



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	101.ITU.I	
<b>Subject:</b>	<b>Mathematics I</b>	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	I	Winter
<b>Total hours:</b>	3+2	According to approved programe
<b>ECTS:</b>	7	According to approved programe
<b>Schedule / Hall</b>		
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Asoc. Dr. Xhevat KRASNIQI	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	xhevat.krasniqi@uni-pr.edu	
Telefon:	+ 383 (0) 44 300963	

<b>BRIEF CONTENT OF SUBJECT</b>	Logic and sets. Functions, relations. Algebraic structures. Numerical Sets. Complex numbers. Matrix. Determinants. Systems of linear equations. Vector algebra. Plain and line in space. The assignments during semester are three tests and two seminars. Students that achieve positive results in tests are not obliged to take the written exam, while students that have the grade above 6 (six) in seminars are also not obliged to take the oral exam.	
<b>AIMS</b>	The student should know enough wins from mathematical disciplines such as: Algebra, Logic, Sets theory, relations, functions, Numerical sets, matrices, determinants, vectors, linear systems of equations, plane, straight line, surface, so that the know ledge gained from mathematical disciplines to apply without problems in the field of engineering.	
<b>EXPECTED LEARNING OUTCOMES</b>	<ol style="list-style-type: none"> <li>1. Mathematics operation in numerical sets</li> <li>2. Operations with matrices and determinant sat least the third order.</li> <li>3.To solve systems of linear least third order.</li> <li>4. Operations with vector</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Mathematical Logic Literature: Dr. Ejup Hamiti : Mathematic I, p. 1-27
	<b>Week - II</b>	Sets. Operations with sets.

	Literature: Dr. Ejup Hamiti : Mathematic I, p.33-50
<b>Week - III</b>	Functions. Permutations. Literature: Dr. Ejup Hamiti : Mathematic I, p.54-69
<b>Week - IV</b>	Algebraic Structures. Literature: Dr. Ejup Hamiti : Mathematic I, p.73-92
<b>Week - V</b>	Setsreal numbers. Literature: Dr. Ejup Hamiti : Mathematic I, p.96-118
<b>Week - VI</b>	Sets of complex numbers. Literature: Dr. Ejup Hamiti : Mathematic I, p. 121-134
	First evaluation
<b>Week - VII</b>	Matrices. Operations with matrices. Literature: Dr. Ejup Hamiti : Mathematic I, p.139-159
<b>Week - VIII</b>	Determinantat. Determinantat ranks third. Literature: Dr. Ejup Hamiti : Mathematic I, p.162-180
<b>Week - IX</b>	Matrica inverse Literature: Dr. Ejup Hamiti : Mathematic I, p.180-200
	The firstseminarpaper
<b>Week - X</b>	The system of linear equations. Kramer formulas. Literature: Dr. Ejup Hamiti : Mathematic I, p.237-249
<b>Week - XI</b>	The equation of the plane Literature: Dr. Ejup Hamiti : Mathematic I, p.265-279
	The second evaluation
<b>Week - XII</b>	Line equation in space. Literature: Dr. Ejup Hamiti : Mathematic I, p.281-285
<b>Week - XIII</b>	Plain and straight line. Relations between them. Literature: Dr. Ejup Hamiti : Mathematic I, p. 286-292
<b>Week - XIV</b>	Surfaces spherical, cylindrical, rotating. Literature: Dr. Ejup Hamiti : Mathematic I, p.297-303
<b>Week - XV</b>	Cylindrical and spherical coordinates in space. Literature: Dr. Ejup Hamiti : Mathematic I, p.320-321
<b>LITERATURE</b>	<ol style="list-style-type: none"> <li>1. Hamiti, E.(2008). Matematika II, Shtëpia Botuese Libri Shkollor, Prishtinë.</li> <li>2. Sadiku, S., Merovci, F. (2008). Matematika I-përmbledhje detyrash të zgjidhura, GrafoBeni, Prishtinë.</li> </ol> <p>Additional Literature:</p> <ol style="list-style-type: none"> <li>3. Hartel, R. W., Hyslop, D. B., Connelly, R. K., &amp; Howell Jr, T. A. (2008).Math concepts for food engineering. CRC Press.</li> </ol>

<b>TEACHING METHODOLOGY</b>	Lecture, discussion, group work, exercises, homework, seminar papers.			
<b>EVALUATION</b>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	3	15	45
	Exercise sessions - theoretical	2	15	30
	Field exercises	-	-	-
	Practical work	-	-	-
	Consultation with the professor / assistant	3	-	3
	Colloquiums / seminars	2	3	6
	Independent tasks (work)	-	-	-
	Student self study time (in library or at home)	5	15	75
	Final exam preparation	7	1	7
	Time spent in assessment (tests, quizzes, final exams)	3	3	9
	Projects, presentations, etc.	-	-	-
<b>Total</b>			<b>175</b>	
<b>EVALUATION</b>	Evaluation methods are: The first evaluation: 30% The second evaluation: 25% Homework and other commitments: 10% A regular attendance: 5% Final Exam: 30% Total: 100%			
<b>ACADEMIC POLICIES</b>	Regular attendance of lectures, quiet in the lesson; disconnection of mobile phones, entry hall with time etc..			

Mitrovica

Prof. Asoc. Dr. Xhevat KRASNIQI

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(Name Surname)

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(Signature)



UNIVERSITETI - UNIVERSITY

“ISA BOLETINI”  
MITROVICË

Faculty of food technology

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Department of Food Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	102.ITU.I	
<b>Subject:</b>	Physics	
<b>Subject Status:</b>	+	Compulsory
<b>Semester:</b>	winter	Summer
<b>Total hours:</b>	3+2	According to approved programe
<b>ECTS:</b>	6	According to approved programe
<b>Schedule / Hall</b>		
<b>Academic year:</b>	1st year, 1st semester	
<b>Professor:</b>	Prof. Asoc. Besire CENA	
<b>Assistants:</b>	Prof. Asoc. Besire CENA	
<b>Contacts:</b>	Professor	Assistant
	Email: besire.tahiri@umib.net	besire.tahiri@umib.net
	Telefon: + 383 (0) 44 255 276	+ 383 (0) 44 255 276

<b>BRIEF CONTENT OF SUBJECT</b>	<p>The main modules of the course Physics are:</p> <ul style="list-style-type: none"> <li>• Movement. Material points and reference systems. Movement in the plane and space.</li> <li>• Dynamics, Elements of Statistics. Solid bodies and their properties. Calorimetry. Thermometry. Specific heat of gases. Thermodynamic processes. First and Second Principle of Thermodynamics. Fluids.</li> <li>• Swings. Waves. Acoustics. Electrostatics. Electromagnetism. Ionizing and non-ionizing radiation. Atomic nucleus. Radioactivity.</li> </ul>
<b>AIMS</b>	<p>The purpose of this course is the theoretical and practical training of students in the field of Physics, respectively:</p> <ul style="list-style-type: none"> <li>• training of technology students in creating knowledge on physical phenomena and the laws necessary for their mastery in practice.</li> <li>• training students to lead and control the work and methods applied in engineering.</li> </ul>

<b>EXPECTED LEARNING OUTCOMES</b>	<input type="checkbox"/> Upon completion of the course, students will be able to: <ul style="list-style-type: none"> <li>a. to understand the basic phenomena of Physics;</li> <li>b. to gain knowledge about laboratory exercise equipment in function of engineering.</li> <li>c. understand and be trained for independent research and creative activities.</li> <li>d. design apparatus, practical-experimental knowledge.</li> <li>e. to select the apparatus and equipment necessary for technological processes.</li> </ul>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	General Introduction to Physics. Movement. Material points and reference systems. Movement in the plane and space.
	<b>Week - II</b>	Dynamics, Elements of Statistics.
	<b>Week - III</b>	Gravitational field and its potential. Solid bodies and their properties.
	<b>Week - IV</b>	Laws of conservation in mechanics. Calorimetry. Thermometry. Specific heat of gases. Thermodynamic processes.
	<b>Week - V</b>	First and Second Principle of Thermodynamics. Fluids.
	<b>Week - VI</b>	Atmospheric pressure, Capillary phenomena, viscosity in liquids, diffusion of ionic solutions.
	<b>Week - VII</b>	First assessment
	<b>Week - VIII</b>	Swings. Waves.
	<b>Week - IX</b>	Acoustics.
	<b>Week - X</b>	Electrostatics.
	<b>Week - XI</b>	Electromagnetism. Ionizing and non-ionizing radiation.
	<b>Week - XII</b>	Atomic structure.
	<b>Week - XIII</b>	Atomic nucleus. Radioactivity.
	<b>Week - XIV</b>	Second evaluation
	<b>Week - XV</b>	Recapitulation of learning units.
<b>LITERATURE</b>	Basic literature: <ol style="list-style-type: none"> <li>1. Stephen T. Thornton &amp; Andrew Rex, Modern Physics for Scientists and Engineers, third edition, Brooks/Cole, 2006.</li> <li>2. Artur Beiser, Concepts of Modern Physics, sixth edition, New York, 2003</li> <li>3. Mustafe Bytyqi, Physics, Faculty of Mathematical and Natural Sciences, Prishtina, 2000.</li> <li>4. Lecture slides</li> </ol> Supplementary literature: <ol style="list-style-type: none"> <li>5. Physics for students of the technical faculty, Dr.S.Skenderi, Dr.R.Maliqi, Prishtina, 2000.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	<p>Teaching will take place through lectures, exercises, case studies, individual and group interpretations, seminar work, periodic self-assessments, etc. Lectures.</p> <p>Seminar (the student together with the lecturer chooses a specific topic, prepares a written seminar and defends the seminar orally in the form of a mini-conference in front of the lecturer and colleagues).</p> <p>At the end of the semester, the lecturer publishes a collection of all the seminars and distributes them to the students</p>																																																								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b></th> </tr> <tr> <th style="text-align: center;">Activity</th> <th style="text-align: center;">Hours</th> <th style="text-align: center;">Day/Week</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">3</td> <td style="text-align: center;">15</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Exercise sessions</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Practical work</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Consultation with the professor / assistant</td> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Colloquiums / seminars</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Independent tasks (work)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">11</td> <td style="text-align: center;">11</td> </tr> <tr> <td>Student self study time (in library or at home)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">15</td> <td style="text-align: center;">15</td> </tr> <tr> <td>Final exam preparation</td> <td style="text-align: center;">6</td> <td style="text-align: center;">5</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Time spent in assessment (tests, quizzes, final exams)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">6</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Projects, presentations, etc.</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td colspan="3"><b>Total</b></td> <td style="text-align: center;"><b>150 hours = 6ECTS</b></td> </tr> </tbody> </table>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>				Activity	Hours	Day/Week	Total	Lectures	3	15	45	Exercise sessions	2	15	30	-	-	-	-	Practical work	2	1	2	Consultation with the professor / assistant	1	3	3	Colloquiums / seminars	2	2	4	Independent tasks (work)	1	11	11	Student self study time (in library or at home)	1	15	15	Final exam preparation	6	5	30	Time spent in assessment (tests, quizzes, final exams)	1	6	6	Projects, presentations, etc.	2	2	4	<b>Total</b>			<b>150 hours = 6ECTS</b>
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<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.</p>																																																								

**Mitrovica**

**Subject teaching professor:**

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**Prof. Asoc. Besire CENA**

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(Name Surname)

(Signature)

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**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

<b>Course Outline Model (Syllabus)</b>		
<b>Faculty:</b>	Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	103.ITU.I	
<b>Subject:</b>	General Chemistry	
<b>Subject Status:</b>		(Compulsory)
<b>Semester:</b>		(Winter )
<b>Total hours:</b>		(3+2)
<b>ECTS:</b>		(7)
<b>Schedule / Hall</b>	According to the official schedule	
<b>Academic year:</b>	2020-2021	
<b>Professor:</b>	Prof.Dr Aziz Behrami	
<b>Assistants:</b>	Mr.sc Malsore Pllana	
<b>Contacts:</b>	Professor	Assistant
	Email: aziz.behrami@umib.net	malesore.pllana@umib.net
	Telefon: +38344170726	

<b>BRIEF CONTENT OF</b>	Chemical Kinetics, Mechanization of Reactions, Pure Substances, Structure of Pure Substances, Atomic and Relative Molecular Masses, Electronic Structure of the Atom, Chemical Bonding and Structure of Molecules, Complex Compounds, Solutions, Chemical Reactions, Chemical Equilibrium, chemical, Colloidal disperse systems, Diffusion and Osmosis, Inorganic and organic pollutants of water and air, Indicators, Buffers, Salt hydrolysis, Electrolyte solutions, Electrolytic potentials, NaCl electrolysis.
<b>AIMS</b>	They are for the student through lectures to achieve sufficient knowledge, to reinforce them through experimental laboratory work, solving stoichiometric tasks in order not only to learn but to study the object of study of the subject of general chemistry.



Achievement should be presented in the form of learning outcomes which are formulations of what the student is expected to know and be able to demonstrate upon completion of the course.

Learning outcomes should be presented based on Blum's taxonomy hierarchy (2011) on the levels of the cognitive domain, which are: Knowledge, understanding, application, analysis, evaluation and synthesis (creation). More in:

<http://bloomstheory.wikispaces.com/Resources+%26+Websites>

Accessibility should be formulated with the help of Action Verbs which should be used for different cognitive levels:

- Knowledge: Adjust, summarize, define, describe, count, examine, identify, etc.
- Understanding: Clarify, connect, change, classify, compare, illustrate, testify, choose, explain, interpret, sketch, discuss, distinguish, predict, re-emphasize, translate, describe, etc.
- Implement: Use, evaluate, complete, calculate, construct, manipulate, organize, demonstrate, prepare, solve, use, illustrate, construct, perform, research, etc.
- Analysis: To analyze, examine, categorize, criticize, debate, single out, detach, evaluate, distinguish, compare, categorize, divide, etc.
- Evaluation: To ascertain, argue, discuss, persuade, discriminate, judge, reason, decompose, prove, discover, predict, plan, construct, propose, invent, formulate, verify, argue, recommend, etc.
- Synthesis: To argue, invent, reorganize, categorize, formulate, generalize, integrate, manage, review, discuss, prioritize, determine, etc.

5-7 expected learning outcomes should be noted for each subject.

At the end of the course the student is expected to be able to:

1. For the student to study the object of study of general chemistry.
2. The student should be trained in basic stoichiometric calculations.
3. The student should be trained for laboratory work.
4. to form a positive intention towards the subject of general chemistry and its importance.
5. To form skills for work in the laboratory and the person responsible for storing substances that are present in research laboratories.
6. Use of equipment in the chemistry laboratory.

