International European University
European Business School

SYLLABUS

Course title

Information Systems and Technologies in Tourism

Course information

Educational program:

Tourism educational and professional program, obligatory educational component

Course description:

Modern information support for an organization operating in the tourism sector is a compulsory condition for its successful functioning. The rapid development of information technologies, substantial foreign currency inflows into this area, and, as a result, the expansion of globalization processes extensively affect the development of the tourism industry. This sector covers a variety of transport, service, trade, and other geographically distributed organizations and enterprises whose coordinated actions are now an essential condition for meeting the demand for tourism goods and services.
The training of specialists in social and cultural services and tourism requires the deep understanding of advanced computer technologies and the development of strong skills in their analysis, implementation, and use, depending on economic and production objectives.

Prerequisites for study (previous requirements):

The Information Systems and Technologies in Tourism academic discipline develops and enhances students' skills in the following areas: information literacy and media literacy, communication and cooperation, digital content creation, and information security in the digital environment.

Number of credits/hours:

4 ECTS credits / 120 hours

Discipline features

Period of teaching	Semester	International discipline integration	Year of study	Courses: general training/professional training/elective
1 semester	5th semester	not available	3rd year	Professional training course

Mode of study:

Blended learning

Classroom location:

Classroom 405, https://dist.ieu.edu.ua/course/index.php?categoryid=649

Information about the lecturer

Lecturer's full name:

Larysa Shevchuk, Doctor of Pedagogy, Professor

Department

Department of Information Technology

Office location:

42V Akademika Hlushkova Ave., room 509, Kyiv

Work and consultation schedule:

Every Tuesday from 12 p.m. to 4 p.m.

Lecturer's e-mail:

larisa_shevchuk@ieu.edu.ua

Course objectives / Learning outcomes

Course objectives

To introduce students to information systems and technologies used in the modern tourism sector and develop the necessary theoretical knowledge and practical skills for designing modern information technologies, their rational use, and the implementation of cutting-edge information technologies in practical tourism activities.

The role of the academic discipline in achieving program learning outcomes

PLO 9. To organize the process of serving consumers of tourist services using cutting-edge information, communication and service technologies and complying with quality standards and safety standards.

PLO 18. To assess your knowledge adequately and apply it in various professional situations.

PLO 21. To make reasoned decisions and take responsibility for the results of your professional activities.

Learning outcomes

To know:

- the place and role of information technologies in the tourism sector;
- objectives and areas of application of information technologies in tourism;
- the current state, classification, and trends in the development of information technologies in international tourism;
- technical support for managing information resources at tourism enterprises;
- areas of using virtual and augmented reality technologies and their impact on the competitiveness of a tourism enterprise;
- the structure and modules of the most popular information management systems for tourism enterprises;
- the modern computer technology market, rules, and principles of equipment operation required to automate the office of a tourism enterprise.

To be able to:

- select the necessary information systems and technologies to solve specific tasks of a tourism enterprise;
- search for information resources using Internet tools and services;
- apply modern information systems and application programs used in international tourism;
- adopt information technologies in the practical work in the chosen specialty;
- ensure data protection and develop an efficient information security strategy for a tourism enterprise;
- work with booking and reservation systems, international web portals, and mobile applications to create, promote, and sell tourism products, as well as software for automating tourism business management.

Course content

Content module 1. SPECIFIC FEATURES OF ADOPTING INFORMATION TECHNOLOGIES IN INTERNATIONAL TOURISM ACTIVITIES
Topic 1. The essence of information technologies and their classification.
Topic 2. The impact of information technologies on the development of international tourism.
Content module 2. THE USE OF INFORMATION TECHNOLOGIES AT A TOURISM ENTERPRISE
Topic 3. Global reservation systems.
Topic 4. Multimedia technologies.
Topic 5. Internet technologies.
Topic 6. Software for automating operations of a tourism enterprise's office.
Content module 3. CORPORATE INFORMATION SYSTEMS
Topic 7. Concepts and principles of designing a corporate information system.
Topic 8. CRM systems and CRM technologies.

