases.

4. Pre-requisite modules or specified entry requirements

CS 312

5. Is the module compensatable?

N/A

8. Indicative content.

ERD and UML Modelling

Practical Database Design Methods and use of

Indexing Structures for Database Files

Practical Database Design and Tuning
Database Security and Authorization
Enhanced Data Models (Triggers)
Distributed Databases and Client-Server Architectures
Emerging Technologies: XML and Internet Databases
Data mining Concepts
Emerging Database Technologies & Apps

Module Outline:

Chapter 4: ERD and UML Modelling (Read Chapter 3 as review)

Chapter 12: Practical Database Design Methods and use of UML

Chapter 14: Indexing Structures for Database Files (Read only)

Chapter 16: Practical Database Design and Tuning

Chapter 23: Database Security and Authorization

Chapter 24: Enhanced Data Models (Triggers) (only 24.1)

Chapter 25: Distributed Databases and Client-Server Architectures

Chapter 26: Emerging Technologies: XML and Internet Databases

Chapter 27: Data mining Concepts

Chapter 29: Emerging Database Technologies & Apps (Read Only)

1. Factual information

Module title	COMPUTER SCIENCE 443 – Thesis I		
Module tutor	Dr. Alexander Astaras	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The module is the second half of a year-long capstone project, concluding the students' four-year learning experience in the Computer Science and Business & Computing study programs. It is designed to foster research, autonomy and synthesis of concepts and skills acquired in all other modules. The first half of the capstone project (CS443) is devoted to research/analysis and design, while the second semester counterpart (CS444) places emphasis on implementation, experimental validation, thesis writing and final project presentation.

3. Aims of the module

To provide students with an opportunity to work in a guided but increasingly independent fashion, to explore a particular problem in depth, to make practical use of principles, techniques and methodologies acquired elsewhere in the module. To challenge students to form a scientific thesis, carry out a sustained piece of individual work to prove or disprove it, and to present their project work in a dissertation. To enhance communication skills, both oral and written.

4. Pre-requisite modules or specified entry requirements

CS312, CS450

5. Is the module compensatable?

N/A

8. Indicative content.

The module deals with the definition and formal proposal phase of a major Computer Science and/or Business Computing IT project. It involves learning to brainstorm for project topic ideas, filter and prioritize them, develop a thesis statement, build a brief project proposal description, seek a faculty member to act as a supervisor for the capstone project, write a thesis proposal, design a poster and deliver a final slide presentation outlining the proposed project.

1. Factual information

Module title	COMPUTER SCIENCE 444 – Thesis II		
Module tutor	Project supervisors (various faculty)	Level	6
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale of the module within the degree scheme/Prerequisites/other entry requirements

The module is the second half of a year-long capstone project, concluding the students' four-year learning experience in the Computer Science and Business & Computing study programs. It is designed to foster research, autonomy and synthesis of concepts and skills acquired in all other modules. The first half of the capstone project (CS443) is devoted to research/analysis and design, while the second semester counterpart (CS444) places emphasis on implementation, experimental validation, thesis writing and final project presentation.

3. Aims of the module

To provide students with an opportunity to work in a guided but increasingly independent fashion, to explore a particular problem in depth, to make practical use of principles, techniques and methodologies acquired elsewhere in the module. To challenge students to form a scientific thesis, carry out a sustained piece of individual work to prove or disprove it, and to present their project work in a dissertation. To enhance communication skills, both oral and written.

4. Pre-requisite modules or specified entry requirements

CS443

5. Is the module compensatable?

N/A

8. Indicative content.

The module deals with the development, experimental validation, thesis document writing and presentation phase of a major Computer Science and/or Business Computing IT project. It involves learning to brainstorm for project development solutions, filter and prioritize them in consultation with the project supervisor, organize and implement development, troubleshoot, build a proof-of-concept prototype, plan validation experiments, write a thesis document which provides a scientific literature context and outlines originality, design a poster and deliver a final slide presentation describing all capstone project work.

1. Factual information			
Module title	COMPUTER SCIENCE 450 - Systems Analysis and Design		
Module tutor	Mr. Chris Christodoulou	Level	5
Module type	Taught: Lecture/guided discussion	Credit value	15
Mode of delivery	100% face-to-face		
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours		

2. Rationale for the module and its links with other modules

The module serves as a capstone for the Junior year, aiming to unify all prior knowledge from the viewpoint of Systems Analysis and Design. As students have already been exposed to various aspects of computer systems, the module introduces them to the development life cycle of real-world, professional applications.

The module introduces the waterfall model for system/application development and the formal tools employed in its various stages with emphasis in prototyping, system implementation and testing.

Students entering the course are expected to have adequate knowledge of data modelling (CS205, CS312), hardware (CS310). The knowledge acquired in this module, will be applied on CS443 and CS444 where students are required to research and create a capstone project.

3. Aims of the module

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.

4. Pre-requisite modules or specified entry requirements

CS312, CS310 or permission by the Department.

5. Is the module compensatable?

N/A

8. Indicative content

The module main focus is Systems analysis where students learn problem-solving techniques to decompose a system into its component pieces for the purpose of studying how well those component parts work and interact to accomplish their purpose.

- Scope analysis and feasibility study.
- Requirements collection and formal tools (ERD, UML, DFD, STD).
- Design: trade-off analysis and formal tools for decision making.
- Implementation phase: actions and deviations from Waterfall model.
- Unit and System testing.
- Deployment and Maintenance.
- Project management throughout the cycle.

Factual information

Module title	Economics 101 Introductory Macroeconomics	Level	4
Module tutor	Dr. Ioannis Krassas	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

The module provides an overview of the basic economic principles and their applications to many real life situations. It previews some of the big ideas that recur throughout economics, such as opportunity cost, the tools of supply and demand. It also focus on the applications of economic theory to national policy issues such as growth, inflation, unemployment, government expenditures, taxation finance and the role of money.

Aims of the module

The module seeks to develop an understanding how an economy works. It enables students to get a better understanding of the world they live in. It also helps them make better decisions as individuals or future executives in any type of organization or venture. All modules are linked to economics because most decisions and policies are made within an economic framework.

Indicative content

Indicative Weekly Content

Basics of Economics

- Scarcity & The Economizing Problem
- Budget Line and PPC
- Opportunity Costs, Marginal Analysis, Utility & Choices
- Circular Flow in an Economy
- Economic Systems

Expectations, Crisis , Behavioral Economics:

- Evolution of Economic Expectations
- Static, Adaptive Expectations
- Rational Expectations, & Bounded Rationality
- Economic Crises
- Intro to Behavioral Economics

Basic Macroeconomic Variables :

- Macro introduction
- GDP
- Economic Growth
- Inflation & Unemployment.