	Weeks	Topic
<b>PROGRAM</b>	<b>Week - I</b>	Chemical Kinetics, Mechanism of Reactions
	<b>Week - II</b>	Pure substances, Structure of pure substances
	<b>Week - III</b>	Relative atomic and molecular masses, Electronic structure of the atom
	<b>Week - IV</b>	Chemical bonding and structure of molecules
	<b>Week - V</b>	Complex compounds, Solutions
	<b>Week - VI</b>	Chemical reactions, Chemical equilibrium
	<b>Week - VII</b>	Energy changes during chemical reactions
	<b>Week - VIII</b>	Colloidal disperse systems
	<b>Week - IX</b>	Diffusion and Osmosis
	<b>Week - X</b>	Inorganic and organic pollutants of water and air
	<b>Week - XI</b>	Indicators, Buffets
	<b>Week - XII</b>	Hydrolysis of salts
	<b>Week - XIII</b>	Electrolyte solutions
	<b>Week - XIV</b>	Electrical potentials
	<b>Week - XV</b>	Electrolysis of NaCl
<b>LITERATURE</b>	<p>Basic literature. To be listed:            General Chemistry "Dr. Ivan Filipovi and Dr. Stepan Lipanovi., reprint 2016</p> <p>Supplementary literature: Brady, J.E and G.E. Huimuston, General chemistry, principles and structure, SI version, wiley and sons, New York, 1986</p> <p>General and inorganic chemistry - Zana Gace 2012.</p>	
<b>TEACHING METHODOLOGY</b>	Lectures, exercises, individual work, experimental work, seminar papers, colloquia, essays, field work, group work, etc.	

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	3	15	45
Exercise sessions - theoretical	2	15	30
Consultation with the professor / assistant	0.5	12	6
Colloquiums / seminars	2	5	10
Independent tasks (work)	2	5	10
Student self study time (in library or at home)	2	15	30
Final exam preparation	2	15	30
Time spent in assessment (tests, quizzes, final exams)	2	5	10
Projects, presentations, etc.	1	4	4
<b>Total</b>			<b>175 = 7 ECTS</b>

<b>EVALUATION</b>	<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]	
	Tests	Rating in% 1st test, written ..... 25% 2 nd test - written ..... 25% Participation in lectures .....10% Written exam ..... 40% Total ..... 100% Grade scales: 50-less - grade 5 (five) 51-60% - grade 6 (six) 61-70% - grade 7 (seven) 71-80% - grade 8 (eight) 81-90% - grade (nine) 91-100% - grade (ten)

**ACADEMIC POLICIES**

Criteria for regular attendance and rules of etiquette are set during the organization of the lesson.  
Further instructions:

- Computer work

Written works must be computer written. In the works it is obligatory to observe the criteria both for the visual aspect and the content of the required works. During the works it is required to respect the spelling rules and APA style

- Ethics in teaching

The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.

- Deadlines

In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he / she deems it reasonable and necessary for the performance of his / her work.

- Rules of conduct and academic policies:

- o active participation of students in lectures
- o participation in discussion, comments and free expression of opinion, opinion and academic position (with arguments)
- o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)
- o Respect for lecture schedules without compromising academic freedom (silent cell phones)
- o respecting the word, thoughts and ideas of colleagues
- o low tolerance for late arrivals and departures without any valid reason
- o preparation and equipping with relevant lectures (obligation of the teacher).

**Mitrovica**

**24.05.2021**

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**Subject teaching professor:**

**Prof.DrAziz Behrami**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICĚ**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	104. ITU.I	
<b>Subject:</b>	Basics of informatics	
<b>Status of subject:</b>	Compulsory	
<b>Semester:</b>	I	
<b>Fund of hours:</b>	2+2	
<b>ECTS:</b>	6	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Mensur Kelmendi	
<b>Assistant/e:</b>		
<b>Contacts:</b>		
	Email:	<a href="mailto:mensur.kelmendi@umib.net">mensur.kelmendi@umib.net</a>
	Phone:	+383 (0) 44214732
<b>CONTENTS</b>	Course means general concepts which relate to the work of computers and information communication technologies in general solutions. The course will address: Material part of the computer (Hardware); Computer software part; Operating systems; Text processing program; Program for presentation and tabular processing of data; Preparation of presentations: Development of presentations; Internet.	
<b>PURPOSE</b>	The aim of this course is to acquaint students with the latest information technologies. Basic concepts of informatics, the historical development of informatics and computers as well as the dependence of the development of informatics on other sciences and vice versa. Students will also be able to master computer communication and use of the Windows operating system, Word application, Excell, Power Point application, Access and work with the Internet.	

<b>ACHIEVEMENT</b>	<p>Students:</p> <ol style="list-style-type: none"> <li>1. Explains the basics and basic notions of Software and Hardware.</li> <li>2. Explains the transformations of numerical systems</li> <li>3. Apply calculations through applications.</li> <li>4. Interprets the results obtained with programs.</li> <li>5. Conducts experimental laboratory work independently.</li> <li>6. Identifies the most appropriate methods for conducting various experiments.</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>THEME</b>
	<b>Week - I</b>	Introduction to the Basics of Informatics
	<b>Week - II</b>	Hardware
	<b>Week - III</b>	Windows Operating System
	<b>Week - IV</b>	Boolean Algebra and Logical Functions
	<b>Week - V</b>	Numerical Systems
	<b>Week - VI</b>	Computer Networks
	<b>Week - VII</b>	Website
	<b>Week - VIII</b>	HTML language
	<b>Week - IX</b>	Gmail and Google Drive
	<b>Week - X</b>	Microsoft Word
	<b>Week - XI</b>	Microsoft Excel 1
	<b>Week - XII</b>	Microsoft Excel 2
	<b>Week - XIII</b>	Microsoft Access
	<b>Week - XIV</b>	Microsoft Power Point
<b>Week - XV</b>	Basics of computer security	
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>1. Vasil Jorgji, Thoma Korini, Elements of information technology, Tiranë (2009).</li> <li>2. Ekrem Dragusha , Microsoft Word 2013.</li> <li>3. Ekrem Dragusha , Microsoft Excel 2013.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>1. Windows: Basic Computing Skills-Indiana University 2016. Outlook: Email Essentials-Indiana University 2016</li> </ol>	

<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>			
<b>EVALUATION</b>	<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>			
	Activity	Hours	Day/week	Total
	Lectures	2	1/15	30
	Exercises	2	1/15	30
	Consultations with the teacher/assistant	1	1/7	7
	Colloquia/seminars	2	1/4	8
	Independent tasks	-		
	Student's own study time (in the library or at home)	2	2/5	10
	Final preparation for the exam	1	1/15	15
	Time spent on assessment (tests, quizzes, final exam)	2	1/15	30
	Projects, presentations, etc.	4	5/1	20
	<b>Total</b>			<b>150= 6 ECTS</b>
<b>ACADEMIC POLICIES</b>	<p><b>Evaluation methods</b> Evaluation % Evaluation of the first test 20 % Evaluation of the second test 20 % Seminary work 20 % Final exam 40 % Total 100 %</p> <p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.</p>			

Mitrović

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**Lecturer:**  
**Prof. Asoc. Dr. Mensur Kelmendi**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

<b>Course Outline Model (Syllabus)</b>		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	105.ITU.I	
<b>Subject:</b>	English language I	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	I	Winter
<b>Total hours:</b>	2+1	According to approved programe
<b>ECTS:</b>	4	According to approved programe
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site.	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Ass. Dr. Sadete PLLANA	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	sadete.pllana@umib.net	
Telefon:	+383 44 333 252	

<b>BRIEF CONTENT OF SUBJECT</b>	English language course provides an understanding of specific words, phrases and topics related to Food Technology. It is concerned with discussions in English language about modern food production and profound knowledge of technologies associated with the production of healthy, safe food.	
<b>AIMS</b>	This course aims: <ul style="list-style-type: none"> <li>• to provide students with profound analytical approach in English.</li> <li>• to develop language skills in terms of technologies and processes</li> <li>• to evaluate “what and how” to say things in English in the field of Food Technology</li> </ul>	
<b>EXPECTED LEARNING OUTCOMES</b>	After the course, students will: <ul style="list-style-type: none"> <li>• have a higher level of English language skills through discussions, debates</li> <li>• present written and / or oral food technology projects,</li> <li>• plan and execute research in food science and technology,</li> <li>• carry out and evaluate various projects in English.</li> </ul>	
<b>PROGRAM</b>	<b>Weeks</b>	
	<b>Week - I</b>	What is Engineering? - Food Engineering
	<b>Week - II</b>	Food Around the World Fast food Restaurants and Ordinary Restaurants



	<b>Week - III</b>	Affordable Foods – Wh - questions
	<b>Week - IV</b>	Food Pyramid
	<b>Week - V</b>	Bakery Products
	<b>Week - VI</b>	You are what you eat; Comprehension Exercises – tenses, discussions
	<b>Week - VII</b>	Test 1
	<b>Week - VIII</b>	Food Processing- Milk and Milk Processing
	<b>Week - IX</b>	Chocolate Technology
	<b>Week - X</b>	Vitamins
	<b>Week - XI</b>	Translation Practice
	<b>Week - XII</b>	Healthy Diets Adjectives
	<b>Week - XIII</b>	Comprehension Exercises
	<b>Week - XIV</b>	Test 2
	<b>Week - XV</b>	Language review
<b>LITERATURE</b>		1. Fellows “Food Processing Technology” Oxford Brookes University, 2000, P. Fellows.
<b>TEACHING METHODOLOGY</b>		1. Communicative approaches: Discussions, debates, group works, individual or pair work.  Recommended Literature: - Obad L. ”English in Food Technology I Graduate– Ist year; Josip Juraj Strossmayer University, faculty of Food Technology, Osijek 2009.

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Exercise sessions - theoretical	1	15	15
Field exercises			
Practical work	-	-	-
Consultation with the professor / assistant	1	1/14	14
Colloquiums / seminars	2	2	4
Independent tasks (work)	1	5	5
Student self study time (in library or at home)	2	8	16
Final exam preparation	7	2	14
Time spent in assessment (tests, quizzes, final exams)	4	2	8
Projects, presentations, etc.	2	2	4
<b>Total</b>			<b>100</b>

<b>EVALUATION</b>	Continuous assessment ( their active participation in class), presentations, Two tests (week 7 and 14) and Final Exam
<b>ACADEMIC POLICIES</b>	Full participation in classes and examinations is expected of all students. Active participation in class, debates, presentations.

**Mitrovica**

**Prof. Ass. Dr. Sadete PLLANA**

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(Name Surname)

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(Signature)



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**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	106.ITU.I	
<b>Subject:</b>	German Language I	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	I	Winter
<b>Total hours:</b>	2+1	According to approved programe
<b>ECTS:</b>	4	According to approved programe
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site.	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Ass. Dr. Sadete PLLANA	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	sadete.pllana@umib.net	
Telefon:	+383 44 333 252	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>In the course “German Language I” will be taught the grammar of the German Language which will serve as a basis for the improvement of communication skills and which are closely related to the topics that will be addressed during the lectures. The topics that will be treated during the lectures are mainly taken from the main course book “Schritte international 1“(lessons 1-4). During the lectures, with the support of the main course book “Schritte International 1”, in a systematic process, all four language skills will be developed: listening, speaking, reading and writing, as well as grammar and vocabulary. The book is divided in lessons, which are thematically organized and linked with each other. The topics are from the everyday life and correspond with the interest of the students and basic knowledge of German Language. These topics help deepen the existing knowledge and the daily communication skills. The students learn how to react in different communication situations, to discuss about their profession, about basic life needs, etc. the topics that will be treated during the lectures are: first contacts, family and friends, food and drinks, as well as about the surrounding. To improve the listening skills during the lectures also CDs will be used with the topics that will be treated from the Kursbuch and Arbeitsbuch.</p>
<b>AIMS</b>	<p>The course “German Language” aims at developing and practicing of language skills, which help the students to communicate in German Language, to read, understand but also write short texts, while not making any mistakes.</p>

<b>EXPECTED LEARNING OUTCOMES</b>	After completing this course, the student will be able to: <ul style="list-style-type: none"> <li>• Read properly adhering to the rules of the German Language spelling</li> <li>• Listen and understand conversations of certain, but simple texts in German Language</li> <li>• Learn new words and improve their vocabulary in German</li> <li>• Understand and implement the German grammar, which is explained during the lectures, and which serves as a basis for a better communication.</li> </ul>	
	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Introduction as well as information on the content of the course and the necessary literature <i>(Schritte international 1, Kursbuch + Arbeitsbuch)</i>
	<b>Week - II</b>	<b>Lesson 1:</b> Guten Tag. Mein Name ist...: Sich begrüßen; Sich und andere vorstellen; Buchstabieren Grammatik: Personalpronomen und Verb; Satzstrukturen: Aussagesatz; <i>Schritte international 1, KB, f. 8 – 10;</i> <i>Schritte international 1, AB, f. 82 – 84;</i> Grammatik: <i>Schritte international 1, KB, f. 15,</i> <i>- em Übungsgrammatik. Deutsch als Fremdsprache, f. 48, 132</i>
	<b>Week - III</b>	Erste Kontakte: Beruf und Herkunft angeben und danach fragen Grammatik: W- Frage; Wort- und Satzfrage Konjugation Präsens <i>Schritte international 1, KB, f. 11 – 12</i> <i>Schritte international 1, AB, f. 85 – 87</i> Grammatik: <i>Schritte international 1, KB, f. 15,</i> <i>- em Übungsgrammatik. DaF, f. 142-144</i>
	<b>Week - IV</b>	Erste Kontakte: Telefonieren; Rechnen Grammatik: Präposition <i>aus</i> ; Konjugation Präsens <i>Schritte international 1, KB, f. 18 – 20;</i> <i>Schritte international 1, AB, f. 92 – 94;</i> Grammatik: <i>Schritte international 1, KB, f. 25,</i> <i>- em Übungsgrammatik. DaF, 28</i>
<b>Week - V</b>	<b>Lesson 2</b> Familie und Freunde: Nach dem Befinden fragen, Befinden ausdrücken Grammatik: Possesivartikel <i>mein/meine</i> <i>Schritte international 1, KB, f. 18 – 20;</i> <i>Schritte international 1, AB, f. 92 – 94;</i> Grammatik: <i>Schritte international 1, KB, f. 25,</i> <i>- em Übungsgrammatik. DaF, 28</i>	
<b>PROGRAM</b>		

