COURSE OUTLINE

1. GENERAL INFORMATION

FACULTY	ECONOMY AND MANAGEMENT		
DEPARTMENT	ORGANIZATIONS MANAGEMENT, MARKETING AND TOURISM		
LEVEL OF STUDY	UNDERGRADUATE		
COURSE CODE	**1605 - 230716**	**SEMESTER**	**7th (dir. Tourism)**
TITLE	**Computer Systems & Applications in Tourism and Hospitality**		

Autonomous Teaching Activities	**WEEKLY TEACHING HOURS**	**CREDITS**
Lectures, Laboratory Exercises	2T-3L	5

COURSE TYPE	SPECIAL BACKGROUND
PREREQUISITE COURSES	
TEACHING LANGUAGE	GREEK AND ENGLISH
COURSE OFFERED TO ERASMUS STUDENTS	YES
COURSE WEBPAGE (URL)	

2. LEARNING OUTCOMES

Learning outcomes
The course defines the concepts: data, information data, information, information, system, subsystem, information system, and applications in tourism companies, so that students: 1. KNOWLEDGE: recognize the sequence of concepts data, information data, knowledge, decision, as well as the implementation of PMS (Property Management System), internet applications, and internet collaboration used by tourism companies. UNDERSTANDING: are able to distinguish information systems from information technology systems and information systems, subsystems of systems and to assess which subsystems/systems each system cooperates with. 3. IMPLEMENTATION: can classify the information needs of the management at all levels of the organization for making the appropriate decisions, to examine which subsystems and applications each system should include, to discover for each system from which subsystems/systems it draws data, or for each system to which systems it transfers data and to discover the forms (tabs) of the systems and to distinguish which systems they belong to and what they are intended for. 4. ANALYSIS: can develop the technological infrastructure of information systems, applications with autonomous use, applications that compose application groups as packages-subsystems, which by their integration create a PMS, applications related to the sectors: rooms, food, sales, human resources, and finance of hosting companies, so that all their activities are effectively controlled and the right decisions are made. Also, students are able to distinguish which internet applications and which systems are used and to

know in which systems the debtors and creditors of the company appear.
5. COMPOSITION: organize the types of information systems by category and by the level of organization, to explain the flow of information data by type, to suggest the types and categories of information, and to recognize the possibilities that information systems provide to the administration of tourism companies for decision making. They can also explain the applications of the internet, which have been adopted by tourism companies.
6. EVALUATION: can evaluate the websites of the hosting companies and propose changes or add additional applications, so that they work effectively and are combined with the booking engine and all the collaborating agencies, travel agencies, tour operators, and online travel agents.
Moreover, they can judge and propose the appropriate system (capacity-department relationship) for any hosting company, so that the management is able to effectively control all its activities.

General Skills

- Search, analysis and synthesis of data and information, using the necessary technologies
- Adaptation to new situations
- Decision making
- Autonomous work
- Teamwork

3. COURSE CONTENT

1. BASIC CONCEPTS
I. Tourism
II. Tourism industry
III. Hospitality industry
IV. Hosting companies
V. System - Subsystem
VI. System theory in the science of management
VII. Hosting companies & systems: Historical development
VIII. Functional structure EF based on information systems & applications
IX. Departments - Employees - Responsibilities
X. EF organization based on information systems & applications
Supervisors - Directors - Administration - Responsibilities
2. INFORMATION SYSTEM
With case studies of three hosting companies
Information system - Information technology system - Information system
II. Data - Information data - Information
III. Awareness hosting business information tools
IV. Information-Information-Knowledge-Decision
V. Qualitative / Quantitative information
3. INFORMATION / INFORMATION
I. Information structure
II. Categories of information
III. Information quality features
IV. Balance sheet information
V. Indicators
VI. Categories of information systems & their types
VII. Information data flow / Information system type
4. INFORMATION SYSTEMS (PS) OF EF BASED ON THE LEVEL OF ORGANIZATION
I. PS of the operational level of E. F.