Basic Macro Relationships:

- Aggregate expenditures
- Savings & Consumption Schedules
- Aggregate Demand & Supply

- Multiplier
- Fiscal & Monetary Policy

Financial Economics:

- Financial Instruments
- Risk and Return ideas
- FV and PV models

Further Topics in Macro & Revision:

- Extensions of AD/AS
- Stability & Economic views
- International Trade
- Money & The Banking System

Factual information			
Module title	Management 101: Introduction to Management	Level	4
Module tutor	Dr. Dimitris Hadjidis	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
An introduction to the general field of Management. It covers the basic managerial concepts through the presentation and the analysis of the four managerial functions: Planning, Organizing, Leading and Controlling. It is a foundation for upper level management modules.			
Aims of the module			
The module seeks to develop students' understanding of the fundamental role of management in both theory and practice. To familiarize them with effective Management practices needed to operate in a challenging business environment impacted greatly by the forces of globalization.			
Indicative content			
Managers and Managing: Essential tasks, levels, challenges in a global environment Fayol's Principles of Management Values, Attitudes, Emotions, and Culture: Personality traits, values, Organizational culture Ethics and social responsibility: Nature, Stakeholders and ethics. Managing diverse employees: Managers and the effective management of diversity Managing in the global environment: The changing global environment Decision making: Nature of managerial decision making, Cognitive biases, entrepreneurship Organizational control and change: Output control, behavior control, clan control Motivation and performance: Need theories, Expectancy theory, Equity theory, Learning theory The manager as a planner and strategist: The nature of the Planning process Value Chain Management: The value chain and competitive advantage, Customer responsiveness Leadership: Nature, Models of leadership Effective groups and teams: Types, Group dynamics			

Factual information			
Module title	MNGT 201 Organisational Behaviour	Level	5
Module tutor	Dr. Dimitris Hatjidis	Credit value	15

Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
The unit covers particular issues about the study of individual, group and structural behavior within organizations. In particular, the unit examines the impact of the human behavior issues on organizational performance and success. It is widely recognized that the knowledge of organizational behavior is critical in modern corporations and public bodies and determines in a high rate their effectiveness and efficiency. It helps students develop plans on how to mobilize people to reach their maximum potential so that it can lead to better organizational performance. It is linked with other modules of the institution such as Business Strategy and Human Resource Management.			
Aims of the module			
This Module aims to introduce students to the study of organizations, their forms and structures, in relation to individual behavior, group dynamics, Emotional Intelligence and the way in which each affects organizational systems. Emphasis is given on discussing and analysing theoretical aspects of group and individual behavior and indicating their applicability within an organizational setting.			
Indicative content			
Introduction in Organisational Behaviour International and organizational culture Understanding and managing individual behavior Individual Differences at work Perceptions and attributions Motivation: Background and theories Managing employee behavior Managing workplace stress Group and team behavior Conflict and Negotiation , Leadsheip Communicating effectively Decision making Organizational structure and design Managing organizational change and learning			

Factual information			
Module title	FIN 201 Financial Management	Level	5
Module tutor	Dr. Hourvouliades Nikolaos	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
The module provides an overview of the basic financial concepts and their applications to the modern corporate world. It focuses on problem-solving methodology and real-life financial management practices, all within an evaluation and ethical framework.			
Aims of the module			
The module seeks to develop students' understanding of the key concepts of financial management necessary for making and evaluating financial decisions.			
Indicative content			

Overview of Corporate Finance
Types of Business Entities
Financial Statements and Long-term Financial Planning
 Working with Financial Statements
 Financial Statements, Tax, Income, Cash statements
 Long-term Financial Planning and Growth
 Financial Ratios
Valuation of Future Cash Flows
 The Time Value of Money
 Discounted Cash Flow Valuation
 Annuities, Perpetuities, the EAR
 Loan Types & Applications
Capital Budgeting (Investment Criteria)
 Net Present Value, Payback period
 IRR, PI,
Short-term Financial Planning and Management
 Short-term Finance and Planning
 Cash and Liquidity Management

Factual information

Module title	MNGT 312 Operations Management	Level	6
Module tutor	Dr. Dimitris Hatjidis	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

The module seeks to develop students' understanding of the fundamental role of operations management in both services and manufacturing. Students are exposed to concepts, problems and analysis related to the strategy, design, planning, and improvement of manufacturing and service operations. The module serves to link operational issues to managerial strategy issues and provides key input for students to undertake their final capstone project

Aims of the module

This module will cover the following thematic areas: new corporate trends, corporate strategies, product design, process management, principles of quality management, inventory management and total corporate planning using the MRP-ERP framework, management of supply chains. The module will also introduce a set of quantitative and analytical tools that can be used in almost any context, including project management, decision trees and process analysis

Indicative content

Intro: The transition from the 2nd to the 3rd industrial revolution and key corporate trends
Corporate competitive strategies and global corporate strategies
Principles and methods used for Product Design
Case studies in Product Design and decision Tree analysis
Process management in goods & service
Case studies in process management
Project Management
Lab sessions on Project Management
Quality management and TQM models

Case studies in quality management and TQM tools
 Principles for the management of supply chains
 Case studies and tools for supply chain management
 Supply chain management for e*business
 Inventory management & inventory optimization models
 The MRP-ERP framework for total corporate planning

Factual information

Module title	FIN 232 International Finance	Level	6
Module tutor	Ioannis Krassas	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

International Finance is a fourth year-first semester module that introduces the students to contemporary foreign exchange topics, and financial instruments that are used in international markets to hedge against currency risks, interest rates and financial exposure. The module, designed for students who wish to build upon the basic economic and financial principles they have acquired in the areas of economics and corporate finance, covers both the management and the markets of multinational businesses. It is a required module for Finance and International Business majors and optional for Marketing students.

Aims of the module

The principal purpose of this module is to introduce those aspects of financial decisions, which arise when companies operate in an international environment. Students are exposed to the international business environment, with emphasis on the challenges financial managers face in the dynamic and rapidly expanding field of international finance. This will build on the work of Corporate Finance and will cover both theoretical and practical aspects. The main objectives are to:

- give an understanding of the risks arising from international operations
- examine the techniques available for managing these risks
- review capital structure theory and investment appraisal in a domestic setting and examine international differences

Indicative content

Introduction to International Finance
 The Foreign Exchange Market
 International Parity Conditions & Exchange Rate Determination
 Foreign Currency Futures & Options
 International Banking & Money Market
 International Equity & Bond Markets
 Interest Rate and Currency Swaps
 Measuring and Managing Foreign Exchange Exposure
 Cash management
 multinational capital budgeting
 End of group project, review, exercises.

Factual information

Module title	Research 299 Business Research Methods	Level	5
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Module tutor	Dr. Konstantinos Rotsios	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	180

Rationale for the module and its links with other modules

The module introduces students to a diversity of research techniques and trains them in experiencing the research process that involves identifying, discussing and formulating research problems, selecting and applying appropriate research approaches and methods of inquiry (both qualitative and quantitative), collecting, analyzing, interpreting and reporting data, for the purpose of solving problems in the business environment. The students will become acquainted with the concept of research and its interplay between the business context and thesis work. The students will understand how to plan research work, develop a research proposal and finally undertake a research project. The module requires an active participation, independent study, an interest to start writing by following a certain methodology, and a high motivation for reading scholarly papers and relevant business information.