<b>Week - VI</b>	<p>Familienmitglieder und Freunde vorstellen Wohnort nennen</p> <p>Grammatik: Personalpronomen; Verbkonjugation: <i>leben, haben</i> <i>Schritte international 1</i>, KB, f. 21 – 22; <i>Schritte international 1</i>, AB, f. 95 – 97;</p> <p>Grammatik: <i>Schritte international 1</i>, KB, f. 25</p>
<b>Week - VII</b>	<p>Zahlen 0 – 20; Formular ausfüllen; Angaben zu Personen machen / verstehen Sich vorstellen</p> <p>Grammatik: Präposition <i>in</i>; Verbkonjugation <i>Schritte international 1</i>, KB, f. 23 – 27; <i>Schritte international 1</i>, AB, f. 98 – 101;</p> <p>Grammatik: <i>Schritte international 1</i>, KB, f. 25</p>
<b>Week - VIII</b>	Midterm test/ exam
<b>Week - IX</b>	<p><b>Lesson 3:</b> Essen und Trinken; Dinge benennen</p> <p>Grammatik: - Ja- /Nein-Frage; <i>Kennen Sie...?</i> - Nullartikel: <i>Haben Sie Äpfel?</i></p> <p><i>Schritte international 1</i>, KB, f. 28 – 30; <i>Schritte international 1</i>, AB, f. 102 – 104;</p> <p>Grammatik: <i>Schritte international 1</i>, KB, f. 35, <i>em Übungsgrammatik. DaF</i>, f. 26</p>
<b>Week - X</b>	<p>Essen und Trinken - Menge benennen</p> <p>Grammatik: Indefiniter Artikel <i>ein/eine</i> Negativartikel <i>kein/keine</i></p> <p><i>Schritte international 1</i>, KB, f. 31 - 32; <i>Schritte international 1</i>, AB, f. 105 – 106;</p> <p>Grammatik: <i>Schritte international 1</i>, KB, f. 35, <i>em Übungsgrammatik. DaF</i>, f. 24</p>
<b>Week - XI</b>	<p>Essen und Trinken Preise, Gewichte und Maßeinheiten Zahlen 21 - 100</p> <p>Grammatik: Plural der Nomen: <i>Tomaten, Eier</i></p> <p><i>Schritte international 1</i>, KB, f. 33 - 34; <i>Schritte international 1</i>, AB, f. 107 – 108;</p> <p>Grammatik: <i>Schritte international 1</i>, KB, f. 35, <i>em Übungsgrammatik. DaF</i>, f. 10</p>
<b>Week - XII</b>	<p>Essen und Trinken Vorlieben ausdrücken</p> <p>Grammatik: Verbkonjugation: <i>essen</i> <i>Schritte international 1</i>, KB, f. 36 - 37;</p>

		<p><i>Schritte international 1</i>, AB, f. 109 – 111;  Grammatik: <i>Schritte international 1</i>, KB, f. 35</p>
	<b>Week - XIII</b>	<p><b>Lesson 4:</b>  Meine Wohnung; Nach einem Ort fragen; Einen Ort nennen; Eine Wohnung/ ein Haus beschreiben  Grammatik:  Definiter artikel <i>der / das / die</i>  Lokale Adverbien <i>hier / dort</i>  <i>Schritte international 1</i>, KB, f. 38 – 40;  <i>Schritte international 1</i>, AB, f. 112 – 114;  Grammatik:  <i>Schritte international 1</i>, KB, f.45,  <i>em</i> Übungsgrammatik. DaF, f. 58</p>
	<b>Week - XIV</b>	<p>Möbel und Elektrogeräte benennen  Gefallen / Missfallen ausdrücken  Farben benennen; Zahlen: 100 – 1.000.000; Wohnungsanzeigen; Grammatik:  Prädikates Adjektiv; <i>Sie ist schön</i>  Personalpronomen <i>er/es/sie</i>  <i>Schritte international 1</i>, KB, f. 41 – 43;  <i>Schritte international 1</i>, AB, f. 115 – 119;  Grammatik: <i>Schritte international 1</i>,  Grammatik:  <i>Schritte international 1</i>, KB, f.45,  <i>em</i> Übungsgrammatik. DaF, f. 136</p>
	<b>Week - XV</b>	<p>Wohnungsstile;  Einen Zeitungsartikel verstehen  Grammatik:  Personalpronomen <i>er/es/sie</i>  Negation <i>nicht: Das Bad ist nicht klein.</i>  <i>Schritte international 1</i>, KB, f. 44 – 47;  <i>Schritte international 1</i>, AB, f. 120 – 123;  Grammatik: <i>Schritte international 1</i>,  Grammatik:  <i>Schritte international 1</i>, KB, f.45,  <i>em</i> Übungsgrammatik. DaF, f. 136</p>
<b>LITERATURE</b>		<p>1. Schritte international 1, Kursbuch + Arbeitsbuch, Lektion 1-4, Hueber Verlag, Ismaning, 2011.</p> <p>Recommended Literature:</p> <ul style="list-style-type: none"> <li>- Dreyer-Schmitt: <i>Lehr- und Übungsbuch der deutschen Grammatik (Neubearbeitung)</i>- Max HueberVerlag, Ismaning, 2000</li> <li>- <i>Unterwegs</i>, Band: 5, Ernst Klett Schulbuchverlag, Stuttgart, 2001 - <i>em</i> Übungsgrammatik. Deutsch als Fremdsprache, Max Hueber Verlag, Ismaning, 2009</li> </ul>

<b>TEACHING METHODOL OGY</b>	<p>The course is realized through lectures.</p> <p>Through conversation methods – the students work individually, in pairs and in groups. The lectures are organized with new teaching methods which have a students centered approach, therefore the students are directly involved in the lectures. In this way they improve all four communication skills.</p>										
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>										
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>							
	Lectures	2	15	30							
	Exercise sessions - theoretical	1	15	15							
	Field exercises										
	Practical work	-	-	-							
	Consultation with the professor / assistant	1	1/14	14							
	Colloquiums / seminars	2	2	4							
	Independent tasks (work)	1	5	5							
	Student self study time (in library or at home)	2	8	16							
	Final exam preparation	7	2	14							
	Time spent in assessment (tests, quizzes, final exams)	4	2	8							
	Projects, presentations, etc.	2	2	4							
<b>Total</b>			<b>100</b>								
<b>EVALUATION</b>		<table border="1"> <tr> <td>Tests/Colloquium</td> <td>Mid term test/ exam 35%</td> </tr> <tr> <td>Practical work and seminars</td> <td></td> </tr> <tr> <td>Exam</td> <td>Final test/ exam 55%</td> </tr> <tr> <td>Participation and engagement in the classroom</td> <td>Homework and activities in the classroom as well as participation 10%</td> </tr> </table>	Tests/Colloquium	Mid term test/ exam 35%	Practical work and seminars		Exam	Final test/ exam 55%	Participation and engagement in the classroom	Homework and activities in the classroom as well as participation 10%	
Tests/Colloquium	Mid term test/ exam 35%										
Practical work and seminars											
Exam	Final test/ exam 55%										
Participation and engagement in the classroom	Homework and activities in the classroom as well as participation 10%										
<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>										

Mitrovica

Prof. Ass. Dr. Sadete PLLANA

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
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Course Outline Model (Syllabus)		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	107.ITU.I	
<b>Subject:</b>	<b>Mathematics II</b>	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	II	Summer
<b>Total hours:</b>	3+2	According to approved programe
<b>ECTS:</b>	7	According to approved programe
<b>Schedule / Hall</b>	Tuesday, 13:00-15:15; S105	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Asoc. Dr. Xhevat KRASNIQI	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	xhevat.krasniqi@uni-pr.edu	
Telefon:	+ 383 (0) 44 300963	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>Functions with one variable. Elementary function and their graph. Numerical Sequences. The limit of sequences. The limits of functions. The continuity of functions. The derivative as a function. Applications of differentiation in functions analysis. Indeterminate integrals. Determinate integrals. Applications of integrals. Improper integrals. The assignments during semester are three tests and two seminars. Students that achieve positive results in tests are not obliged to take the written exam, while students that have the grade above 6 (six) in seminars are also not obliged to take the oral exam.</p>	
<b>AIMS</b>	<p>The student should know enough wins from mathematical disciplines such as: functions, <a href="#">sequences</a>, their limits, continuity it of function, derivatives, review functions with the help of derivative, integral indefinite and definite, so that the know ledge gained from mathematical disciplines to apply without problems in the field of engineering.</p>	
<b>EXPECTED LEARNING OUTCOMES</b>	<ol style="list-style-type: none"> <li>1. Calculates a limit.</li> <li>2. Discussed and presented graphicallya function.</li> <li>3. To calculate in definite integral.</li> </ol> <p>To calculate a definite integral and to applied in technical sciences.</p>	
<b>PROGR AM</b>	<b>Weeks</b>	Topic
	<b>Week - I</b>	<p>Functions with one variable.            Literature: Dr. Ejup Hamiti, Mathematic II, p. 1-21</p>



	<b>Week - II</b>	Sets. Basic elementary functions and their graph. Literature: Dr. Ejup Hamiti : Mathematic II, p. 21-30
	<b>Week - III</b>	Numerical sequences. Literature: Dr. Ejup Hamiti : Mathematic II, p. 30-48
	<b>Week - IV</b>	Limit function. Literature: Dr. Ejup Hamiti : Mathematic II, p. 49-71
	<b>Week - V</b>	Continuity of function. Literature: Dr. Ejup Hamiti : Mathematic II, p.71- 85
	<b>Week - VI</b>	Derivatives and differentials of functions with one variable. Literature: Dr. Ejup Hamiti : Mathematic II, p.99- 137
		First evaluation
	<b>Week - VII</b>	Fundamental theorems of the differential. L'Hopital's rules for indefinite forms. Literature: Dr. Ejup Hamiti : Mathematic II, p.147- 168
	<b>Week - VIII</b>	Application of differential functions in discussed and presented graphically functions. Literature: Dr. Ejup Hamiti : Mathematic II, p.183- 204
	<b>Week - IX</b>	Konkaviteti. Asimptotat. Literature: Dr. Ejup Hamiti : Mathematic II, p.204 - 225
	<b>Week - X</b>	Polynomials. Literature: Dr. Ejup Hamiti : Mathematic II, p.269-290
	<b>Week - XI</b>	The indefinite integral. Literature: Dr. Ejup Hamiti : Mathematic II, p.295-308
		The second evaluation
	<b>Week - XII</b>	Integration of rational functions, irrational and transcendental. Literature: Dr. Ejup Hamiti : Mathematic II, p.308-327
	<b>Week - XIII</b>	The second seminar paper Literature: Dr. Ejup Hamiti : Mathematic II, p.329-366
	<b>Week - XIV</b>	Calculation of the flat plan surface. Literature: Dr. Ejup Hamiti : Mathematic II, p.367- 372
<b>Week - XV</b>	Volume of solids. Arc length. Surface of rotary surfaces. Integral non-self. Literature: Dr. Ejup Hamiti : Mathematic II, p.373-380	
<b>LITERATURE</b>	<ol style="list-style-type: none"> <li>1. Hamiti, E.(2008). Matematika II, Shtëpia Botuese Libri Shkollor, Prishtinë.</li> <li>2. Sadiku, S., Merovci, F. (2008). Matematika I-përmbledhje detyrash të zgjidhura, GrafoBeni, Prishtinë.</li> </ol> <p>Additional Literature:</p> <ol style="list-style-type: none"> <li>3. Hartel, R. W., Hyslop, D. B., Connelly, R. K., &amp; Howell Jr, T. A. (2008). Math concepts for food engineering. CRC Press.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	Lecture, discussion, group work, exercises, homework, seminar papers.			
<b>EVALUATION</b>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	3	15	45
	Exercise sessions - theoretical	2	15	30
	Field exercises	-	-	-
	Practical work	-	-	-
	Consultation with the professor / assistant	3	-	3
	Colloquiums / seminars	2	3	6
	Independent tasks (work)	-	-	-
	Student self study time (in library or at home)	5	15	75
	Final exam preparation	7	1	7
	Time spent in assessment (tests, quizzes, final exams)	3	3	9
	Projects, presentations, etc.	-	-	-
<b>Total</b>			<b>175</b>	
<b>EVALUATION</b>	<p>Evaluation methods are:</p> <p>The first evaluation: 30%</p> <p>The second evaluation: 25%</p> <p>Homework and other commitments: 10%</p> <p>A regular attendance: 5%</p> <p>Final Exam: 30%</p> <p>Total: 100%</p>			
<b>ACADEMIC POLICIES</b>	Regular attendance of lectures, quiet in the lesson; disconnection of mobile phones, entry hall with time etc..			

Mitrovica

Prof. Asoc. Dr. Xhevat KRASNIQI

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

Course Outline Model (Syllabus)		
<b>Faculty:</b>	Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	108.ITU.I	
<b>Subject:</b>	Inorganic Chemistry	
<b>Subject Status:</b>		(Compulsory)
<b>Semester:</b>		(Summer )
<b>Total hours:</b>		(3+2)
<b>ECTS:</b>		(7)
<b>Schedule / Hall</b>	According to the official schedule	
<b>Academic year:</b>	2020-2021	
<b>Professor:</b>	Prof.Dr Aziz Behrami	
<b>Assistants:</b>	Mr.sc Malsore Pllana	
<b>Contacts:</b>	Professor	Assistant
Email:	aziz.behrami@umib.net	Malsore.pllana@umib.net
Telefon:	+38344170726	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>What does the subject contain? What are some of the topics covered in this course?</p> <p>Periodic table of the elements, general characteristics of the elements s and p, Hydrogen (H), its benefit properties and its compounds. and f properties, group IIb, Zn, Cd, Hg, Iron Triad Fe, Co, Ni, Toxic Properties of these elements and their compounds ..</p>
<b>AIMS</b>	<p>What is intended to be achieved through this course?</p> <p>They are for the student through lectures to achieve sufficient knowledge, to reinforce them through experimental laboratory work, solving stoichiometric tasks in order not only to learn but to study the objective of the course.</p>

**EXPECTED LEARNING OUTCOMES**

Achievement should be presented in the form of learning outcomes which are formulations of what the student is expected to know and be able to demonstrate upon completion of the course. Learning outcomes should be presented based on Blum's taxonomy hierarchy (2011) on the levels of the cognitive domain, which are: Knowledge, understanding, application, analysis, evaluation and synthesis (creation). More in:

<http://bloomstheory.wikispaces.com/Resources+%26+Websites>

Accessibility should be formulated with the help of Action Verbs which should be used for different cognitive levels:

- Knowledge: Adjust, summarize, define, describe, count, examine, identify, etc.
- Understanding: Clarify, connect, change, classify, compare, illustrate, testify, choose, explain, interpret, sketch, discuss, distinguish, predict, re-emphasize, translate, describe, etc.
- Implement: Use, evaluate, complete, calculate, construct, manipulate, organize, demonstrate, prepare, solve, use, illustrate, construct, perform, research, etc.
- Analysis: To analyze, examine, categorize, criticize, debate, single out, detach, evaluate, distinguish, compare, categorize, divide, etc.
- Evaluation: To ascertain, argue, discuss, persuade, discriminate, judge, reason, decompose, prove, discover, predict, plan, construct, propose, invent, formulate, verify, argue, recommend, etc.
- Synthesis: To argue, invent, reorganize, categorize, formulate, generalize, integrate, manage, review, discuss, prioritize, determine, etc.