II. P. S. level of knowledge of E. F.
III. PS of administrative level of E.F.
IV. PS of the strategic level of E.F.
Criteria for the selection of the PSs of the EF A ′, B ', G.
5. INFORMATION TECHNOLOGY SYSTEM, INFORMATION SYSTEM
I. Comparison of information technology systems of e. Φ. A′, β′, γ′
II. Information system
III. Evolution of the technological infrastructure of information systems
IV. Networks
V. Internet, web, web 2.0, consumer-generated media
VI. Communication of the hosting company database with potential customers
VII. Changes brought by the internet to the hosting companies
6. APPLICATIONS OF INFORMATION SYSTEMS IN HOSTING COMPANIES
I. What are applications
II. Applications with autonomous use or as parts of systems in e. F.
III. System applications, systems application groups (packages) for e. F.
IV. Integration of system application groups
V. Property Management System (PMS)
VI. System configuration
7. APPLICATIONS OF ROOM SECTOR SYSTEMS
I. Reservations
II. Reception
III. Housekeeping
IV. Identity & passport reading
V. Call center management
VI. Electronic locking
VII. Digital signage
VIII. Events
IX. KWS and MIS of the room sector
8. F&B SYSTEMS APPLICATIONS
I. Warehouse
II. Catering - costing of recipes
III. Nutritional analysis
IV. Beverage control
V. Vending machines
VI. Point of Sales (POS)
VII. KWS and MIS of the F&B sector
SALES APPLICATIONS
1. MARKETING SYSTEM IMPLEMENTATION
A. INTERNET PROMOTION AND COOPERATION
Web site, Web Booking Engine, Search Engine Optimization (SEO), Online Reputation Management (ORM), E-Customer Relationship Management (e-CRM), Newsletter, Really Simple Syndication or Rich Site Summary (RSS), View and collaborate with DMS, OTA, and GDS
B. CUSTOMER HISTORY
C. CONTACT MANAGEMENT
2. IMPLEMENTATION OF A SALES ANALYSIS SYSTEM
3. REVENUE MANAGEMENT SYSTEM (RMS) APPLICATION
4. KWS and MIS of the sales sector
9. SYSTEMS APPLICATIONS SECTORS: HUMAN RESOURCES, ECONOMICS & MAINTENANCE-SECURITY
I. Staff
II. E-learning
III. KWS and MIS of the human resources sector

IV. Payroll
V. Accounting system
VI. KWS and MIS of the financial sector
VII. Maintenance
X. Energy management
IX. Security
X. KWS and MIS of the maintenance system
System applications that we are going to see in the future
10. "ERMISWIN" APPLICATION OF HOSPITALITY INTEGRATED TECHNOLOGIES S. A.
I. In general
II. Examples of use
III. Basic functions
11. APPLICATION «PROTELF. O. » OF HOSPITALITY INTEGRATED TECHNOLOGIES S. A.
I. In general
II. Examples of use
III. Basic functions
12. "PYLON" APPLICATION OF EPSILONNET
I. In general
II. Examples of use
III. Basic functions
13. SELECTION OF THE APPROPRIATE UNIQUE INFORMATION SYSTEM
I. Selection criteria
II. Practice exercises
III. Epilogue

4. TEACHING AND LEARNING METHODS - ASSESSMENT

<table>
<tr><td>TEACHING METHOD</td><td>Face to face in both theory and laboratory.</td></tr>
<tr><td>ICT USE</td><td>Use of ICT in theory, in the laboratory, and the communication with the students.</td></tr>
<tr><td>TEACHING ORGANIZATION</td><td>
<table>
<tr><th>Activities</th><th>Working Load per Semester</th></tr>
<tr><td>Lectures</td><td>26</td></tr>
<tr><td>Computer lab exercises with hotel programs and internet use.</td><td>39</td></tr>
<tr><td>Tutoring</td><td>39</td></tr>
<tr><td>Assignment</td><td>10</td></tr>
<tr><td>Seminars</td><td>12</td></tr>
<tr><td>Educational Visits</td><td>24</td></tr>
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<tr><td>TOTAL</td><td>150</td></tr>
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<tr><td>ASSESSMENT</td><td>The evaluation is done in the Greek language.
In theory, with open-ended questions at the end of the semester.
In the laboratory, with elaborating questions, multiple-choice as well as exercises in real working conditions with computers at the end of the semester.
Students are allowed to see the correct answers and to cross-check the correctness of their grading on the course website.</td></tr>
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5. REFERENCES

-Suggested bibliography:

- Nerantzis K.2018. Information systems and applications in hosting companies
- Bruce, Braham. 1993. Computer systems in the hotel & catering industry.
- Kasavana, Cahill. 1997.Hospitality industry computer systems 3rd edition.
- McFadden, Conolly. 2005. Technology Strategies for the Hospitality industry.
- Sheldon P.J. 1997. Tourism Information Technology.
- Sotiriadis M. 2005. Financial management of hotel companies.
- Ebusinessforum. Deliverable. 2006. Electronic Services and Applications in Tourism: Current Situation and Prospects

WEBSITES

http://www.micros.com/
http://www.hit.com.gr/
http://www.bluebyte.gr
http://www.sunsoft.gr
http://www.infor.com/
http://portal.singularlogic.eu/
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