Aims of the module

The students will apprehend the main research strategies in social sciences, learn how to use theory, construct a literature review, articulate a selected problem driven and justified from the literature, select a sample and utilize different methods for collecting, analyzing, and interpreting research data. Learning outcomes include the following:

- Understand the main principles of research
- Develop an ability to evaluate secondary research documents and reports
- Apprehend the principles of qualitative and quantitative research methods
- Develop analytical and critical thinking skills that will be implemented in the students' research project
- Exercise writing skills and argumentation
- Develop communication skills

Indicative content

- The basics of business and academic research
- The Business Research process
- Forming the Research Proposal
- Literature Review
- Use of Theory
- Ethical Considerations
- Secondary and primary data
- Qualitative and quantitative research
- Sampling

Proposal Submission

- Evaluation of proposals
- Statistical Background
- Data mining and data handling
- Writing the final paper
- Main analysis, conclusions and further research

Factual information

Module title	MGT 341 Business in Greece and the European Union	Level	6
Module tutor	Staff – PhD in Business/Economics	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
The rationale of this module is to give students some insights into the complexities of the European environment from a global, business, political and legal perspective. It also explores the different ways in which the European Union institutions have a determining influence on any company working in or with the European Single Market. Particular focus is placed on doing business in Greece and South Eastern Europe. The module allows students to place many of the issues visited in various business modules in the context of the European Union and its unique institutional arrangements			
Aims of the module			
This module will centre around the analysis of the business environment, placing it in the context of the European Union, The corporate implications of European Institutions and the policies of the European Union will be a key theme. Related themes for exploration include: the political economy of capitalist varieties in Europe, comparative analysis between EU economies and corporate implications, comparative analysis of the EU to the USA, The Euro and the Eurozone, corporate culture and ethics, Greece in the European context, integrating Eastern Europe into the EU, Europe in the global arena and the European crisis			
Indicative content			
Methodological analysis of the Business Environment European Union in the context of globalisation Theories of economic integration The institutions of the European Union The common policies of the European Union and corporate implications The Single European Market The European Monetary Union, the Euro and corporate implications The Greek economy and business environment Comparative analysis of European economies The typologies of European economic models European & US economies: Comparative analysis The economic and institutional crisis in Europe The European context of the Greek economic crisis Greek economic prospects under the Troika's conditionality Political economy: Varieties of capitalism in Europe Core Europe and the Periphery			

Factual information			
Module title	FIN 220 Investments & Portfolio Management	Level	6
Module tutor	Dr. Hourvouliades Nikolaos	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
Investments & Portfolio Management is a fourth year-second semester module that completes the students' knowledge of the asset classes & global investment choices in order to form an optimal portfolio. This final semester module combines all prior knowledge on macroeconomics, microeconomics, finance			

and investments. It is a required module only for Finance majors and optional for all other business students
Aims of the module
The principal purpose of this module is to provide a comprehensive analysis of the characteristics and analyses of individual securities, as well as the theory and practice of combining securities to form optimal portfolios. The aims of this module are to: -provide an overview of the entire investment scene -survey various investment alternatives and their opportunities from the viewpoint of risk and return -treat asset pricing models and the efficient market hypothesis (EHM) -review the role of behavioral finance and how it affect EMH -examine the formation of optimal portfolios -examine the analysis, valuation and management of stocks -treat the theory of the term structure of interest rates, bond pricing and the management of bond funds -introduce the fundamentals of option valuation and trading
Indicative content
The Investment Environment, Securities Markets & Transactions Return and Risk Modern Portfolio Topics, Launch of Group Portfolio Project Common Stocks Analysing Common Stocks Stock Valuation and Characteristics The Fixed Income Market/ Bond Valuation and Characteristics Mutual Funds Characteristics Portfolio Management Options/ Financial Futures, Commodities

Factual information			
Module title	Econ 332 International Economics	Level	5
Module tutor	Staff - PhD in Economics	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
The rationale of this module is to initiate students to the major issues in today's international economic sphere by combining a presentation of basic international trade and finance theory concepts with applied issues and policies. The applied, policy aspect of the module is enhanced by invited guest speakers. The module further develops key concepts from economics and relates international financial issues to finance modules.			
Aims of the module			
This module will cover economic trade theories, tariff and non-tariff barriers, the trading system and international institutions. The next main area of focus will be on international finance including exchange rate theories, the functioning of the international monetary and financial system, multinational companies, regional economic integration and transition economies.			
Indicative content			

The Global Economy and its Institutions

International Trade Relations

Comparative Advantage and the Gains from Trade

The Economics of Protectionism: Tariffs and NTBs

Trade Policies and Trade Blocs

International Financial Relations

Measuring International Transactions

Exchange Rate Theories & Determination

Exchange Rate Systems

Macroeconomic Policy in Open Economies

Factual information

Module title	MNGT 302- Revenue Management	Level	6
Module tutor	Staff – PhD in Economics/Finance	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

With a fixed capacity, a highly disposable product and high fixed costs, hotels are a natural candidate for the application of revenue management. The purpose of this module is to provide a core understanding of the fundamentals of revenue management, which ties into the larger picture of revenue strategy. The module is structured to provide an insightful look into Revenue Management.

In today's hotel sector an increasingly complex network of traditional and web based channels have to be managed to insure hotel success. Key questions include: how should you distribute over the web? How can you maximise the potential of online travel agents (OTAs)? With the distribution environment both highly complex and constantly evolving, this module will give you comprehensive foundation.

Aims of the module

Upon completion of the module, students will be able to

- Understand the terms of:
 - Hotel Rate Distribution
 - Revenue management
 - Optimization of the pricing policy
- Implement in business environment:
 - Market segmentation
 - Set price mix

Indicative content

- Manage the price and the duration
- Revenue management implementation

- Revenue management in other industries and hotel outlets
- Pricing strategy & the benefits of the rate fences
- The importance of forecasting and forecasting challenges
- Segmentation and price discrimination. Strategic pricing.
- Setting & positioning price

Factual information

Module title	MNGT305-HR in Hotel & Tourism	Level	5
Module tutor	Anestis Th. Anastasiou	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

Hospitality is a concept deeply rooted into Greek mentality. Intuitive hospitality is offered by all tourism professionals and the country is renowned for this quality. Nevertheless, contemporary developments and cultural trends make it necessary for professionals to be educated according to today's needs. This module covers a wide range of topics that include advance hospitality management theory, impact of socio-economics and technology on hospitality, the future trends, laws relating to business ownership, current practices, legislation and ethics in hospitality practices, operations of revenue, logistics in accommodation for guests, guest handling, and various segments such room, concierge, food and beverage, pools, casinos, beach-bars and restaurants.

Aims of the module

This unit aims to introduce students to the study of the personnel management theory and practices within a hospitality industry content. Emphasis is given on discussing and analysing theoretical aspects of recruiting and selecting hospitality employees, performance evaluation, theories and principles of employee motivation.