5-7 expected learning outcomes should be noted for each subject.

At the end of the course the student is expected to be able to:

1. For the student to study the object of study of Inorganic chemistry.
2. The student should be trained in basic stoichiometric calculations.
3. The student should be trained for laboratory work.
4. to form a positive intention towards the subject of Inorganic chemistry and its importance.
5. To form skills for work in the laboratory and the person responsible for storing substances that are present in research laboratories.
6. Use of equipment in the chemistry laboratory.

**PROGRAM**

<b>Weeks</b>	<b>Topic</b>
<b>Week - I</b>	Periodic table of elements (Hydrogen)
<b>Week - II</b>	Elements of group 18a
<b>Week - III</b>	Elements of group 17a, F , Cl
<b>Week - IV</b>	Elements of group 16a O, S
<b>Week - V</b>	Elements of group 15a N, P
<b>Week - VI</b>	Elements of gr 14 aC, Si, Pb
<b>Week - VII</b>	First Evaluation
<b>Week - VIII</b>	Elements of gr 13a B, Al

	<b>Week - IX</b>	Alcaline earth metals Be, Mg		
	<b>Week - X</b>	Calcium, properties, benefit and compounds		
	<b>Week - XI</b>	Alcaline metals		
	<b>Week - XII</b>	Sodium, Potassium, their properties, benefit and compounds		
	<b>Week - XIII</b>	Elements d and f		
	<b>Week - XIV</b>	Iron Triad, Group V b, Group VI b.		
	<b>Week - XV</b>	Second evaluation ( Final )		
<b>LITERATURE</b>	<p>Basic literature. To be listed:            General Chemistry "Dr. Ivan Filipovi and Dr. Stepan Lipanovi., reprint 2016</p> <p>Supplementary literature: Brady, J.E and G.E. Huimuston, General chemistry, principles and structure, SI version, wiley and sons, New York, 1986</p> <p>General and inorganic chemistry - Zana Gace 2012.</p>			
<b>TEACHING METHODOLOGY</b>	Lectures, exercises, individual work, experimental work, seminar papers, colloquia, essays, field work, group work, etc.			
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	3	15	45
	Exercise sessions - theoretical	2	15	30
	Consultation with the professor / assistant	0.5	12	6
	Colloquiums / seminars	2	5	10
	Independent tasks (work)	2	5	10
	Student self study time (in library or at home)	2	15	30
	Final exam preparation	2	15	30
	Time spent in assessment (tests, quizzes, final exams)	2	5	10
	Projects, presentations, etc.	1	4	4
	<b>Total</b>			<b>175 = 7 ECTS</b>

<b>EVALUATION</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="text-align: center;"><b>Evaluation methods</b></th> </tr> <tr> <th colspan="2" style="text-align: center;">[according to the Statute and Regulation of UMIB Studies]</th> </tr> </thead> <tbody> <tr> <td style="width: 50%; vertical-align: top;">Tests</td> <td style="width: 50%; vertical-align: top;">           Rating in%            1st test, written ..... 25%            2 nd test - written ..... 25%            Participation in lectures ..... 10%            Written exam ..... 40%            Total ..... 100%            Grade scales:            50-less - grade 5 (five)            51-60% - grade 6 (six)            61-70% - grade 7 (seven)            71-80% - grade 8 (eight)            81-90% - grade (nine)            91-100% - grade (ten)         </td> </tr> </tbody> </table>	<b>Evaluation methods</b>		[according to the Statute and Regulation of UMIB Studies]		Tests	Rating in% 1st test, written ..... 25% 2 nd test - written ..... 25% Participation in lectures ..... 10% Written exam ..... 40% Total ..... 100% Grade scales: 50-less - grade 5 (five) 51-60% - grade 6 (six) 61-70% - grade 7 (seven) 71-80% - grade 8 (eight) 81-90% - grade (nine) 91-100% - grade (ten)
<b>Evaluation methods</b>							
[according to the Statute and Regulation of UMIB Studies]							
Tests	Rating in% 1st test, written ..... 25% 2 nd test - written ..... 25% Participation in lectures ..... 10% Written exam ..... 40% Total ..... 100% Grade scales: 50-less - grade 5 (five) 51-60% - grade 6 (six) 61-70% - grade 7 (seven) 71-80% - grade 8 (eight) 81-90% - grade (nine) 91-100% - grade (ten)						
<b>ACADEMIC POLICIES</b>	<p>Criteria for regular attendance and rules of etiquette are set during the organization of the lesson.          Further instructions:</p> <ul style="list-style-type: none"> <li>• Computer work          Written works must be computer written. In the works it is obligatory to observe the criteria both for the visual aspect and the content of the required works. During the works it is required to respect the spelling rules and APA style</li> <li>• Ethics in teaching          The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.</li> <li>• Deadlines          In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he / she deems it reasonable and necessary for the performance of his / her work.</li> <li>• Rules of conduct and academic policies:           <ul style="list-style-type: none"> <li>o active participation of students in lectures</li> <li>o participation in discussion, comments and free expression of opinion, opinion and academic position (with arguments)</li> <li>o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)</li> <li>o Respect for lecture schedules without compromising academic freedom (silent cell phones)</li> <li>o respecting the word, thoughts and ideas of colleagues</li> <li>o low tolerance for late arrivals and departures without any valid reason</li> <li>o preparation and equipping with relevant lectures (obligation of the teacher).</li> </ul> </li> </ul>						

**Mitrovica**

**24.05.2021**

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**Subject teaching professor:**

**Prof.Dr Aziz Behrami**

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(Name Surname)

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**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

Course Outline Model (Syllabus)		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	109.ITU.I	
<b>Subject:</b>	Organic chemistry I	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>		Summer
<b>Total hours:</b>		2+2
<b>ECTS:</b>		6
<b>Schedule / Hall</b>	according to the official schedule	
<b>Academic year:</b>	I year, II semester	
<b>Professor:</b>	Prof. Asoc. Dr. Fatos Rexhepi	
<b>Assistant:</b>	Ass. Malesore Pllana	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:fatos.rexhepi@umib.net">fatos.rexhepi@umib.net</a> .	<a href="mailto:malesore.pllana@umib.net">malesore.pllana@umib.net</a>
	Telefon: +38345400751	

<b>BRIEF CONTENT OF SUBJECT</b>	Some of the topics that will be contained in organic chemistry I are as follows: Structure and properties of organic compounds, Alkanes, Alkenes, Alkynes, Stereochemistry, Cycloalkanes, Alkyl halides, Identification of organic structure: UV-VIS, IR, NMR and MS.
<b>AIMS</b>	The purpose of this course is to give the student the basic knowledge in organic chemistry. The elementary course of organic chemistry gives the student the basics of structure and reactions of organic compounds, nomenclature and stereochemistry of carbon compounds. The reactions of the compounds are systematically examined according to the type of reaction mechanism. In this way the student can follow the courses which are related to organic chemistry.



<b>EXPECTED LEARNING OUTCOMES</b>	Upon completion of this course the student will be able to:	
	<ol style="list-style-type: none"> <li>1. Describe the structure of organic compounds</li> <li>2. Predicts the structure and possible isomers of simple organic compounds based on their molecular formula.</li> <li>3. Applies the IUPAC system for naming organic compounds</li> <li>4. Explains the standard mechanisms of some reactions in organic chemistry such as substitution and elimination</li> <li>5. Describes the stereochemical relations of molecules, Specifies R, S configuration of compounds according to Cahn-Ingold-Prelog rule.</li> <li>6. Discuss the results of instrumental methods (IR and UV/VIS) for identifying the structure of an organic compound.</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Structure and Bonding
	<b>Week - II</b>	Polar Covalent Bonds; Acids and Bases
	<b>Week - III</b>	Organic Compounds: Alkanes and Their Stereochemistry
	<b>Week - IV</b>	Organic Compounds: Cycloalkanes and Their Stereochemistry
	<b>Week - V</b>	Stereochemistry at Tetrahedral Centers
	<b>Week - VI</b>	An Overview of <b>Organic</b> Reactions
	<b>Week - VII</b>	Alkenes: Structure and Reactivity
	<b>Week - VIII</b>	Alkenes: Reactions and Synthesis
	<b>Week - IX</b>	Alkynes: An Introduction to Organic Synthesis
	<b>Week - X</b>	Organohalides
	<b>Week - XI</b>	Reactions of Alkyl Halides: Nucleophilic Substitutions and Eliminations
	<b>Week - XII</b>	Conjugated Compounds and Ultraviolet Spectroscopy
	<b>Week - XIII</b>	Structure Determination: Mass Spectrometry and Infrared Spectroscopy.
	<b>Week - XIV</b>	Structure Determination: Nuclear Magnetic Resonance Spectroscopy
	<b>Week - XV</b>	Practical problems for identification of organic molecules by UV/VIS, IR, NMR and MS Spectroscopy (Rules of spectra interpretation)
<b>LITERATURE</b>	<b>Basic literature:</b>	
	<ol style="list-style-type: none"> <li>1. John McMurry, <b>Kimia Organike</b>, botimi i parë në shqip i perkthyer dhe përshtatur në shqip nga grup autorësh, Erik botime, Tiranë-Shqipëri, 2014.</li> <li>2. Nexhat Daci, Majlinda Daci-Ajvazi <b>Kimia Organike</b>, botimi i pestë, Libri Shkollor, 2014, Prishtinë.</li> </ol>	
	<b>Supplementary literature:</b>	
	<ol style="list-style-type: none"> <li>1. Robert J. Ouellette and J. David Rawn, <b>Principles of Organic Chemistry</b>, Copyright © 2015 Elsevier Inc. All rights reserved. ISBN: 978-0-12-802444-7. DOI: <a href="https://doi.org/10.1016/C2014-0-02430-6">https://doi.org/10.1016/C2014-0-02430-6</a></li> </ol>	

<b>TEACHING METHODOLOGY</b>	Lectures (power point presentations), experimental work, colloquium , homework, group work.			
<b>EVALUATION</b>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	2	15	30
	Laboratory work	2	15	30
	Consultation with the professor / assistant	1	15	15
	Colloquiums / seminars	2	2	4
	Independent tasks (work)	1	15	15
	Student self study time (in library or at home)	3	15	45
	Final exam preparation	4	2	8
	Time spent in assessment (tests, quizzes, final exams)	3	1	3
<b>Total</b>			<b>150 hours=6 ECTS</b>	
<b>Evaluation methods</b> Evaluation in % First test.....25 % Second test.....25 % Laboratory experimental work.....20 % Final exam.....30 % Totali.....100 % Grade level: 50-less -grade 5 (five) 51-60 % - grade 6 (six) 61-70 % - grade 7 (seven) 71-80 % - grade 8 (eight) 81-90 % - grade (nine) 91-100 % -grade (ten)				

**ACADEMIC POLICIES**

The student has for obligation to attend lectures and exercises, keep calm in the lesson, stay active in the lesson, turn off the cell phones, enter the hall on time.  
Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.

**Mitrovica**

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**Subject teaching professor:**

**Prof. Asoc. Dr. Fatos Rexhepi**

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(Name Surname)

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(Signature)



**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	110.ITU.I	
<b>Subject:</b>	Biology	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>		Summer
<b>Total hours:</b>		3+2
<b>ECTS:</b>		6
<b>Schedule / Hall</b>	Thursday 9.00 -12:15 / 103	
<b>Academic year:</b>	First (I), Second semester (II)	
<b>Professor:</b>	Prof. Ass. Dr. Mirsade Osmani	
<b>Assistants:</b>	?	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:mirsade.osmani@umib.net">mirsade.osmani@umib.net</a>	?
	Telephone: +38349600851	?

<b>BRIEF CONTENT OF SUBJECT</b>	In this subject is described the structure and function of prokaryotic and eukaryotic cells, the construction of cell organelles and their role in metabolism and energy. Basics of inheritance and variability of living organisms. Special attention will be given to the construction and function of the tissues and organs of plant and animal, embryonic development and interactions between the living world and the environment.	
<b>AIMS</b>	The main purpose of this course is for students to gain knowledge into the structure and function of cells, to understand the construction and role of cell organelles in metabolism and energy. Also, the student will understand the structure and function of the tissues and organs of plants and animals and the embryonic development of plants and animals.	
<b>EXPECTED LEARNING OUTCOMES</b>	At the end of this course, student will be able to: 1. Understand the themes and characteristics of life. 2. Describe the complexity of cell structure and function. 3. Discuss the structure and function of plant and animal tissues and organs. 4. Compare reproduction and embryonic development of plants and animals. 5. List the components and complexity of heredity and explain how its accuracy is maintained. 6. Analyze diversity and interactions of life forms, their responses to the environment, their adaptation-evolution, and their behavior.	
<b>PROGRAM</b>	<b>Weeks</b>	Topic
	<b>Week - I</b>	Subject and history of biology. Chemical bases of life.