Course materials and requirements

Books and materials

1. V.K. Kiptenko, O.Y. Malynovska, A.P. Fedchuk. Educational and Methodical Set of Classes with the Parus – Travel Agency Software Module (Version 7.4 for Windows). K: LGT, 2013. – 50 p. with illustrations.
2. V.K. Kiptenko, T.I. Mykhailenko. Methodical Recommendations for Performing Independent Tasks in the Geoinformation Management Discipline. Kyiv: Alfa-PIK Publishing House, 2020. – 37 p.
3. N.S. Koroma, T.I. Mykhailenko, S.Y. Syrovets. Educational and Methodical Set: Information Technologies in Tourism. Kyiv: Alfa-PIK, 2022. – 40 p.
4. N.S. Koroma. The Role of Geoinformation Technologies in the Creation and Management of Smart Cities // Scientific Round Table: Prospects for the Implementation of GIS Technologies in Applied Research, Kyiv, November 18, 2020. – 2020. – 61 p. – p. 14-17.
5. T.H. Kupach. Information Technologies and Systems in Tourism: Educational and Methodical Set (for university students). Kyiv, 2015. – 95 p.
6. T.I. Mykhailenko. Opportunities for the Use of GIS Technologies to Manage Public Utilities in a Community (on the Example of Pobuzka OTG). Problems and Prospects for the Development of Economy, Finance, Accounting, and Law: Proceedings of the International Scientific Conference (Poltava, June 1, 2020): in 2 parts. Poltava: CFEND, 2020. Part 2. – 71 p.
7. Features of Developing a CRM System for an International Tour Operator / V.S. Kruhlyk et al. Scientific Notes of the Taras Shevchenko National University of Kyiv. Series: Technical Sciences. 2020. P. 79–84.
   URL: http://eprints.mdpu.org.ua/id/eprint/9325/

8. S.Y. Syrovets, I.V. Rak. Computer Reservation Systems in the Tourism Industry // Collection of Scientific Papers of Khmelnytskyi Cooperative Professional College of Khmelnytskyi Cooperative Trade and Economic Institute. Kamianets-Podilskyi: Medobory-2006 Private Enterprise, 2014. – 576 p. – p. 401–408.
9. S.Y. Syrovets. Educational and Methodical Set: Methods of Regional Studies in Tourism. K.: Alfa-PIK, 2017. – 40 p.
10. S.Y. Syrovets. Educational and Methodical Set: Methods of Research in International Tourism. K.: Alfa-PIK, 2019. – 60 p.
11. Big data in tourism research: A literature review// *https://www.sciencedirect.com/science/article/abs/pii/S0261517718300591?via%3Dihub.*
12. Tourism, big data, and a crisis of analysis// *https://www.sciencedirect.com/science/article/abs/pii/S0160738321000207.*
13. Christine A. Vogt. Customer Relationship Management in Tourism: Management Needs and Research Applications. Journal of Travel Research. 2010. No 49(1). DOI: 10.1177/0047287510368140. URL*:* *https://www.researchgate.net/publication/249701260_Customer_Relationship_Management_in_Tourism_Management_Needs_and_Research_Applications* (Date of request: April 2, 2021).
14. Dr. Vaishali Goel1, Ashutosh Singh, Shipra Shrivastava. CRM: A Winning Approach for Tourism Sector. Volume-5, Issue-2, (April-2015). International Journal of Engineering and Management Research. 2015. P. 321–325. URL*:* *https://www.ijemr.net/DOC/CRMAWinningApproachForTourismSector(321325).pdf*
15. Hansen F. and Oleshchuk V.A.: Conformance Checking of RBAC Policy and its Implementation, The First Information Security Practice and Experience Conference, ISPEC 2005, Singapore, LNCS, Volume 3439, pp. 144-155, 2005. 20. Shelly, Gary, Cashman, Thomas, Vermaat, Misty, and Walker, Tim. (1999). Discovering Computers 2000: Concepts for a Connected World. Cambridge, Massachusetts: Course Technology.
16. Roya Rahimi, Mehmet Ali Köseoglu, Ayse Begum Ersoy, Fevzi Okumus. Customer relationship management research in tourism and hospitality: a stateof-the-art. Emerald Insight. June 19, 2017.

Course technical requirements

To access course materials, you will need regular access to a computer and the Internet. To successfully study and pass the course exam, you should continuously explore materials available on the University's distance learning platform (Moodle) in the Information Systems and Technologies in Tourism course. Besides, you should create report documents for practical assignments and upload them to the platform (the platforms can only be accessed using a corporate email).
If you are unable to access the distance learning platform, you should inform the Dean's Office, your class representative, or the course lecturer directly.