Indicative content

- Job design and organisational structure
- Job description, specification, analysis
- Recruitment
- Selection
- Hiring processes
- Induction training (onboarding)
- Assessment and evaluation
- Performance Management and metrics
- Talent acquisition and management
- Remuneration and reward strategy
- Training and Development

Factual information

Module title	MARKETING 320 MARKETING RESEARCH	Level	6
Module tutor	Dr. Eirini Tsihla	Credit value	15

Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			
The need for relevant accurate and timely information is at the core of marketing activity and primarily for strategy development. Marketing research module links all theoretical components of marketing to relevant data derived information. The meaningful and effective implementation of Marketing Theory is realized primarily in combination with effective Marketing Research implementation.			
Aims of the module			
To introduce the students to the needs of information regarding the marketing environment and the ways to investigate and learn how to provide qualitative and quantitative information through marketing research as to cover them. Also, to familiarize students with the marketing research tools and the use of the most appropriate as to meet research objectives in a valid and reliable way. To allow students to conduct and evaluate research projects.			
Indicative content			
A Mktg dec. making & MR The research process Sources & types of information Literature review Reliability & Validity Measurement methods & scales Questionnaire development Qualitative research & observation Research designs Causal designs Sampling Midterm exam Sampling & coding How to do research on your own Data analysis Descriptive statistics Statistical testing How to write a communicative report Communicating findings and limitations			

Factual information			
Module title	MNGT 303-Events management	Level	6
Module tutor	Staff – PhD in Marketing	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150
Rationale for the module and its links with other modules			

This module will provide industry-specific knowledge of events planning and running. It will offer a comprehensive overview of events management, covering all types of event destinations, venues and operations. Specific attention is paid to the analysis, management and monitoring of the economic and tourism benefits of the events sector. Topics that will be covered include event management, planning, operations, logistics, quality management, coordination of HR, financial management and marketing of events, communications, and evaluation and impact assessment methods. Participants will also be given a wide range of event studies in order to learn from prior industry experience.

Aims of the module

After successful completion of the module attendance, students will be able:

1. Understand the significance of events in the context of tourism.
2. Evaluate the scope and potential of the events sector.
3. Application of management and marketing principles to the planning, monitoring and evaluation of events.
4. Classify the types of events and explain their role.
5. Determine the steps necessary to create a successful event.
- 6.

Indicative content

The module encompasses subjects as below:

- Event organizing and management
- Work distribution and team management
- Events categories
- Mega events, benefits and side-effects
- Cross cultural and cultural interaction
- Demand and Supply in event industry
- Event and tourism industry interconnection
- Online practice using events platform

Factual information

Module title	MKTG 303-Tourism e-business	Level	6
Module tutor	Staff – PhD in Marketing	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

Advances in technology have greatly influenced and shaped modern tourism operations. IT systems offer flexible, online and, above all, affordable, solutions for everyone, from single individuals to large companies. What is more important, online systems are used not only by industry professionals but by customers too; it is a given fact that a growing majority of tourists around the world use the internet to research, examine and select their next travel. As a result, it has become absolutely necessary that a professional of any position in tourism should be able to manage and run such platforms on a daily basis. There are hundreds of innovative and versatile platforms available for travel services, covering the needs of various segments, such as destination management companies, travel agencies, tour operators, hotels and hotel chains, tourist transfers and buses, excursions and package organizers etc. During this module participants will be introduced to the basic characteristics of various e-business concepts, as well as industry-specific software, such as hotel

booking, airline reservations, events registrations, as well as operational software covering areas of accounting, HR, logistics and dining services.

Aims of the module

- Introduction to e-Business and e-Commerce for tourism
- E-Marketplaces: structures and mechanisms
- Industry applications and electronic systems

Indicative content

Internet and the World of Hospitality and Tourism.

Internet Revolution: History and Basics.

Internet as a Means of Communication, Commerce, Information Distribution, and Travel and Hospitality Research.

E-Marketing

Impact of the Internet on Travel and Hospitality Industry.

The Future of the Travel Agents and Intermediaries

Factual information

Module title	MKTG 324 e-Marketing	Level	6
Module tutor	Staff – PhD in Marketing	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

The cultural and technological changes that internet has brought to the possibilities for exchanges with the consumer has created not only a whole new set of ways of communication but also of product delivery, product creation, marketing research and group behaviour. These new capabilities and their consequences are the scope of this module.

Aims of the module

The module will introduce to the student all the key-practices a current marketer or executive needs to know to cope with the needs of e-marketing and e-business in small or large scale projects. The module will integrate the needs and parameters of physical space marketing with the ones of the digital environment.

Indicative content

intro to e-marketing

- e-mail marketing
- on-line advertising
- affiliate marketing
- search engine marketing & optimization
- ppc advertising
- social media
- social media as a tool for small business
- viral marketing
- on line reputation management and web pr
- web site design and development
- on-line copyrighting

- web analytics and optimization
- m-marketing
- crm
- market research
- e-strategy-adjusting campaigns to small business needs

Factual information

Module title	MARKETING 330 CONSUMER BEHAVIOUR	Level	6
Module tutor	Dr. Eirini Tsichla	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

The marketing discipline and marketing activity is in theory and in practice should be customer centric and that means consumer centric. The marketing process and theory start with the consumer and end with the consumer. It starts with identifying needs all the way to post purchase satisfaction and loyalty. The purpose of this module is to complement the marketing process with the understanding of how a consumer decides and behaves.

Aims of the module

An analysis of consumer behavior, this module introduces students to the processes that consumers employ in order to select, purchase, use, evaluate, and dispose of products and services that will satisfy their needs. The module will also provide students with an understanding of the influences (external and internal) that determine consumer behavior. And, since consumers vary in the ways that they consume products and services, the module will demonstrate in various ways how and why the analysis of consumer behavior is critical to the field of marketing.

Indicative content

The social and market environment, The role of consumption in society

- Perception in consumer behavior
- The role of self-image in consumption
- Values and motivation
- Lifestyle
- Memory and learning
- Consumer attitude formation
- The cognitive and affective dimensions
- Individual decision making
- Household and group decision making
- Group influence and opinion leadership
- Culture and subculture
- Cultural change process and new consumers
- Group behaviour

Factual information

Module title	Marketing 301 Entrepreneurial Corporate Marketing Strategy	Level	6
Module tutor	Dr. Eirini Tsichla	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

The module offers an in-depth examination and analysis of the basic marketing principles. A considerable effort is made to provide students with the elements of advanced marketing thinking in structuring innovative marketing strategies for various corporations. Students are prepared to work in the competitive and dynamic field of marketing and implement planning and execution skills within a rapidly changing environment. It is an upper level required marketing module.

Aims of the module

The module seeks to develop students' understanding of the fundamental role of Marketing in modern organizations and to comprehend the type of managerial decisions that need to be taken in order to help a company succeed in the marketplace. The module aims to develop the business acumen of students and enhance marketing confidence through knowledge and experience with real business cases and marketing simulation. Also, the module emphasizes the central role of branding in strategy formulation and addresses contemporary tactics including experiential branding, brand advocacy, brand activism, and fostering brand communities.