	<b>Week - II</b>	Cell structure and function; Comparing prokaryotic and eukaryotic cells; Cell membrane structure and transport.
	<b>Week - III</b>	Nucleus, Replication, Transcription and Translation. Inheritance and variability of living organisms.
	<b>Week - IV</b>	Intracellular compartments and Cytoskeleton.
	<b>Week - V</b>	The Cell cycle: Mitosis, Meiosis and The cell cycle control.
	<b>Week - VI</b>	The structure and function of animal tissues.
	<b>Week - VII</b>	Reproduction and animal embryonic development. First midterm evaluation.
	<b>Week - VIII</b>	Morphology and physiology of different organ systems in animals: Digestive system, Blood circulation system, Respiratory system.
	<b>Week - IX</b>	Excretory system, Musculoskeletal system, Nervous system.
	<b>Week - X</b>	Sensory organs, Endocrine system, Immunity system.
	<b>Week - XI</b>	Structure and diversity of plants.
	<b>Week - XII</b>	Morphological and physiological characteristics of basic functional plant systems (cell, tissue, organ).
	<b>Week - XIII</b>	Basic principles of plant growth (primary and secondary) and development (vegetative and reproductive phase).
	<b>Week - XIV</b>	Basics of Ecology.
	<b>Week - XV</b>	Interactions between life organisms and environment. Second midterm evaluation.
<b>LITERATURE</b>	<p>Basic Literature:</p> <ol style="list-style-type: none"> <li>Osmani M (2021): Biologjia, dispensë ligjeratash.</li> <li>Elezaj RI, Letaj RrK (2012): Biologjia qelizore. Universiteti I Prishtinës. Prishtinë.</li> </ol> <p>Additional literature:</p> <ol style="list-style-type: none"> <li>Rozhaja D (2002): Fiziologjia krahasuese. Akademia e Shkencave dhe Arteve e Kosovës, Prishtinë.</li> <li>Campbell NA, Reece JB (2005): Biology. 7th Ed. The Benjamin/Cummings Publishing Company, San Francisco, CA, USA.</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Teaching will take place through lectures, exercises, individual and group interpretations, seminars, periodic self-assessments, etc. The main focus will be the implementation of interactive teaching and learning strategies that promote constructive thinking through reading and writing, group work, discussion, project-based learning, problem-solving, laboratory and fieldwork, and audiovisual presentations with video projector, graphoscope, CD, etc. In this way, the creation of interactive professor-student and student-student relations will be aimed.</p>	

	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>		
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>
	Lectures	3	15
	Practical work	2	15
	Consultation with the professor / assistant	2	5
	Colloquiums / seminars	2	2
	Independent tasks (work)	1	10
	Student self study time (in library or at home)	2	12
	Final exam preparation	2	6
	Time spent in assessment (tests, quizzes, final exams)	1	5
	Projects, presentations, etc.	2	5
<b>Total</b>		<b>150</b>	
<b>EVALUATION</b>	<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]		
	Tests	70%	
	Practical test during exercises	10%	
	Seminary work (in word)	10%	
	Interpretation and presentation of seminary work	10%	
	Tasks and essays during the semester		
	Final exam	100%	
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.		

**Mitrovica**

**Subject teaching professor:**

**Prof. Ass. Dr. Mirsade Osmani**

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	111.ITU.I	
<b>Subject:</b>	English language II	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	I	Summer
<b>Total hours:</b>	2+1	According to approved programe
<b>ECTS:</b>	4	According to approved programe
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site.	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Ass. Dr. Sadete PLLANA	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
	Email: sadete.pllana@umib.net	
	Telefon: +383 44 333 252	

<b>BRIEF CONTENT OF SUBJECT</b>	English language course provides an understanding of specific words, phrases and topics related to Food Technology. It is concerned with discussions in English language about modern food production and profound knowledge of technologies associated with the production of healthy, safe food.	
<b>AIMS</b>	This course aims: <ul style="list-style-type: none"> <li>• to provide students with profound analytical approach in English.</li> <li>• to develop language skills in terms of technologies and processes</li> <li>• to evaluate “what and how” to say things in English in the field of Food Technology</li> </ul>	
<b>EXPECTED LEARNING OUTCOMES</b>	After the course, students will: <ul style="list-style-type: none"> <li>• have a higher level of English language skills through discussions, debates</li> <li>• present written and / or oral food technology projects,</li> <li>• plan and execute research in food science and technology,</li> <li>• carry out and evaluate various projects in English.</li> </ul>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Food Technology – English for specific Purposes, Vocabulary
	<b>Week - II</b>	The food industry today Properties of liquids, solids and gases

	<b>Week - III</b>	Taste, flavour and aroma
	<b>Week - IV</b>	Food safety, good manufacturing practice and quality assurance
	<b>Week - V</b>	Ambient-temperature processing- vocabulary, discussions
	<b>Week - VI</b>	Language review
	<b>Week - VII</b>	Test 1
	<b>Week - VIII</b>	Raw material preparation-modal verbs,
	<b>Week - IX</b>	Cleaning, Peeling, Sorting.
	<b>Week - X</b>	Packaging Technology- Food Packaging and Labeling Subjects-Verb Agreement
	<b>Week - XI</b>	Translation Practice
	<b>Week - XII</b>	Food Quality Assurance The Complex Sentence
	<b>Week - XIII</b>	Language review
	<b>Week - XIV</b>	Test 2
	<b>Week - XV</b>	Materials handling
<b>LITERATURE</b>	1. Fellows “Food Processing Technology” Oxford Brookes University, 2000, P. Fellows.	
<b>TEACHING METHODOLOGY</b>	<p>1. Communicative approaches: Discussions, debates, group works, individual or pair work.</p> <p>Recommended Literature:</p> <p>2. Obad L. ”English in Food Technology I Graduate– Ist year; Josip Juraj Strossmayer University, faculty of Food Technology, Osijek 2009.</p>	



<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Exercise sessions - theoretical	1	15	15
Field exercises			
Practical work	-	-	-
Consultation with the professor / assistant	1	1/14	14
Colloquiums / seminars	2	2	4
Independent tasks (work)	1	5	5
Student self study time (in library or at home)	2	8	16
Final exam preparation	7	2	14
Time spent in assessment (tests, quizzes, final exams)	4	2	8
Projects, presentations, etc.	2	2	4
<b>Total</b>			<b>100</b>
<b>EVALUATION</b>	Continuous assessment (their active participation in class), presentations, Two tests (week 7 and 14) and Final Exam		
<b>ACADEMIC POLICIES</b>	Full participation in classes and examinations is expected of all students. Active participation in class, debates, presentations.		

**Mitrovica**

**Prof. Ass. Dr. Sadete PLLANA**

\_\_\_\_\_  
(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

<b>Course Outline Model (Syllabus)</b>		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	112.ITU.I	
<b>Subject:</b>	German Language II	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	II	Summer
<b>Total hours:</b>	2+1	According to approved programe
<b>ECTS:</b>	4	According to approved programe
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site.	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Ass. Dr. Sadete PLLANA	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	sadete.pllana@umib.net	
Telefon:	+383 44 333 252	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>The course "German Language II" is developed as the continuity of subject "German language I". The base of this course is the improvement of the skills needed to communicate and to read in this language. The students must be also able to write short texts, preferably without mistakes. During the lectures and exercises, through the themes of the provided book, four major skills: listening, speaking, reading and writing and vocabulary will be practiced and developed systematically. Grammar topics that are related to the themes of the book and are in the service of communication will also be handled. Through the foreseen themes, the existing knowledge and skills in everyday communication will widen. Students learn how to react in different communication situations with people, their professions, basic life needs, etc.</p>
<b>AIMS</b>	<p>The course “German Language” aims at developing and practicing of language skills, which help the students to communicate in German Language, to read, understand but also write short texts, while not making any mistakes.</p>

<b>EXPECTED LEARNING OUTCOMES</b>	<p>After completing this course, the student will be able to:</p> <ul style="list-style-type: none"> <li>• Listen and understand simple conversations and texts in German Language</li> <li>• Read properly while implementing the spelling rules in German Language as well as understand the texts</li> <li>• Write short sentences while implementing the rules in German Language and the structure of the sentences</li> <li>• Gain new knowledge on language and German culture, gained in the first course</li> <li>• Improve its communication skills through practice such as: listening/ understanding, speaking, reading and writing</li> <li>• Deepen the existing skills and knowledge in his daily communication</li> <li>• Understand and apply new words in his daily communication, while also using grammar rules that help building proper sentences.</li> </ul>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
<b>Week - I</b>	<p>Introduction as well as information on the content of the course and the necessary literature (<i>Schritte international I</i>, Kursbuch + Arbeitsbuch)</p>	
<b>Week - II</b>	<p><b>Lektion 5</b> <b>Mein Tag:</b> Uhrzeit, Alltagsaktivitäten nennen Grammatik: - Wichtige Wendungen Trennbare Verben</p>	
<b>Week - III</b>	<p>Wochentage nennen Grammatik: Verbkonjugation: <i>stehen, arbeiten</i></p>	
<b>Week - IV</b>	<p>Tagesablauf; Aktivitäten nennen Grammatik: Verbposition im Satz</p>	
<b>Week - V</b>	<p>Schilder / Anrufbeantworter Grammatik: Präpositionen <i>am, um, von ... bis</i></p>	
<b>Week - VI</b>	<p><b>Lektion 6</b> <b>Freizeit:</b> Wetter / Jahreszeiten / Himmelsrichtungen beschreiben Grammatik: - Wichtige Wendungen Akkusativ</p>	
<b>Week - VII</b>	<p>Gespräche beim Einkauf und im Restaurant führen Grammatik: <i>Ja- / Nein-Frage</i> und Antwort <i>ja, nein, doch</i></p>	
<b>Week - VIII</b>	<p>Midterm test/ exam</p>	
<b>Week - IX</b>	<p>Im Gespräch zustimmen, widersprechen, verneinen Grammatik: - Verbkonjugation: <i>lesen, treffen, schlafen</i></p>	

	<b>Week - X</b>	Über Freizeit und Hobbys sprechen; Anzeigen lesen und schreiben Grammatik: - Verbkonjugation: <i>fahren, nehmen, möchten</i>
	<b>Week - XI</b>	<b>Lektion 7:</b> Lernen – ein Leben lang Fähigkeiten ausdrücken Grammatik: - Modalverben: <i>können, wollen</i> Lokale Adverbien <i>hier / dort</i>
	<b>Week - XII</b>	Absichten ausdrücken Seinen Willen äußern Grammatik: Satzklammer: <i>Ich kann nicht tanzen</i>
	<b>Week - XIII</b>	Über Aktivitäten in der Vergangenheit sprechen Grammatik: - Perfekt mit <i>haben</i>
	<b>Week - XIV</b>	Einen Ratgeber-Text verstehen Grammatik: - Perfekt mit <i>sein</i>
	<b>Week - XV</b>	Test 2
<b>LITERATURE</b>	<p>1. Schritte international 1, Kursbuch + Arbeitsbuch, Lektion 1-4, Hueber Verlag, Ismaning, 2011</p> <p>Recommended Literature:</p> <ul style="list-style-type: none"> <li>- Dreyer-Schmitt: Lehr- und Übungsbuch der deutschen Grammatik (Neubearbeitung)- Max HueberVerlag, Ismaning, 2000</li> <li>- Unterwegs, Band: 5, Ernst Klett Schulbuchverlag, Stuttgart, 2001</li> <li>- em Übungsgrammatik. Deutsch als Fremdsprache, Max Hueber Verlag, Ismaning, 2009</li> </ul>	
<b>TEACHING METHODOLOGY</b>	<p>The course is realized through lectures.</p> <p>Through conversation methods – the students work individually, in pairs and in groups. The lectures are organized with new teaching methods which have a students’ centered approach, therefore the students are directly involved in the lectures. In this way they improve all four communication skills.</p> <p>To improve the listening skills during the lectures also CDs will be used with the topics that will be treated from the Kursbuch and Arbeitsbuch.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Exercise sessions - theoretical	1	15	15
Consultation with the professor / assistant	1	1/14	14
Colloquiums / seminars	2	2	4
Independent tasks (work)	1	5	5
Student self study time (in library or at home)	2	8	16
Final exam preparation	7	2	14
Time spent in assessment (tests, quizzes, final exams)	4	2	8
Projects, presentations, etc.	2	2	4
<b>Total</b>			<b>100</b>

  

<b>EVALUATION</b>	Tests/Colloquium	Mid term test/ exam 35%
	Practical work and seminars	
	Exam	Final test/ exam 55%
	Participation and engagement in the classroom	Homework and activities in the classroom as well as participation 10%

  

<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.
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**Mitrovica**

**Prof. Ass. Dr. Sadete PLLANA**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of Food Technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	201.ITU.I	
<b>Subject:</b>	Engineering Thermodynamics	
<b>Status of subject:</b>	Compulsory	
<b>Semester:</b>	III	
<b>Fund of hours:</b>	3+2	
<b>ECTS:</b>	7	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Ismet Mulliqi	
<b>Assistant/e:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>		
	Email: <a href="mailto:ismet.mulliqi@umib.net">ismet.mulliqi@umib.net</a>	<a href="mailto:arbër.hyseni@umib.net">arbër.hyseni@umib.net</a>
	Phone: +383 (0) 44176310	+383 (0) 49665988

<b>CONTENTS</b>	<p>In this course basic concepts of thermodynamics such as: work, internal energy, enthalpy, entropy and relevant processes that occur in them will be covered.</p> <p>Other topics that will be covered are: the first and the second law of thermodynamics, Carnot cycle, thermodynamic potentials, chemical equilibrium, phase rule, the properties of ideal solutions, and thermodynamics and biological systems.</p>
<b>PURPOSE</b>	<p>To understand the principles of thermodynamics, and processes that occur in thermic plants and their applications in various processes in industrial practice.</p> <p>Acquiring skills for independent experimental work, and correct use of laboratory equipment.</p>
<b>ACHIEVEMENT</b>	<p>Students:</p> <ol style="list-style-type: none"> <li>1. Describe the systems and processes in engineering thermodynamics.</li> <li>2. Apply mathematical calculations to solve problems in engineering thermodynamics.</li> <li>3. Interpret basic concepts such as: work, internal energy, enthalpy, and entropy using relevant definitions and equations.</li> <li>4. Do experimental laboratory work independently.</li> <li>5. Identify the most appropriate methods for doing experimental work.</li> </ol>

	Weeks	THEME
<b>PROGRAM</b>	<b>Week - I</b>	Basic concepts in thermodynamic
	<b>Week - II</b>	Thermodynamic properties and the interaction energy of a closed system and environment
	<b>Week - III</b>	Energy and first principle of thermodynamics
	<b>Week - IV</b>	Law of conservation mass and energy
	<b>Week - V</b>	Fundamental thermodynamic changes in ideal gases (izobaric, izohoric, isothermal, adiabatic and polytropic changes) and mixtures of ideal gases
	<b>Week - VI</b>	Equations of state of real gases <i>Evaluation of the first test</i>
	<b>Week - VII</b>	Determining the sizes of the states and change the states of real fluid
	<b>Week - VIII</b>	Second principle of thermodynamics and energy balance
	<b>Week - IX</b>	Statements of the second principle of thermodynamics
	<b>Week - X</b>	Thermodynamic equilibrium
	<b>Week - XI</b>	The behavior of real gases and vapors
	<b>Week - XII</b>	Humid air
	<b>Week - XIII</b>	Thermodynamics and biological systems
	<b>Week - XIV</b>	Laws of thermodynamics and biological systems
	<b>Week - XV</b>	Applications of exergy in bioenergetics
<b>LITERATURE</b>	<p><b>Basic literature:</b> Sh. Rashani, Termodinamika dhe Termoteknika, Universiteti i Prishtinës, Mitrovicë, 2010</p> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>1. Yunusa A. Çengel; Michael A. Boles: Thermodynamics and Engineering Approach, McGraw-Hill, international edition, 2002.</li> <li>2. I. Demneri; A. Shtjefni; R. Karapici: Termoteknika, Tiranë, Pegi, 2008.</li> <li>3. Yasar Demirel, <i>Thermodynamics and Biological Systems</i>, University of Nebraska at Lincoln, 2014</li> <li>4. J. G. Morris, <i>Thermodynamics of Biological proces</i>, (1974), Published by English Universities Press Ltd., London</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>				
	Activity	Hours	Day/week	Total
	Lectures	3	15	45
	Exercises	2	15	30
	Consultations with the teacher/assistant	0.5	14	7
	Colloquia/seminars	1	4	4
	Independent tasks	2	5	10
	Student's own study time (in the library or at home)	3	8	24
	Final preparation for the exam	4	10	40
	Time spent on assessment (tests, quizzes, final exam)	2	6	12
	Projects, presentations, etc.	1	3	3
	<b>Total</b>			<b>175 = 7 ECTS</b>
<b>EVALUATION</b>	<b>Evaluation methods</b>			
	Evaluation %			
	Evaluation of the first test	20 %		
	Evaluation of the second test	20 %		
	Seminary work	20 %		
	Final exam	40 %		
	Total	100%		
<b>ACAD EMIC POLI CIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.			