Learning process

The Information Systems and Technologies in Tourism course consists of lectures and practical classes.
Lectures use the following training methods: lecture, conversation lecture, discussion, discussion of problematic issues, demonstration, analysis of various situations according to the lecture topic.
Practical classes use the following training methods: questioning, testing performing individual tasks, performing analytical and calculation works, solving specific problems and situations.

Assessment policy

Summative assessment

You will have various ways to show your knowledge and skills during the semester. This includes how you attend classes, how and what you contribute to class discussions, how you perform and submit laboratory tasks and tests on time, how you perform independent work tasks, as well as your ability to present your work. Additionally, you have the opportunity to complete tasks performed individually or in a small group in the form of a student research paper.

Activities during the semester	Maximum amount of points during the semester
CURRENT CONTROL – 60 points	
Seminar works (16 pcs.)	16
Practical works (16 pcs.)	24
Independent works	12
Individual work	8
EXAMINATION CONTROL – 40 points	
TOTAL – 100 points	

Grading scale

The grade for the discipline is determined as the sum of points for current activities in the semester and points for the final control. The final control in the form of an exam is carried out after learning all the topics of the discipline, during the examination session. The minimum amount of points that should be obtained by students for current educational activities during a semester to be admitted to the final control is 36 points. The minimum amount of points for current learning activities and the exam required to pass the discipline should be at least 60. The overall points of the discipline are 100.

The total grade for the discipline is given according to the national and European scale (ECTS).
The overall final grade in points according to the national and ECTS scales is put into the examination and test register, academic card and credit book of students.

National and ECTS grading scale

Sum of points for all types of educational activities	ECTS grade	Grade according to the national scale	
		for exam, term paper, practical training	for Pass/Fail test
90-100	A	excellent	pass
82-89	B	good	
74-81	C		
66-73	D	satisfactory	
60-65	E		
30-59	FX	fail with possible repeated pass	fail with possible repeated pass
1-29	F	excellent	pass

How to find out your grade:

To check your grades for tasks and read your lecturer's comments, you should check appropriate tabs on the distance learning platform (Moodle) in this course.
You can also obtain information about your grades in the general chat of the discipline group (Viber or Telegram) or directly from the course lecturer via corporate e-mail, messengers, or by appointment on consulting days.

Course policy

General guidelines

To ensure fruitful learning and cognitive activities of students while studying the discipline, one holds topical lectures and practical classes.
During classes and at the University, students should respect lecturers, staff, and other students, attend classes according to the schedule, come on time, and not leave classes without lecturer's permission. All academic assignments and works should be performed by the deadlines.

The teaching staff should constantly advance their professional level, teaching skills, general culture, as well as provide students with appropriate conditions for learning educational programs according to the requirements for the content, level and capacity of education, and encourage their comprehensive professional development. Lecturers should follow the curriculum, not be late for classes, not allow any manifestations of corruption, discrimination, bullying, harassment, and infringement of the students' rights.

Class attendance and participation

The learning process is based on the application of active teaching methods. Active participation is an expectation and a norm.
Attendance and active participation account for 80% of the grade.
Students who miss the current control for valid reasons confirmed by documents have the right to take current control within two weeks after returning to studying.
Students who have missed classes without valid reasons, have not participated in current control activities, have not liquidated academic failure are not admitted to the final semester control of this discipline. In this case, an academic staff member puts a mark 'non-admission' in the exam record. Repeated taking of the exam in the discipline is appointed in case of accomplishing all types of educational, independent (individual) work stipulated by the working program of the academic discipline and is carried out according to the approved schedule of academic failure liquidation.

Academic integrity

The integrity of academic activities at any higher education institution requires honesty in learning and research, and therefore, academic integrity is expected from all IEU students. Academic dishonesty is prohibited in the programs of our University. All participants in the educational process must obey the academic integrity principles.

Late task performance, correction of grades, making up missed classes

Reports on completed tasks should be uploaded to Moodle by the deadlines stipulated in the course schedule. It is best practice to perform tasks as soon as possible after receiving them so that you have enough time to take an active part in the class. If you need more time to perform the task, flexible deadlines are available. Completed tasks will be accepted until full credit until the last scheduled class in the discipline. Afterwards, the 40% partial credit based on the grade will be awarded within a week after the last day of class. Tasks that are not submitted at all will receive 0.

If you miss classes for more than one week due to illness or other reasons, please contact your lecturer to arrange alternative options for performing tasks. Deadlines work both ways, and meeting them ensures that your lecturer will provide prompt feedback on your tasks to make sure you keep up with the course.