Indicative content

Marketing strategy in today's business environment
Global, ethical and sustainable marketing
Elements of marketing strategy, planning and competition
Understanding consumer and business markets
Segmentation, target marketing and positioning
Developing the value offering
Brand building,
Organizational branding
Brand identity over time
Managing the marketing mix

Factual information

Module title	MKT318 Global Marketing	Level	6
Module tutor	Dr. Konstantinos Rotsios	Credit value	15
Module type	Face to face Lecture/guided discussion	Notional learning hours	150

Rationale for the module and its links with other modules

This module addresses marketing management problems, techniques and strategies needed to incorporate the marketing concept into today's global economy. More specifically, this fourth year module, provides students with the relevant knowledge to analyse and explain the international business environment and to develop suitable marketing strategies for companies that seek to expand their business in foreign markets. It is a required module for the concentration of Marketing and International Business and an elective for the rest of the concentrations.

Aims of the module			
The module seeks to expand the knowledge of students in analyzing the international marketing environment by explaining thoroughly the key factors that affect it. Furthermore marketing principles and strategies are applied under a global perspective, by focusing on the similarities and acknowledging the differences of the international markets			
Indicative content			
Analysis of external environments (economic-cultural-social-political-legal). Rationale for global expansion, where and how. Country markets selection process. Entry methods. Global competition and developed vs emerging countries. Global product, distribution, pricing and promotion strategies.			
Indicative Weekly Content			
1. The global marketing environment. From domestic marketing to international and global marketing			
2. Global economy and trade liberalization. The balance of payments, the foreign currency market and macroeconomic indicators.			
3. Cultural and social forces. The parameters that constitute cultural environment: language, religion, family, education, perceptions towards time, work & leisure etc. The Hoffstede classification.			
4. Political & legal forces. Rationale and potential actions of host countries governments. Home market pressure groups. Political risk assessment and protection.			
5. Global markets and buyers – the consumer, the business and the government markets. Factors that affect their buying behavior			
6. Global competitors: global vs global or global vs. local, - competition in developed & developing countries- country of origin effect			
7. Global market Participation- reasons for going global- evaluating and country selection process. Screening process			
8. Global market entry strategies – Exporting, licensing, franchising & Foreign Production- Ownership strategies: Joint Ventures and strategic alliances			
9. Global Product strategies- rationale for product standardization vs adaptation- forces and types of product adaptations PLC and global product.			
10. Branding Decisions. The global brand name process, groups of global customers			
11. Pricing for Global markets – standardization or adaptation-Internal, Market, Environmental factors that affect pricing– Managerial issues: managing price escalations, transfer prices.			
12. Managing Global distribution channels –foreign channel members- identifying, designing & managing global distribution channels			
13. Global Promotion Strategies: pull vs push- personal selling- sales promotion-public relations. Standardization vs Adaptation. Global advertising: global vs local advertising campaigns- media strategy			

1. Factual information			
Module title	MATHEMATICS 115 – Business Calculus		
Module tutor	Dr. Kanakoglou Konstantinos	Level	4
Module type	Taught: Lecture/discussion	ECTS credits	7.5

Mode of delivery	100% face-to-face
Notional learning hours: 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours The OU honours degrees conform to the current European qualifications framework. This indicates how the OU credit measures against the European credit transfer system (ECTS). In essence, 60 OU credit points are the equivalent of 30 ECTS points.

2. Rationale of the module within the degree scheme

The purpose of MATH 115 is to present mathematical skills and concepts and to apply them to ideas that are important to students in the management, life, and social sciences. In particular, the course will introduce the student to the concepts of limits, differentiation and integration with emphasis on text problem solving.

3. Aims of the module

The module is designed to give students a sound intuitive understanding of basic concepts and enable students to apply a variety of techniques to practical situations. Differentiation, Integration etc. are some of the topics that will be presented in this module and then applied to optimization problems (Business and Science), rates of change problems and other applications. The module will be text oriented and intends to help students to develop their critical thinking and problem solving ability. Upon completion of this module, it is the aim and hope of the mathematics faculty that students who work hard and apply themselves will be able to:

1. Acquire a solid foundation in Differential and Integral calculus in order to prepare for other university modules that require such knowledge.
2. Understand how math can model and solve authentic real world problems.
3. Develop problem-solving skills, fostering critical thinking, within a varied and interesting setting.
4. Encourage modeling and connecting Mathematics to various disciplines.

4. Pre-requisite modules or specified entry requirements

MATH 101 or CS 180

6. Indicative content

Functions, Graphs, and Limits

Applications of Derivatives

Additional Applications of the Derivative

Exponential and Logarithmic Functions

Integration

Functions of Two or more Variables

1. Factual information

Module title	STATISTICS 210 – Introduction to Statistics with R		
Module tutor	Dr. Chatzistavros Evangelos	Level	4
Module type	Taught: Lecture/discussion	ECTS credits	7.5
Mode of delivery	100% face-to-face		

Notional learning hours 150	Face to Face delivery (lectures, guided discussions, guest speakers): 44 hours, Tutorials and Office hours: 11 hours, Completion of regular homework, preparation for submitting assessments, study for Exams: 95 hours The OU honours degrees conform to the current European qualifications framework. This indicates how the OU credit measures against the European credit transfer system (ECTS). In essence, 60 OU credit points are the equivalent of 30 ECTS points.
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2. Rationale of the course within the degree scheme/Prerequisites/other entry requirements
An application-oriented introduction to modern statistical analysis using R software that includes: study design, exploratory data analysis; random variables; probability models and sampling distributions; point and interval estimates; hypothesis tests and linear regression. A wide variety of applications are used.
3. Aims of the course
This course is an introduction to descriptive and inferential statistical methods. Students will master problem solving using both manual computations and R statistical software. The student will learn to formulate research questions, design data collection to answer the question, collect and analyse the data and interpret and report the results. The course aims at the following: • Give the student the statistical skills necessary to meet the needs of business and the real- world decision-making problems. • Effectively communicate the results of a statistical analysis both orally and in writing. • Provide fundamental statistical knowledge and skills required for a higher-level course in related fields. • Analyze data using R software

4. Pre-requisite courses or specified entry requirements
Math 101

6. Indicative content.										
<table border="1"> <tr><td>Data and Statistics</td></tr> <tr><td>Descriptive Statistics</td></tr> <tr><td>Descriptive Statistics: Numerical Measures</td></tr> <tr><td>Probability</td></tr> <tr><td>Discrete Probability Distributions</td></tr> <tr><td>Continuous Probability Distributions</td></tr> <tr><td>Sampling Distributions</td></tr> <tr><td>Interval Estimation</td></tr> <tr><td>Hypothesis Testing</td></tr> <tr><td>Linear Regression</td></tr> </table>	Data and Statistics	Descriptive Statistics	Descriptive Statistics: Numerical Measures	Probability	Discrete Probability Distributions	Continuous Probability Distributions	Sampling Distributions	Interval Estimation	Hypothesis Testing	Linear Regression
Data and Statistics										
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Probability										
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Interval Estimation										
Hypothesis Testing										
Linear Regression										

9. STUDENT SUPPORT, GUIDANCE AND ADVICE

ACADEMIC ADVISING AND MENTORING

During the first 2 weeks of classes, students will be assigned the faculty member who will be their Academic Advisor for their first year at AAU and, in most cases, until graduation. The Academic Advisor helps students to plan their overall program of studies, as well as to select modules each semester. Advisors also provide information about AAU academic and support services, assist students in addressing problems in particular modules within a given semester, and offer ongoing advice concerning the students' long-term academic and career goals.