**Mitrovicë**

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**Lecturer:  
Prof. Asoc. Dr. Ismet Mulliqi**

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(Name Surname)

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(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and food technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	202. ITU.I	
<b>Subject:</b>	Physical chemistry	
<b>Status of subject:</b>	Compulsory	
<b>Semester:</b>	III	
<b>Fund of hours:</b>	3+2	
<b>ECTS:</b>	7	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Mehush Aliu	
<b>Assistant/e:</b>	MSc. Malësore Pllana	
<b>Contacts:</b>		
	Email: mehush.aliu@umib.net	malesore.pllana@umib.net
	Phone: +383 (0) 44633263	

<b>CONTENTS</b>	<p>The following topics will be covered in this course: photoelectric effect, Bohr atomic model, quantum numbers, particles and waves, theory of molecular orbitals, hybridization.</p> <p>Other topics that will be covered within this course are the basic thermodynamic concepts that including internal energy, enthalpy, entropy, the first and second principles of thermodynamics, the Carnot cycle.</p>
<b>PURPOSE</b>	<p>Knowing with the structure (building) of the subject (matter) as the fundament for almost all other subjects.</p> <p>Familiarity with thermodynamics of chemical systems interconnected with classical thermodynamics.</p> <p>Development of skills for independent experimental work, the correct use of chemical reagents and laboratory equipment.</p>

<b>ACHIEVEMENT</b>	Student: <ol style="list-style-type: none"> <li>1. Explains the structure of matter based on laws, theories and experiments.</li> <li>2. Explain physical and chemical transformations and equilibria using laws of thermodynamic.</li> <li>3. Applies mathematical calculations in solving physical chemistry problems.</li> <li>4. Interpret the obtained results and write the reports independently.</li> <li>5. Interprets the basic concepts of work, internal energy, enthalpy and entropy through relevant definitions and formulas.</li> <li>6. Conducts experimental laboratory work independently.</li> <li>7. Identifies the most appropriate methods for conducting various experiments.</li> </ol>	
	<b>PROGRAM</b>	<b>Weeks</b>
<b>Week - I</b>		Photoelectric effect, Atom structure, Bohr atomic model
<b>Week - II</b>		Quantum numbers
<b>Week - III</b>		Particles and waves, solving the Shredinger equation for the hydrogen atom
<b>Week - IV</b>		Molecular orbital theory, the nature of the chemical bond
<b>Week - V</b>		Covalent bonding orientation in space, The atomic orbital hybridization
<b>Week - VI</b>		Basic thermodynamical concepts, Internal energy
<b>Week - VII</b>		First law of thermodynamics, Work of volume in different conditions
<b>Week - VIII</b>		Test I
<b>Week - IX</b>		Enthalpy, Thermo chemistry
<b>Week - X</b>		Second principle of thermodynamics and Carnot cycle
<b>Week - XI</b>		Entropy
<b>Week - XII</b>		First order reactions
<b>Week - XIII</b>		Second order reactions
<b>Week - XIV</b>		Reaction mechanisms
<b>Week - XV</b>	Test II	
<b>LITERATURE</b>	<b>Basic literature:</b> <ol style="list-style-type: none"> <li>1. Atkins P.; The elements of Physical chemistry, 10th edition 2014, Oxford University Press Inc., New York, USA.</li> <li>2. Peter Atkins, Julio de Paula, Physical chemistry, Thermodynamics, structure and changes, tenth edition, 2014, USA.</li> <li>3. Andrew Cooksy, Physical chemistry, thermodynamics, statistical mechanics, and kinetics, 2014, USA.</li> </ol>	
	<b>Additional literature:</b> <ol style="list-style-type: none"> <li>1. Spasoje Djordjeviq, Fizicka hemija, Tehnolosko-Metalurski Fakultet, Beograd, 2010.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks).  Teaching through demonstration and experiment.  Learning through projects, seminars, periodic self-assessments, field research and research itself.  All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>																																												
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	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Activity</th> <th style="width: 15%;">Hours</th> <th style="width: 25%;">Day/week</th> <th style="width: 20%;">Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">3</td> <td style="text-align: center;">15</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Exercises</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Consultations with the teacher/assistant</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">12</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Colloquia/seminars</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Independent tasks</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Student's own study time (in the library or at home)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Final preparation for the exam</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Time spent on assessment (tests, quizzes, final exam)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">5</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Projects, presentations, etc.</td> <td style="text-align: center;">1</td> <td style="text-align: center;">4</td> <td style="text-align: center;">4</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td></td> <td style="text-align: center;"><b>175 = 7 ECTS</b></td> </tr> </tbody> </table>	Activity	Hours	Day/week	Total	Lectures	3	15	45	Exercises	2	15	30	Consultations with the teacher/assistant	0.5	12	6	Colloquia/seminars	2	5	10	Independent tasks	2	5	10	Student's own study time (in the library or at home)	2	15	30	Final preparation for the exam	2	15	30	Time spent on assessment (tests, quizzes, final exam)	2	5	10	Projects, presentations, etc.	1	4	4	<b>Total</b>			<b>175 = 7 ECTS</b>
	Activity	Hours	Day/week	Total																																									
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<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.</p>																																												

Mitrovicë

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Lecturer:

**Prof. Asoc. Dr. Mehush Aliu**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

Course Outline Model (Syllabus)		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	203.ITU.I	
<b>Subject:</b>	Organic chemistry II	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>		Winter
<b>Total hours:</b>		3+2
<b>ECTS:</b>		6
<b>Schedule / Hall</b>	according to the official schedule	
<b>Academic year:</b>	II year, III semester	
<b>Professor:</b>	Prof. Asoc. Dr. Fatos Rexhepi	
<b>Assistant:</b>	Ass. Malesore Pllana	
<b>Contacts:</b>	Professor	Assistant
Email:	<a href="mailto:fatos.rexhepi@umib.net">fatos.rexhepi@umib.net</a>	<a href="mailto:malesore.pllana@umib.net">malesore.pllana@umib.net</a>
Telefon:	+38345400751	

<b>BRIEF CONTENT OF SUBJECT</b>	Some of the topics that module II of organic chemistry will contain are the following: Resonant structure of benzene and aromaticity, carbonyl compounds, phenols and alcohols, amines and nitriles, organic metabolic pathway chemistry and biomolecules.	
<b>AIMS</b>	The aim of this course is to give the student knowledge about organic compounds that are directly related to food products in the sense that these compounds are essential ingredients of food or they are integrated into food for certain technological purposes. Familiarity with the structure, properties, synthesis and use of these organic compounds is quite important to understand the chemistry and interaction of ingredients in food products.	
<b>EXPECTED LEARNING OUTCOMES</b>	Upon completion of this course the student will be able to: <ol style="list-style-type: none"> <li>1. Identify and define the structure of organic compounds</li> <li>2. Predicts physical and chemical properties based on the structure of the compound.</li> <li>3. Applies the IUPAC system for naming organic compounds</li> <li>4. Logically explains the standard mechanisms of some reactions in organic chemistry.</li> <li>5. To classify the structural difference of carbonyl compounds and their occurrence in food products.</li> <li>6. Describes the internal construction of biomolecules (lipids, carbohydrates, proteins and nucleic acids).</li> </ol>	
<b>P R O</b>	<b>Weeks</b>	<b>Topic</b>

	<b>Week - I</b>	Benzene and Aromaticity
	<b>Week - II</b>	Chemistry of Benzene: Electrophilic Aromatic Substitution
	<b>Week - III</b>	Alcohols and Phenols
	<b>Week - IV</b>	Ethers and Epoxides
	<b>Week - V</b>	Aldehydes and Ketones
	<b>Week - VI</b>	Carboxylic Acids and Nitriles
	<b>Week - VII</b>	Carboxylic Acid Derivatives: Nucleophilic Acyl Substitution Reactions
	<b>Week - VIII</b>	Carbonyl Alpha-Substitution Reactions
	<b>Week - IX</b>	Carbonyl Condensation Reactions
	<b>Week - X</b>	Preview of Carbonyl Chemistry
	<b>Week - XI</b>	Amines and Heterocycles
	<b>Week - XII</b>	Biomolecules: Carbohydrates
	<b>Week - XIII</b>	Biomolecules: Amino Acids, Peptides, and Proteins
	<b>Week - XIV</b>	Biomolecules: Lipids
	<b>Week - XV</b>	Biomolecules: Nucleic Acids
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>1. John McMurry, <b>Kimia Organike</b>, botimi i parë në shqip i perkthyer dhe përshtatur në shqip nga grup autorësh, Erik botime, Tiranë-Shqipëri, 2014.</li> <li>2. Nexhat Daci, Majlinda Daci-Ajvazi <b>Kimia Organike</b>, botimi i pestë, Libri Shkollor, 2014, Prishtinë.</li> </ol> <p><b>Supplementary literature:</b></p> <ol style="list-style-type: none"> <li>1. Robert J. Ouellette and J. David Rawn, <b>Principles of Organic Chemistry</b>, Copyright © 2015 Elsevier Inc. All rights reserved. ISBN: 978-0-12-802444-7. DOI:<a href="https://doi.org/10.1016/C2014-0-02430-6">https://doi.org/10.1016/C2014-0-02430-6</a></li> </ol>	
<b>TEACHING METHODOLOGY</b>	Lectures (power point presentations), experimental work, colloquium , homework, group work.	

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Laboratory work	2	15	30
Consultation with the professor / assistant	0.5	16	8
Colloquiums / seminars	2	2	4
Independent tasks (work)	1	10	10
Student self study time (in library or at home)	3	15	45
Final exam preparation	3	5	15
Time spent in assessment (tests, quizzes, final exams)	2	4	8
<b>Total</b>			<b>150 hours= 6 ECTS</b>

  

<b>EVALUATION</b>	<b>Evaluation methods</b>
	Evaluation in %
	First test.....25 %
	Second test.....25 %
	Laboratory experimental work.....20 %
	Final exam.....30 %
	Total.....100 %
	Grade level:
	50-less -grade 5 (five)
	51-60 % - grade 6 (six)
61-70 % - grade 7 (seven)	
71-80 % - grade 8 (eight)	
81-90 % - grade (nine)	
91-100 % -grade (ten)	

**ACADEMIC POLICIES**

The student has for obligation to attend lectures and exercises, keep calm in the lesson, stay active in the lesson, turn off the cell phones, enter the hall on time.  
Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.

**Mitrovica**

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**Subject teaching professor:**

**Prof. Asoc. Dr. Fatos Rexhepi**

\_\_\_\_\_  
(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of Food Technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	204.ITU.I	
<b>Subject:</b>	Fluid Mechanics	
<b>Status of subject:</b>	Compulsory	
<b>Semester:</b>	III	
<b>Fund of hours:</b>	2+2	
<b>ECTS:</b>	6	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Ismet Mulliqi	
<b>Assistant/e:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>		
	Email: <a href="mailto:ismet.mulliqi@umib.net">ismet.mulliqi@umib.net</a>	<a href="mailto:arbër.hyseni@umib.net">arbër.hyseni@umib.net</a>
	Phone: +383 (0) 44176310	+383 (0) 49665988

<b>CONTENTS</b>	<p>In this course basic concepts of fluid mechanics such as: physical properties of fluids, Euler’s equation for the statics and dynamics of fluids, Bernoulli’s equation for the flow of ideal and real fluids, will be covered.</p> <p>Other topics that will also be covered are: laminar and turbulent flow, sedimentation of solid particles in fluids, fluid flow through porous mediums, viscosity and rheology.</p>
<b>PURPOSE</b>	<p>To understand the basic properties of fluids and the laws of fluids at rest and in motion. Acquiring skills for calculating energy loss during the flow of real fluids, and correct usage of laboratory equipment.</p>
<b>ACHIEVEMENT</b>	<p>Students:</p> <ol style="list-style-type: none"> <li>1. Describe the basic properties of fluids.</li> <li>2. Apply mathematical calculations for solving problems in fluid mechanics.</li> <li>3. Interpret basic concepts in fluids such as: compression of fluids, viscosity, molecular flux of momentum, energy loss, using relevant definitions and equations.</li> <li>4. Do experimental laboratory work independently.</li> <li>5. Identify the most appropriate methods to do various experimental work.</li> </ol>



PROGRAM	Weeks	THEME
	Week - I	Introduction to fluid mechanics - basic concepts.
	Week - II	Physical properties of fluids – compressibility and gases viscosity
	Week - III	Physical properties of fluids – liquids viscosity
	Week - IV	Euler's Equation of the statics the fluid
	Week - V	The basic equation of fluid statics not compressibility
	Week - VI	The relative tranquility of the liquid during the rotation around the vertical axis
	Week - VII	Kinematic basic notions of fluid <i>Evaluation of the first test</i>
	Week - VIII	Ideal fluid dynamics (Euler equations)
	Week - IX	Navier-Stokes equation it to the real fluid; The Equation of Bernul
	Week - X	The dynamics of turbulent flow
	Week - XI	Specificities of the boundary dynamic fluid layer
	Week - XII	The resistance of the body. The resistance factor of the body
	Week - XIII	Viscosity and rheology
	Week - XIV	Non-Newtonian fluids
	Week - XV	Fluid flow meters in rheology
LITERATURE	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>1. E. Beqiri., Mekanika e fluideve (Operacionet teknologjike I), Universiteti i Prishtinës, 1996.</li> <li>2. N. Dhamo, Inxhinieria kimike – Fenomenet e mbartjes, Shtëpia Botuese “Libri Universitar”, Tiranë, 1997.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>1. Noel de Nevers, Fluid Mechanics for Chemical Engineers, 3<sup>th</sup> ed., McGraw-Hill’s, Chemical Engineering series, 2005.</li> <li>2. Practical Food Rheology An Interpretive Approach, Edited by Ian T. Norton, Fotios Spyropoulos and Philip Cox, Chemical Engineering University of Birmingham Edgbaston, Birmingham B15 2TT, UK, 2011, A John Wiley &amp; Sons, Ltd., Publication</li> </ol>	
TEACHING METHODOLOGY	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>				
	Activity	Hours	Day/week	Total
	Lectures	2	15	30
	Exercises	2	15	30
	Consultations with the teacher/assistant	0.5	12	6
	Colloquia/seminars	1	4	4
	Independent tasks	2	4	8
	Student's own study time (in the library or at home)	3	8	24
	Final preparation for the exam	4	10	40
	Time spent on assessment (tests, quizzes, final exam)	2	4	8
	Projects, presentations, etc.	1	2	2
	<b>Total</b>			<b>152 = 6 ECTS</b>
<b>EVALUATION</b>	<b>Evaluation methods</b>			
	Evaluation %			
	Evaluation of the first test	20 %		
	Evaluation of the second test	20 %		
	Seminary work	20 %		
	Final exam	40 %		
	Total	100%		
<b>ACAD EMIC POLI CIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.			