Lecturer's response time (regarding checking tasks)

Via corporate e-mail (within 24 hours), via messengers (within 1-2 hours)

Efficient communication

Efficient communication is crucial for success in this course, and the following channels are recommended:

- *Q&A Forum*: To address general course-related questions, check the F.A.Q section in Moodle first, then post your question in the Q&A forum to seek answers from your colleagues or the lecturer (you are guaranteed to receive email notifications whenever a new post or response is made);
- *E-mail:* If you have a personal course-related question, please e-mail the lecturer directly;
- *Social media, messengers*: personal communication with classmates and the lecturer;
- *Face-to-face meeting*: communication with classmates during classes and with the lecturer on consulting days.

ChatGPT and other generative AI policy

The use of generative AI is allowed.

The use of electronic devices during classes

Please use your electronic devices (smartphones, tablets, laptops) only for class-related purposes and if they are needed to make course content accessible. Make sure to switch your smartphone to silent mode during the class. If you have urgent personal matters, such as a family emergency, that might require you to answer a call, please notify the lecturer before the class begins so you can quietly leave the classroom to take the call.
Besides, no part of the class can be recorded in audio or video format without the consent of the lecturer and your classmates. This ensures the privacy of other students and prevents any disruption to their participation or learning.

Policy of publication and distribution of course materials

Students are not allowed to post, publish, sell, or otherwise publicly distribute course materials without the written permission of the lecturer.
Such materials include: lecture notes, lecture slides (presentations), video or audio recordings, tasks, problem sets, tests, other students' work, and answer keys, etc.
Students who sell, post, publish, or distribute course materials without written permission in order to get answers or otherwise can be subject to disciplinary action, up to and including being required to withdraw from the course.

Expected student workload and engagement

You should allocate approximately 4 hours per week for this course. If you face circumstances requiring you to spend more time on any of the tasks, please inform your lecturer by e-mail (messenger). The deadline for submission can be extended only if the lecturer is informed in advance that you will not be able to submit the task on time. Students are expected to have a backup plan in case of computer malfunctions or Internet outages.

Support services

E-schedule: https://rozklad.ieu.edu.ua
Online library: https://onlinelibrary.ieu.edu.ua
Repository: https://sed.ieu.edu.ua/index.php/sed/index
Education Ombudsman: https://ieu.edu.ua/pro-mieu/ombudsmen

Course schedule

Topic	Content of practical classes/seminars
	▪ *Seminar No. 1*. Preparation and defense of the research project on the chosen topic;
Topic 1. The essence of information technologies and their classification	▪ *Practical work No. 1.* Characteristics of the information society and its development prospects; ▪ *Independent work on Topic 1*. Researching the topic in scientometric databases;
	▪ *Individual work*. Creation of an explanatory dictionary

Topic 2. The impact of information technologies on the development of international tourism	*Seminar No. 2*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 2*. Information communications in modern international tourism business. Modeling of business processes of a tourism enterprise; ▪ *Independent work on Topic 2*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 3. Global reservation systems	*Seminar No. 3*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 3.* Principles of working with the Amadeus Global Reservation System; ▪ *Independent work on Topic 3*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 4. Multimedia technologies	*Seminar No. 4*. Preparation and defense of the research project on the chosen topic; ▪ *Independent work on Topic 4*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 5. Internet technologies	*Seminar No. 5*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 4*. System of working with search engines in international tourism business; ▪ *Independent work on Topic 5*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 6. Software for automating operations of a tourism enterprise's office	*Seminar No. 6*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 5*. Principles of working with software for a tourism enterprise;

	▪ *Independent work on Topic 6*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 7. Concepts and principles of designing a corporate information system	*Seminar No. 7*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 6*. System of working with reservation programs in international tourism; ▪ *Independent work on Topic 7*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary
Topic 8. CRM systems and CRM technologies	*Seminar No. 8*. Preparation and defense of the research project on the chosen topic; ▪ *Practical work No. 7*. CRM software tools; ▪ *Practical work No. 8*. CRM software products; ▪ *Independent work on Topic 8*. Researching the topic in scientometric databases; ▪ *Individual work*. Creation of an explanatory dictionary

Tips on successful study

If you want to succeed in this discipline, you should be:

- persistent, attentive, and curious;
- creative, cheerful, and open to communication and discussions;
- ready to acquire information and knowledge about the subject not only during lectures but also during extracurricular activities.