THE LEARNING HUB

The Learning Hub strives to help students to become strong, independent learners through a variety of services. AAU's Learning Hub is located on the upper floor of the library. Students are invited to meet with the tutors and receive assistance with writing projects as well as mathematics and science needs. Consultation is offered on one to one basis on prearranged meetings, or drop in sessions, as well as via e-mail.

10. OPPORTUNITIES FOR PERSONAL DEVELOPMENT PLANNING

CAREER SERVICES AND GUIDANCE

The Career Services Office maintains strong connections with local businesses to:

- Provide students with internship and employment opportunities.
- Facilitate students' transition into the workforce after graduation.

Career Services organizes annual Career Fairs featuring businesses and non-governmental organizations (NGOs) from Greece and abroad.

- The Career Services Office supports students and alumni in all stages of job searching, including:
 - Resume preparation
- Writing cover letters
- Job market insights (e.g., available positions, company policies, hiring processes, salaries, etc.)
- Interview techniques

Career advisors offer one-on-one sessions to:

- Guide students on career planning and job market trends.
- Help students prepare effectively for job applications and interviews.

Additionally, Career Services meets with company representatives to:

- Identify business needs.
- Match students' skills and interests with job opportunities.

INTERNSHIPS

The Career Office gives special emphasis to students' internships, both with local and international organizations. Every academic term there is a visiting program with local organizations with internship opportunities, all relevant to the academic programmes and focusing on enhancing in-class learning. Apart from the on-campus recruiting, the office coordinates a series of internship opportunities with organizations located in other cities or even abroad, either with on-site placement or remote work. The Job Board and Facebook Career Group help disseminate the internship opportunities, while the Career Workshops (resume writing, cover letter preparation, mock interviews) prepare students for claiming those opportunities.

11. FACILITIES AND SERVICES

BISSELL LIBRARY - GENERAL INFORMATION

The Bissell Library offers a vast collection of books in print, electronic books, videos, and DVDs. Already one of the largest English language libraries in Greece, its collection is rapidly growing into a space designed to accommodate the institution's needs for years to come. The collection includes subscriptions to periodicals in hard copy as well as access to numerous full-text scholarly journals, magazines, and newspapers.

The Bissell Library offers, to currently enrolled students, on site and remote access to research databases to support inquiry and research. Business databases include Ebsco's Business Source Elite, Regional Business News, Hoover's, and ProQuest ABI Inform Global. Databases for research include: Academic Search Premier, E-books collection, Encyclopaedia Britannica, ERIC, GreenFILE, Columbia International Affairs Online (CIAO), JSTOR, Oxford English Dictionary and Oxford Music Online. We also subscribe to the Ebsco A-Z service, providing listing of all the electronic resources accessible from the library. The EBSCO Discovery Service TM brings together the most comprehensive content providing to users an easy, yet powerful means of accessing all of the library's information resources through a single search. Library users can search the catalog, databases or the Internet through public access terminals available on both floors of the library. Network ports are available for laptops and the entire building is Wi-Fi enabled.

COMPUTING SERVICES & NETWORKING FACILITIES

AAU has state of the art computer infrastructure and facilities. All computer facilities are connected to a high-speed campus network, which is based on fiber optic cables connecting all buildings. In addition, a large high speed wireless network access (Wi-Fi) covers large areas of the campus giving students the ability to use the school's resources or access the internet on their laptop.

Many high-speed servers are present in the network infrastructure, along with Intel® Core™ latest technology workstations, connected to the Internet, available to students in multiple laboratories.

The laboratories are used both as general access and instructional computer labs. They are equipped with data projectors and black and white or color laser printers. All stations are networked with full Internet Access and run the latest software such as MS office, Oracle, Power-builder, Visible Analyst, Java,

Visual Basic, 3-D Max, Adobe Photoshop, Adobe CS Production Studio Premium, Macromedia Studio, Macromedia Authorware, PanaView Image Assembler, Mathematica Player, Minitab, MathCad, Daedalus, etc.

SCIENCE LABORATORIES

All science modules are accompanied by laboratory work. The purpose of the laboratories offered is to expose students to hands-on experience regarding concepts and principles learned in classroom. The university's Science Facilities are located on the ground floor of Constantinidis Hall. The facilities include three laboratories (Biology/Ecology, Physics and Chemistry).

12. DETERMINATION OF RESULTS

MINIMUM REQUIREMENTS FOR PASS

To obtain an Open University award, students are required to complete all parts of the programme's approved assessment and comply with all regulations relating to their programme of study. The minimum aggregate pass marks for The Open University validated awards are 40% for undergraduate programmes.

These minima apply to assessments, modules, stages and qualifications.

DETERMINING MODULE OUTCOMES

The overall module mark or grade shall be determined as set out in the assessment strategy detailed in the module specification and published in the Programme Handbook.

A student who passes a module shall be awarded the credit for that module. The amount of credit for each module shall be set out in the programme specification and published in the Programme Handbook.

In order to pass a module a student must achieve the requirement of the module as set out in the module specification and published in the Programme Handbook.

Where a student is registered only for a module (rather than a qualification) the resit will apply.

BACHELOR HONOURS DEGREE CLASSIFICATION

Classification of bachelor degrees will be based on the average mark across all modules within Stage 3 (usually Credit Level 6) and Stage 2 (usually Credit Level 5) at a ratio of 2:1 respectively unless the requirements of a Professional, Statutory and Regulatory Body (PSRB) state otherwise.

Honours degrees are classified as:

- First class Aggregate mark of 70% or above
- Upper Second class Aggregate mark between 60% and 69%

- Lower Second class Aggregate mark between 50% and 59%
- Third class Aggregate mark between 40% and 49%

Where students have directly entered a Qualification Level 6 top-up award (e.g. having previously undertaken a Higher National Diploma (HND) or Foundation Degree (FD) award) the calculation for the honours classification will be based solely on all credits at Credit Level 6.

Performance in work for which an award of credit for prior learning has been made is not taken into account in the calculation of the final award.

Where the final result of the classification calculation creates a mark of 0.5% or greater this will be rounded up to the next full percentage point (e.g. 69.5% is rounded to 70; 59.5% to 60%; and so on). Where the calculation creates a mark below 0.5% this will be rounded down to the next full percentage point (e.g. 69.4% is rounded to 69%; 59.4% to 59%; and so on). For the purposes of rounding up or down, only the first decimal place is used.

13. ASSESSMENT AND PROGRESSION REGULATIONS

SUBMISSION OF ASSESSED WORK

Work submitted for a summative assessment component cannot be amended after submission, or re submitted.

Student requests for extensions to assessment deadlines will not be approved unless made in accordance with published partner institution guidelines as approved by The Open University.

Where coursework is submitted late and there are no accepted extenuating circumstances it will be penalized in line with the following tariff:

Submission within 6 working days: a 10% reduction for each working day late down to the 40% pass mark and no further.