**Mitrovicë**

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**Lecturer:  
Prof. Asoc. Dr. Ismet Mulliqi**

\_\_\_\_\_  
(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	205.ITU.I	
<b>Subject:</b>	Ecology on Food Industry	
<b>Subject Status:</b>	Elective	(Mandatory or Elective)
<b>Semester:</b>	III	( <b>Winter</b> / Summer)
<b>Total hours:</b>	2 + 2	(According to approved programe)
<b>ECTS:</b>	4	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site	
<b>Academic year:</b>	-	
<b>Professor:</b>	Prof. Asoc. Dr. Valdet Gjinovci	
<b>Assistants:</b>	Dafina Llugaxhiu	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:valdet.gjinovci@umib.net">valdet.gjinovci@umib.net</a>	<a href="mailto:dafina.llugaxhiu@umib.net">dafina.llugaxhiu@umib.net</a>
	Telefon: +383 (0) 49 702 002	+383 (0) 44 783 166

<b>BRIEF CONTENT OF SUBJECT</b>	<p>Within this course will be addressed definition of ecology, importance of Ecology as future science, ecological factors: physical and chemical factors.</p> <p>Temperature, light, pressure, humidity, radiations and their impact on microorganisms, distilled water, pH, organic compounds, acids, alcohols, etc., and their impact on development of microorganisms, biotic factors: relation in connection microorganism – macroorganism and microorganism – microorganism, symbiosis, parasitism and antibiosis, water ecology, soil ecology and Aerial Ecology.</p> <p>Ecology of microorganisms related to food: preserving (storage) of food, water, thirst from the presence of heterotrophic and pathogenic microorganisms, control of food quality, closely related with microorganisms, measures taken to eliminate germs on the area of food collection, during transport, processing, packaging and distribution.</p>
<b>AIMS</b>	<p>Gaining the basic knowledge on ecology and ecological factors.</p> <p>The impact of ecological factors, separately and jointly in food composition status and, through microorganisms.</p> <p>Introduction to ecological conditions, through the first up to the last link of food technology.</p> <p>Introduction to areas of food handling:</p> <p>Provision of raw material, collection, delivery to a plant, processing and distribution, respectively storage.</p>

<b>EXPECTED LEARNING OUTCOMES</b>	<p>By completion of this course the students will be able to:</p> <ol style="list-style-type: none"> <li>1. Identify the ecological factors decisional for the impact of microorganisms development, food spoiling and their elimination.</li> <li>2. Explain the microorganisms cultivation techniques taken from different ecological environment, for ex. water, air, animal, working spaces, etc.</li> <li>3. Describe the possibility of eventual microorganism elimination from environment dealing with food technology and the chain or link of food processing.</li> <li>4. Makes preparations for implementation in practice of knowledge gained from teaching and practicing.</li> <li>5. Concludes the impact of ecological factors on various products depending from their biological, chemical and physical condition, in order to undertake the preventive and eliminating measures.</li> </ol>		
	<b>PROGRAM</b>	<p><b>Weeks</b></p>	<p><b>Topic</b></p>
<p><b>Week - I</b></p>		<p>Introduction, Importance, definition and position of Ecology on Biological Science, its relation against other sciences and life in general</p>	
<p><b>Week - II</b></p>		<p>Ecological Factors - their distribution and basic knowledge</p>	
<p><b>Week - III</b></p>		<p>Abiotic Factors: Physical factors (T° - temperature, light – radiations, atmospheric and osmotic pressure, humidity, ultrasound, dryness, edaphic factors)</p>	
<p><b>Week - IV</b></p>		<p>Chemical Factors: Basics, Acids, Salts, Colours, Alcohols, etc</p>	
<p><b>Week - V</b></p>		<p>Biotic Factors: Mutual relation between macro and micro and macroorganisms; Symbiosis (mutualism, antibiosis and parasitism)</p>	
<p><b>Week - VI</b></p>		<p>Appliance of ecological factors on food industry, either in beneficiary or utilizing aspect either in eliminating aspect</p>	
<p><b>Week - VII</b></p>		<p>Impact of ecological factor on raw material and processed food material (milk, meat, corn, seeds, fruits, vegetables, etc.)</p>	
<p><b>Week - VIII</b></p>		<p>Test I</p>	
<p><b>Week - IX</b></p>		<p>Impact of ecological factors in processes of food fermentation, preservation (conservation) and utilization</p>	
<p><b>Week - X</b></p>		<p>Transformation of raw materials in noble food through microorganisms</p>	
<p><b>Week - XI</b></p>		<p>Food technological processes and Ecological factors</p>	
<p><b>Week - XII</b></p>		<p>Second intermediary assessment</p>	
<p><b>Week - XIII</b></p>		<p>Research on relation microorganism - food related to chemical and physical consistence of food</p>	
<p><b>Week - XIV</b></p>		<p>Microbial spores and food (possibility of infection, their determination respectively elimination)</p>	
<p><b>Week - XV</b></p>	<p>Test II</p>		

<b>LITERATURE</b>	<p><b>Fundamental literature:</b></p> <p><b>Konrad Martin • Joachim Sauerborn;</b> Agroecology (Springer Science+Business Media Dordrecht 2013).</p> <p><b>Thomas J. Montville, Karl R. Matthews, Kalmia E. Kniel</b> Food Microbiology, (Copyright © 2012 ASM Press).</p> <p>Complementary literature:</p> <p><b>Stephen R. Gliessman, Eric W. Engles, Agroecology,</b> The Ecology of Sustainable Food Systems, third edition (© 2015 by Taylor &amp; Francis Group, LLC).</p>																																																
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises).</p> <p>Teaching through demonstration and experiment.</p> <p>Learning through projects, seminars, periodic self-assessments. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>																																																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b></th> </tr> <tr> <th style="text-align: center;">Activity</th> <th style="text-align: center;">Hours</th> <th style="text-align: center;">Day/Week</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Exercise and</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Consultation with the professor / assistant</td> <td style="text-align: center;">1</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Colloquiums / seminars</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Independent tasks (work)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">9</td> <td style="text-align: center;">9</td> </tr> <tr> <td>Student self study time (in library or at home)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">8</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Final exam preparation</td> <td style="text-align: center;">1</td> <td style="text-align: center;">10</td> <td style="text-align: center;">10</td> </tr> <tr> <td>Time spent in assessment (tests, quizzes, final exams)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">3</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Projects, presentations, etc.</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td></td> <td style="text-align: center;"><b>100</b></td> </tr> </tbody> </table>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>				Activity	Hours	Day/Week	Total	Lectures	2	15	30	Exercise and	2	15	30	Consultation with the professor / assistant	1	5	5	Colloquiums / seminars	2	2	4	Independent tasks (work)	1	9	9	Student self study time (in library or at home)	1	8	8	Final exam preparation	1	10	10	Time spent in assessment (tests, quizzes, final exams)	1	3	3	Projects, presentations, etc.	1	1	1	<b>Total</b>			<b>100</b>
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Projects, presentations, etc.	1	1	1																																														
<b>Total</b>			<b>100</b>																																														

<b>EVALUATION</b>	<p><b>Evaluation methods</b></p> <p><u>Assessment in %</u></p> <p>Assessment of the first test.....20 %</p> <p>Assessment of the second test.....20 %</p> <p>Seminar paper..... 20 %</p> <p>Final exam.....40 %</p> <p>Total.....100 %</p>
<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>

**Mitrovica**

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**Subject teaching professor:  
Prof. Asoc. Dr.ValdetGjinovci**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	206.ITU.I	
<b>Subject:</b>	Materials of plant origin	
<b>Subject Status:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	Winter	(Winter / Summer)
<b>Total hours:</b>	2+2	(According to approved program)
<b>ECTS:</b>	4	(According to approved program)
<b>Schedule / Hall</b>	Thursday, 14:15-15:45 /L S103	
<b>Academic year:</b>	Year- II, semester IV	
<b>Professor:</b>	Prof.Dr. Dilaver Salihu	
<b>Assistants:</b>	MSc. Dafina Llugaxhiu	
<b>Contacts:</b>	Professor	Assistant
	Email: dilaver.salihu@umib.net	dafina.llugaxhiu@ubt-uni.net
	Telefon: +38349303138	+38344783166

<b>BRIEF CONTENT OF SUBJECT</b>	It deals with the chemical, physical composition of materials of plant origin, storage conditions, transport of products. The quality control system of grinding products, Soft Wheat, Corn, Rice Plantain Rice, Sugar Anchovies, Potatoes, root vegetables, Kako, etc. Nutritional values of plant material in the processing industry.
<b>AIMS</b>	Knowledge of the most important sort of plant materials and their products, from conservation to the processing industry.
<b>EXPECTED LEARNING OUTCOMES</b>	<p>Upon completion of this course students will:</p> <ol style="list-style-type: none"> <li>1. Acquire knowledge on the most important types and sorts of materials of plant origin and their products, morphology and structure, chemical and physical composition and the impact of specific components in the assessment of technological quality.</li> <li>2. Know the way of packaging for any type of materials of plant origin and their products, as well as their storage and ways of preservation;</li> <li>3. Be able to apply their knowledge in practice.</li> <li>4. Knowledge of flour types, its properties and their classification</li> <li>5. The role of raw material in food technology</li> </ol>

	Weeks	Topic
<b>PROGRAM</b>	<b>Week - I</b>	The main objectives of raw materials in crop production technology
	<b>Week - II</b>	Evolution of cereals, wheat- Triticum sp
	<b>Week - III</b>	Physico-chemical composition of cereals,
	<b>Week - IV</b>	Classification of maize-Zeo mays flour cereals
	<b>Week - V</b>	Grinding history, grinding technology,
	<b>Week - VI</b>	Biochemical changes of cereals during silos-storage.
	<b>Week - VII</b>	The first control test.
	<b>Week - VIII</b>	Classification of saprophytic microflora, phytopathogenic in cereals.
	<b>Week - IX</b>	Ways to fight and determine the degree of excision, dangerous for cereals in silos.
	<b>Week - X</b>	Evolution of legumes per grain, beans-Phasillus Vulgaris, Vicia faba, Pisum sativum, Glucina maxima L,
	<b>Week - XI</b>	Evolution of sunflower -Helianthus annus,
	<b>Week - XII</b>	Oil plant processing processes,
	<b>Week - XIII</b>	The second control test.
	<b>Week - XIV</b>	Evolution of fruit and tuber plants, Sugar beet-Beta vulgaris L.Patates- Solenum tubersum,
	<b>Week - XV</b>	Evolution of vegetable plants for fruits, family - Solanaceae, Cucurbitaceae, Cucumis sativus, Cucumis melo, Cyrillus lanatus, family Liliaceae,
<b>LITERATURE</b>	<p>Reference:</p> <p>1.Sinani, A [2008], Teknologjia e ruajtjes dhe përpunimit te dritherave Tirane, ISBN 978-99956-654-7-0</p> <p>2.A. Salillari. N.Bardhi .A. Ibraliu.A.Sota, M.Hysa [2012] Evolucioni i bimve te kultivuara , Tiranë.ISBN.978-9928-137-17-3.</p> <p>3.Çoban, H, [2008], Perimekultura e zbatuar ne serra dhe ne fusha te hapura, Tirane, ISBN-978-99956-654-8-7.</p> <p>Additional reference:</p> <p>1.Grupatore, Historia e Bujqesise dhe Agroindustriese Shqiptare . Tirane ,[2003],</p> <p>2.Bardhi N,Rusinovci I,Mero GJ,[2006] Bimete vajore . Prishtine.</p> <p>3.Nasto Th, N.Bardhi [2004]Bazet e perimtarise dhe prodhimit te perimeve . Tirane.Literatura edhe në gjuhë të huaja + Literatura dhe web faqe të cilat mund të jenë në interes për studentët.</p>	
<b>TEACHING METHODOLOGY</b>	<p>During lectures students will be able not only debates during the elaboration of the unit by the teacher but also during treatment worked and seminar projects presented by students during semester. Project work will do individually or in groups. The lectures developed with the help of video-projector through visual presentation program PowerPoint Presentation</p>	



<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Exercise sessions - theoretical	2	15	30
Field exercises	5	1	5
Practical work	1	1	1
Consultation with the professor / assistant	1	2	2
Colloquiums / seminars	2	1	2
Independent tasks (work)	2	1	2
Student self-study time (in library or at home)	2	4	8
Final exam preparation	2	7	14
Time spent in assessment (tests, quizzes, final exams)	2	2	4
Projects, presentations, etc.	1	2	2
<b>Total</b>			<b>100=4 ECTS</b>

  

<b>EVALUATION</b>	<div style="border: 1px solid black; padding: 10px; margin: 0 auto; width: 80%;"> <p><b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]</p> </div>
	<p>Regular continuation – 5%</p> <p>Colloquium 1- 15%</p> <p>Colloquium 2- 10%</p> <p>Activity in lecture and seminars 15 %</p> <p>Final exam 55%</p> <p>Total 100%</p>

**ACADEMIC POLICIES**

Criteria for regular attendance and etiquette are set during the organization of the lesson.

Further instructions:

- Computer work

Written works must be computer written. In the works are obligatory the observance of the criteria both for the visual aspect and the content of the required works. During the works, it is required to respect the spelling rules and APA style

- Ethics in teaching

The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.

- Deadlines

In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he/she deems it reasonable and necessary to carry out his / her work.

- Rules of conduct and academic policies:

- o active participation of students in lectures

- o participation in discussion, comments, and free expression of opinion, opinion, and academic position (with arguments)

- o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)

- o Respecting lecture schedules without compromising academic freedom (silent cell phones)

- o respecting the word, thoughts, and ideas of colleagues

- o low tolerance for late arrivals and departures without any valid reason

- o preparation and equipping with relevant lectures, (obligation of the teacher).