Submission that is late by 7 or more working days: submission refused, mark of 0. A working day is defined by the partner and submission after the deadline will be assumed to be the next working day.

Academic staff must submit their marks and feedback within 3 working days from the day the assessment was submitted.

ASSESSMENT SCORES

All undergraduate assessment will be marked on a percentage scale of 0-100.

Grade Description	UK points
Excellent	70-100

Very Good (high)	65-69
Very Good (low)	60-64
Good (high)	55-59
Good (low)	50-54
Satisfactory (high)	45-49
Satisfactory (low)	40-44
Fail	0-39

The final grade for an individual assessment component will be determined after completion of a quality assurance process (e.g. moderation, remarking) as detailed in the partner institution's OU approved policy for moderation.

Where the result of the assessment calculation creates a mark of 0.5% or greater this will be rounded up to the next full percentage point (e.g. 69.5% is rounded to 70; 59.5% to 60%; and so on). Where the calculation creates a mark below 0.5% this will be rounded down to the next full percentage point (e.g. 69.4% is rounded to 69%; 59.4% to 59%; and so on). For the purposes of rounding up or down, only the first decimal place is used.

DETERMINING PROGRESSION AND QUALIFICATION OUTCOMES

The paths through which students are required to progress through the programme, and the elements identified as compulsory or optional, are set out in the programme specification and approved in the validation process.

Pathways through any programmes offered by partner institutions may require students to complete prerequisite or co-requisite modules.

STAGE REQUIREMENTS

Each of the stages of an undergraduate programme is expected to consist of a total of 120 credits.

In cases where Programmes are not divided into stages (for example, most postgraduate programmes and undergraduate programmes of 120 credits or less) the provisions below apply to the whole programme.

In order to complete and pass a stage of a programme, a student must acquire the total credit set out in the programme specification at the approved qualification level for the award, or have been exempted through advanced standing, or through the implementation of the processes covering extenuating circumstances (see Section F).

The credit value of each module contributing to a stage determines its weighting in the aggregation of credit for a stage.

Where a student fails a module, the following may apply in the first instance:

- Resit, a second attempt at an assessment component following a failure at first attempt.

RESIT PROVISION

Resit provision is subject to all the following conditions:

- The maximum number of retakes allowed in a programme leading to an Open University award is 10.
- A student who does not complete the resit by the date specified shall not progress on the programme, except in cases where the process for allowing extenuating circumstances has been followed.
- Resits can only take place after the meeting of the Board of Examiners or following agreement by the Chair and the External Examiner of the Board.
- A student who successfully completes any required resits within a module shall be awarded the credit for the module and the result capped at the minimum pass mark for the module.

14. DISSERTATIONS AND PROJECTS

HOW THE BISSELL LIBRARY SUPPORTS STUDENTS WITH THEIR THESES

The Bissell library in its effort to compliment and facilitate the educational process and the curriculum always strives to provide the best services possible safeguarding that all students across all Schools receive the same learning experience and support, as well as fair access to all available resources and services. More specifically, when it comes to the writing up stage of their theses, the Bissell Library provides the following Resources and Support Services.

Resources :

- A collection of thesis writing books, academic writing and general study skills. This collection is housed in the Learning Hub
- Subject guides provide a thematic information gateway of trustworthy information resources (e-journals, databases, etc.) to assist students in their quest for information gathering for their theses.
- The website of the Library, attempts to familiarize and provide introductory guidance on how to use various online tools such as Zotero, EasyBib and Diigo, which can become indispensable tools when it comes managing information and bookmarks, and citing resources.
- Guides have been composed to assist students with the OU Harvard referencing style (available on the library website)

- The Library in conjunction with all Schools has streamlined the procedure of gathering all theses so as to develop in the near future an Institutional Repository. In the meantime students can drop in any time and can have access to study good examples of theses on site.
- Last but not least a plethora of printed material in a variety of subjects is also available to students.
- The students are able to ask for Interlibrary loans of journal articles not available online. The service is provided by the British Library. They are also able to suggest books relevant to their research to the library to buy.

Support Services:

- The allocation of two Academic Liaison Librarians allows for better communication among students, academic staff and the Library.
- Information Literacy lessons conducted by the Academic Liaison Librarians offer students a reminder of research, evaluation and referencing skills, part of their coursework, to support them in their projects. These sessions include: techniques on how to locate formal and informal information sources on subjects, evaluation of resources, plagiarism and paraphrasing, and referencing.
- Finally, the Academic Liaison Librarians provide one to one support on how to search, evaluate and locate materials and referencing, either in drop in sessions or after appointments.

15. OTHER INSTITUTIONAL POLICIES AND REGULATIONS

ACADEMIC MISCONDUCT

An academic offence (or breach of academic integrity) includes any action or behavior likely to confer an unfair advantage, whether by advantaging the alleged offender or by disadvantaging another or others. Examples of such misconduct are plagiarism, collusion, cheating, impersonation, use of inadmissible material and disruptive behavior.

Responsibilities

- **Students:** Students are responsible for upholding academic integrity and reporting any instances of academic misconduct. They must familiarize themselves with the institution's Academic Misconduct Policy and adhere to it.
- **Faculty and Staff:** Faculty and staff are responsible for preventing, detecting, and addressing academic misconduct. They are expected to educate students on academic integrity, report any suspected cases, and follow the procedures outlined in this policy.
- **Procedures Reporting Suspected Misconduct:** Charges against a student for violating academic integrity may originate from any source: a faculty member, an administrator, a staff member, a fellow student, or from the community at large. Anyone who suspects academic misconduct must report it to the appropriate academic authority (Department Chair, Associate Deans) and provide evidence. In case of plagiarism, it should also be reported to the student electronically through the AAU's ERP system. In this way, students are immediately notified. Students may also report academic misconduct by another student to the faculty or staff member responsible for the module.

- Investigation: Upon receiving a report of academic misconduct, the academic authority shall forward the case to the Academic Standards and Performance Committee (ASPC). If a member of the Committee originates the charge, then that member will be excluded from the decision-making process, and any other process related to the case.

The ASPC will either itself investigate the charge or establish from its own membership a panel to conduct the investigation. In establishing whether a breach of academic integrity has occurred, the Committee should consider oral and/or written evidence supplied by the individual(s) making the charge and the alleged offender. The alleged offender shall have the right to appear before the Committee.

Determination and Consequences

After the investigation, the ASPC shall determine whether academic misconduct occurred. If academic misconduct is confirmed, sanctions will be imposed based on the severity and frequency of the offense.

The following list of sanctions is indicative and can be imposed by majority vote of the Committee:

- Admonishment Letter (or Letter of Warning): The student is advised in writing that their behavior violates rules of academic and/or personal integrity and that a recurrence will lead to more serious sanctions. The Committee will deliberate on whether the letter should or should not appear in the student's file permanently or for a lesser period of time.
- First Offense File: The student's name and a description of the offense is filed in a shared electronic folder, accessible by the Provost, the Deans, the department chairs and the area coordinators. Second offenses automatically result in a hearing.
- Disciplinary Probation: The student is advised in writing that their behavior violates rules on academic and/or personal integrity and is given a probationary period (to be decided upon by the Committee) to show by good behavior that a more stringent penalty should not be imposed. During the period of the probation, the student is required to terminate association with all extra-curricular activities and resign from any student office.
- Suspension: The student's relationship with the ULE will be discontinued until the end of the semester or term. The student will forfeit any fees involved with the ULE.
- Dismissal: The student's relationship with the ULE will be terminated

EXTENUATING CIRCUMSTANCES

The Open University recognizes that students may suffer from a sudden illness, or other serious and unforeseen event or set of circumstances, which adversely affects their ability to complete an assessment, or the results they obtain for an assessment. In such cases the partner institution's extenuating circumstances procedures will be applied, as approved in institutional review.

A student who is prevented from attending or completing a formal assessment component or who feels that their performance would be (or has been) seriously impaired by extenuating circumstances, may submit a deferral request to the AS&PC.

MITIGATING CIRCUMSTANCES

The following regulations distinguish between factors or circumstances which were known to the student in advance of taking an assessment and which affect his or her ability to attend an examination or submit work by the published deadline, and those which have not impaired the student's ability to attend for examination or meet a deadline for the submission of work but which may have affected his or her performance. In all cases, it is the responsibility of the student to ensure the timely disclosure of any factors or circumstances which may affect the assessment of his or her learning and responsibility for the consideration of these factors and circumstances will lie with the AS&PC.

Students whose circumstances may affect (or may have affected) their ability to meet a program's assessment requirements must submit a completed Mitigating Circumstances Extension Form together with verifiable documentation to the Registrar's Office. This form can be completed electronically or in person and may, if necessary, be signed retrospectively.

In the case of factors or circumstances which were known to the student in advance of taking an assessment and which affect his or her ability to attend an examination or submit work by the published deadline:

- the AS&PC will consider the evidence submitted by the student;
- if the mitigating circumstances are accepted by the Committee it will determine the extension to be granted to the student or, in the case of examinations, the date on which the student shall be assessed; in such cases the grades will not be capped at 40%.
- the Chair of the Board of Examiners, the Registrar and the appropriate department head/area coordinator will be informed of the Committee's decision.
- The student will have the right to apply for a further extension, or for a rescheduling of an examination, if the mitigating circumstances persist.

In the case of factors or circumstances having prevented a student from attending for examination or meeting a deadline for the submission of work but which may have affected his or her performance:

- the AS&PC will review the evidence submitted by the student and make a recommendation for consideration by the appropriate Board of Examiners;

the Board of Examiners is responsible for considering that action that it should take in the light of the for the consideration of these factors and circumstances will lie with the AS&PC.

Students whose circumstances may affect (or may have affected) their ability to meet a program's assessment requirements must submit a completed Mitigating Circumstances Extension Form together with verifiable documentation to the Registrar's Office. This form can be completed electronically or in person and may, if necessary, be signed retrospectively.

In the case of factors or circumstances which were known to the student in advance of taking an assessment and which affect his or her ability to attend an examination or submit work by the published deadline:

- the AS&PC will consider the evidence submitted by the student;
- if the mitigating circumstances are accepted by the Committee it will determine the extension to be granted to the student or, in the case of examinations, the date on which the student shall be assessed; in such cases the grades will not be capped at 40%.
- the Chair of the Board of Examiners, the Registrar and the appropriate department head/area coordinator will be informed of the Committee's decision.

- The student will have the right to apply for a further extension, or for a rescheduling of an examination, if the mitigating circumstances persist.

In the case of factors or circumstances having prevented a student from attending for examination or meeting a deadline for the submission of work but which may have affected his or her performance:

- the AS&PC will review the evidence submitted by the student and make a recommendation for consideration by the appropriate Board of Examiners;
- the Board of Examiners is responsible for considering that action that it should take in the light of the recommendations of the AS&PC;
- the actions available to the Board of Examiners include: the deferral of an assessment to a later date; compensation for the failure in a module; agreement that the student should either retake the module or be reassessed with the grade achieved being recorded in the student's transcript and therefore contributing to the classification of the award; and, exceptionally a decision that the student be assigned a higher grade for the module or modules on which his or her performance has been affected.

Students are responsible for ensuring that the partner institution is notified of any extenuating circumstances at the time they occur and for supplying supporting documentation by the published deadline.

If a student is unable to attend an examination or other assessment event because of extenuating circumstances, they must inform the Partner institution as soon as possible and provide supporting evidence before published deadlines or within 7 calendar days, whichever is sooner. If a student cannot submit evidence by published deadlines, they must submit details of the extenuating circumstances with an indication that evidence will be submitted within 7 calendar days.

Medical evidence submitted in support of a claim for extenuating circumstances should be provided by a qualified medical practitioner.

Upon receipt of recommendations from the panel or body responsible for investigating extenuating circumstances, the Board of Examiners, or its subsidiary board, will decide whether to:

- provide a student with the opportunity to take the affected assessment(s) as if for the first time i.e. a 'sit' or 'submit', allowing them to be given the full marks achieved for the examination or assessment, rather than imposing a cap;
- waive late submission penalties;
- determine that there is sufficient evidence of the achievement of the intended learning outcomes from other pieces of assessment in the module(s) for an overall mark to be derived;
- note the accepted extenuation for the module(s) and recommend that it is taken into account at the point of award and classification.

The Board of Examiners, depending on the circumstances, may exercise discretion in deciding on the particular form any reassessment should take. Options are a viva voce examination, additional assessment tasks designed to show whether the student has satisfied the programme learning outcomes, review of previous work, or normal assessment at the next available opportunity. The student will not be put in a position of unfair advantage or disadvantage: the aim will be to enable the student to be assessed on equal terms with their cohort.

The module marks released following the meeting of the Board of Examiners should clearly identify results where extenuation has been considered and applied.

- If a student fails, without good cause, to provide the responsible body with information about extenuating circumstances within the timescales specified in the partner institution policy, the responsible body has authority to reject the request on those grounds.

16. STUDENT PARTICIPATION AND EVALUATION

STUDENT PARTICIPATION

A member of the Student Government Association (SGA) must be present at all meetings of the Academic Standards and Performance Committee (ASPC) of the college, and participate in the discussions and voting for all cases examined. Furthermore, there are scheduled weekly meetings between the Associate Dean of Students and the SGA, where students present their views on the operation and development of the College. In addition, AAU may invite students to Academic Council meetings, where they can express their views and opinions to the top-level administration. The SGA is also involved in co-organizing major on-campus events.

MODULE EVALUATION

Module evaluation is conducted through the student evaluation forms. These forms measure the teaching quality and assessment methods, learning materials, delivery methods, module objectives, thought-provoking activities, comprehension of the subject matter, grading, degree of intellectual challenge and stimulation and draw comparisons with other modules.

The collection of student feedback is made at the office of the Associate Dean of Students, who has the general overview of the procedure. Then, modules are classified according to the programme they belong, and the feedback is sent to the corresponding department head. The results are also forwarded to the individual instructors. The outcomes of module evaluations and measures that need to be taken to improve student experience in future offerings of the modules are discussed with the academic teams.