**Mitrovica**

10.01.2022

**Subject teaching professor:**

Prof.Dr. Dilaver Salihu  
(Name Surname)

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(Signature)



**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and food technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	207.ITU.I	
<b>Subject:</b>	General Microbiology	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>		Summer
<b>Total hours:</b>		3+2
<b>ECTS:</b>		7
<b>Schedule / Hall</b>	Thursday 13.00 -15:15 / 103	
<b>Academic year:</b>	Second (II), Fourth semester (IV)	
<b>Professor:</b>	Prof. Ass. Dr. Mirsade Osmani	
<b>Assistants:</b>	?	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:mirsade.osmani@umib.net">mirsade.osmani@umib.net</a>	?
	Telefon: +38349600851	?

<b>BRIEF CONTENT OF SUBJECT</b>	Microbiology is a basic subject that deals with the study of microorganisms, their construction, function and impact on other living organisms. Microorganisms are small microscopic single-celled organisms invisible to the human eye and multicellular. These include bacteria, protozoa, fungi, microalgae, prokaryotes, viruses. This subject is related to the morphology of microorganisms, ecology (influencing abiotic and biotic factors on microorganisms), physiology (exchange of matter between microorganisms), genetics (inheritance and microbial variability), recognition of certain pathogenic feature of microorganisms, and the role that microorganisms have for human life.	
<b>AIMS</b>	At the end of the program, through lectures, students gain basic knowledge about the biology of prokaryotic cells, metabolism and diversity among microorganisms, microbial genetics, systematics and evolution, etc. , to reinforce them through experimental laboratory work, problem solving, so that not myself to learn but to study the objective of the course.	
<b>EXPECTED LEARNING OUTCOMES</b>	At the end of this course, student will be able to: <ol style="list-style-type: none"> <li>1. Describe the morphology of microorganisms (shape, size, structure of microorganisms).</li> <li>2. Know the cultivation technique, as well as cultivate microorganisms in artificial food.</li> <li>3. Define the role of ecological factors in the life of microorganisms.</li> <li>4. Recognize the processes of exchange of matter between microorganisms (Aerobic and anaerobic dissimulation's).</li> <li>5. Discuss the hereditary properties of microorganisms.</li> <li>6. Describe some properties of pathogenic microorganisms.</li> <li>7. Analyze the role that microorganisms have in human life.</li> </ol>	
<b>P R O</b>	<b>Weeks</b>	<b>Topic</b>

	<b>Week - I</b>	Definition, the subject of the study, brief history of development, position and role of microbiology.
	<b>Week - II</b>	Form and construction of Viruses, Ricketts and Chlamydia (Bedsonieve).
	<b>Week - III</b>	The shape, size, structure and function of the prokaryotic cell (Archaea and Bacteria)
	<b>Week - IV</b>	Continuation: Cell wall, cell membrane, mesozomes, mitochondrial analogs, RE analogs, Golgi apparatus analogs, thylakoids analogs among prokaryotic cells.
	<b>Week - V</b>	Cytoplasmas, ribosomes, nucleoids, vacuoles, lysosomes, granules, flagellates, fimbrias, spores (endospores) among prokaryotic cells.
	<b>Week - VI</b>	Actinomycetes, Blue-green algae (Cianophyta), Fungi (Yeasts and Molds); Construction of the yeast cell, protozoas - general characteristics and
	<b>Week - VII</b>	Ecology of microorganisms (influence of abiotic and biotic factors in the microorganism). First Intermediate Evaluation
	<b>Week - VIII</b>	Physiology of microorganisms; Chemical composition of microorganisms, enzymes of microorganisms.
	<b>Week - IX</b>	Exchange of materia between microorganisms - Glucose degradation way. Anaerobic dissimilation (fermentation)
	<b>Week - X</b>	Aerobic dissimilations, specific dissimilations, respiratory mechanism of microorganism
	<b>Week - XI</b>	Constructive exchange between microorganisms. Growth and multiplication of microorganisms.
	<b>Week - XII</b>	Inheritance of microorganisms; Variability between microorganisms.
	<b>Week - XIII</b>	The spread of microorganisms in nature and they role of in the circulation of matter.
	<b>Week - XIV</b>	Some features of pathogenic microorganisms
	<b>Week - XV</b>	Microorganisms in human serving. Second Intermediate Evaluation
<b>LITERATURE</b>	<p>Basic literature:</p> <ol style="list-style-type: none"> <li>1. Plakolli M. 2001: Mikrobiologjia e përgjithëshme. Prishtinë</li> </ol> <p>Additional literature:</p> <ol style="list-style-type: none"> <li>2. Madigan M. T., Martinko M. J., Parker J., 2012: Biology of Microorganisms Tortora, Funke, Case, 2012.</li> <li>3. Microbiology: An Introduction, 10<sup>th</sup> Edition, Lerner K. L., Lerner B. W., 2008: World of Microbiology and Immunology.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	Teaching will take place through lectures, exercises, individual and group interpretations, seminars, periodic self-assessments, etc. The main focus will be the implementation of interactive teaching and learning strategies that promote constructive thinking through reading and writing, group work, discussion, project-based learning, problem-solving, laboratory and fieldwork, and audiovisual presentations with video projector, graphoscope, CD, etc. In this way, the creation of interactive professor-student and student-student relations will be aimed.		
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>		
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>
	Lectures	3	15
	Exercise sessions - theoretical	/	/
	Field exercises	/	/
	Practical work	2	5
	Consultation with the professor / assistant	2	5
	Colloquiums / seminars	1	10
	Independent tasks (work)	2	15
	Student self study time (in library or at home)	2	10
	Final exam preparation	2	5
	Time spent in assessment (tests, quizzes, final exams)	2	5
	Projects, presentations, etc.	2	5
<b>Total</b>		<b>175</b>	
<b>EVALUATION</b>	<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]		
	Tests	70%	
	Practical test during exercises	10%	
	Seminary work (in word)	10%	
	Interpretation and presentation of seminary work	10%	
	Tasks and essays during the semester		
	Final exam	100%	
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.		

Mitrovica

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**Subject teaching professor:**

**Prof. Ass. Dr. Mirsade Osmani**  
(Name Surname)

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(Signature)



### Course Outline Model (Syllabus)

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	208.ITU.I	
<b>Subject:</b>	Biochemistry	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>		Summer
<b>Total hours:</b>		3+2
<b>ECTS:</b>		6
<b>Schedule / Hall</b>	Thursday 9.00 -12:15 / 103	
<b>Academic year:</b>	Second (II), Fourth semester (IV)	
<b>Professor:</b>	Prof. Ass. Dr. Mirsade Osmani	
<b>Assistants:</b>	?	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:mirsade.osmani@umib.net">mirsade.osmani@umib.net</a>	?
	Telefon: +38349600851	?

<b>BRIEF CONTENT OF SUBJECT</b>	Biochemistry as a life science examines the chemistry of living organisms and the molecular basis of changes that occur in living cells. Biochemistry has become the basis for understanding all life processes. This course will include all type of biomolecules (amino acids, proteins, carbohydrates and lipids), enzymes and metabolism of all groups of biomolecules.	
<b>AIMS</b>	Provide elementary knowledge about the chemical composition of living beings as well as the structure, properties and function of major biological molecules such as proteins, carbohydrates and lipids. Provide knowledge also about the compounds involved in metabolic processes as well as the mechanisms of regulation and control of metabolic processes and give you knowledge about the enzymes that catalyze these reactions.	
<b>EXPECTED LEARNING OUTCOMES</b>	At the end of this course, student will be able to: <ol style="list-style-type: none"> <li>1. Describe the structure and classification of biomolecules;</li> <li>2. Discuss about the biological functions of all categories of biomolecules;</li> <li>3. Understand mechanisms of enzyme catalysis, factors influencing in enzyme catalysis and to be able to classify them.</li> <li>4. Analyze in details metabolic pathways of each category of organic compounds (amino acids, proteins, carbohydrates, lipids, nucleic acids).</li> <li>5. Determine the relationship between metabolic pathways.</li> <li>6. Understand reciprocal adjustment of anabolic and catabolic processes.</li> </ol>	
<b>P R O</b>	<b>Weeks</b>	<b>Topic</b>

	<b>Week - I</b>	Introduction; Chemical composition of cell
	<b>Week - II</b>	Aminoacides, Peptides
	<b>Week - III</b>	Proteins
	<b>Week - IV</b>	Carbohydrates
	<b>Week - V</b>	Lipids
	<b>Week - VI</b>	Enzymes
	<b>Week - VII</b>	First midterm evaluation
	<b>Week - VIII</b>	Enzyme classifications
	<b>Week - IX</b>	Metabolism. Carbohydrate catabolism – Glycolysis
	<b>Week - X</b>	Glycogenolysis, Fermentation and Pentose acid pathway
	<b>Week - XI</b>	Krebs cycle and Gluconeogenesis
	<b>Week - XII</b>	Lipid metabolism
	<b>Week - XIII</b>	Protein and aminoacids metabolism
	<b>Week - XIV</b>	Nucleic acid metabolism
	<b>Week - XV</b>	Second midterm evaluation
<b>LITERATURE</b>	<p>Basic Literature:</p> <ol style="list-style-type: none"> <li>1. Qerimi H. – Biokimia, Universiteti i Prishtines, 2002</li> </ol> <p>Additional literature:</p> <ol style="list-style-type: none"> <li>2. Campbell M., Farrell Sh. – “BIOCHEMISTRY”, Thomson Brooks / Cole, 2015</li> <li>3. Voet D., Voet G. J., Pratt W. Ch.. Fundamentals of biochemistry. John Wiley &amp; Sons. Inc. 2005</li> <li>4. D. L. Nelson and M. M. Cox. - LEHNINGER PRINCIPLES OF BIOCHEMISTRY (6th Edition), W. H. Freeman and Co, New York, 2013</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Teaching will take place through lectures, exercises, individual and group interpretations, seminars, periodic self-assessments, etc. The main focus will be the implementation of interactive teaching and learning strategies that promote constructive thinking through reading and writing, group work, discussion, project-based learning, problem-solving, laboratory and fieldwork, and audiovisual presentations with video projector, graphoscope, CD, etc. In this way, the creation of interactive professor-student and student-student relations will be aimed.</p>	

	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>		
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>
	Lectures	3	15
	Exercise sessions - theoretical	/	/
	Field exercises	/	/
	Practical work	2	15
	Consultation with the professor / assistant	2	5
	Colloquiums / seminars	2	2
	Independent tasks (work)	1	10
	Student self study time (in library or at home)	2	12
	Final exam preparation	2	6
	Time spent in assessment (tests, quizzes, final exams)	1	5
	Projects, presentations, etc.	2	5
<b>Total</b>		<b>150</b>	
<b>EVALUATION</b>	<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]		
	Tests	70%	
	Practical test during exercises	10%	
	Seminary work (in word)	10%	
	Interpretation and presentation of seminary work	10%	
	Tasks and essays during the semester		
	Final exam	100%	
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.		

**Mitrovica**

**Subject teaching professor:**

**Prof. Ass. Dr. Mirsade Osmani**

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(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of Food Technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	209.ITU.I	
<b>Subject:</b>	Heat and mass transfer	
<b>Status of subject:</b>		Compulsory
<b>Semester:</b>		IV
<b>Fund of hours:</b>		2+2
<b>ECTS:</b>		7
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Ismet Mulliqi	
<b>Assistant/e:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>		
	Email: <a href="mailto:ismet.mulliqi@umib.net">ismet.mulliqi@umib.net</a>	<a href="mailto:arbër.hyseni@umib.net">arbër.hyseni@umib.net</a>
	Phone: +383 (0) 44176310	+383 (0) 49665988

<b>CONTENTS</b>	In this course basic concepts of heat and mass transfer such as: molecular flux of heat transfer, molecular and convective diffusion flux, conductivity, convection, radiation, mass transfer. Other topics that will be covered are: the differential equation of non-stationary conduction and convective transfer of heat, heat transfer coefficient, main laws of radiation and heat transfer in biological systems.
<b>PURPOSE</b>	To understand the mechanisms of heat and mass transfer. Acquiring skill for independent work in formulating and solving models for heat and mass transfer.
<b>ACHIEVEMENT</b>	Students: <ol style="list-style-type: none"> <li>1. Describe the processes in heat and mass transfer.</li> <li>2. Apply mathematical calculations for solving problems in heat and mass transfer.</li> <li>3. Interpret the basic concepts of conductivity, convection, radiation, diffusion, using relevant definitions and equations.</li> <li>4. Do experimental laboratory work independently.</li> <li>5. Identify the most appropriate methods for doing experimental work.</li> </ol>

PROGRAM	Weeks	THEME
	Week - I	The knowledge base for heat and mass transfer.
	Week - II	Transfer of Heat-Conductivity, molecular heat flux
	Week - III	Conductivity coefficient
	Week - IV	Differential Equation of not stationary conductivity
	Week - V	The Differential Equation of heat convective transfer
	Week - VI	The concept and definition of heat transfer coefficient
	Week - VII	Theory of similarity of heat transfer <i>Evaluation of the first test</i>
	Week - VIII	Forced convection and the natural
	Week - IX	Radiation - the main laws of radiation
	Week - X	Molecular diffusion, molecular diffusion flux and convective
	Week - XI	Mass diffusion coefficient
	Week - XII	Basic concepts of turbulent diffusion
	Week - XIII	Definition of coefficient mass transfer
	Week - XIV	Heat transfer in biological systems
	Week - XV	Bioheat transfer modelling
LITERATURE	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>E. Beqiri, Transmetimi i nxehtësisë, dispensë, FXM, Mitrovicë, 2007.</li> <li>E. Beqiri, Operacionet difuzive, Enti Krahinor për Botimin e Teksteve Mësimore, Prishtinë, 1988.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>JOHN LIENHARD IV / JOHN LIENHARD V., A Heat Transfer Textbook, Third Edition, Phlogiston Press, Cambridge Massachusetts, 2005.</li> <li>N. Dhamo, Inxhinieria kimike – Fenomenet e mbartjes, Shtëpia Botuese “Libri Universitar”, Tiranë, 1997.</li> <li>Liang Zhu, Heat Transfer aplikacions in biological systems, University of Maryland Baltimore County, Baltimore, Maryland, 2007.</li> </ol>	
TEACHING METHODOLOGY	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>				
	Activity	Hours	Day/week	Total
	Lectures	2	15	30
	Exercises	2	15	30
	Consultations with the teacher/assistant	0.5	14	7
	Colloquia/seminars	1	4	4
	Independent tasks	2	5	10
	Student's own study time (in the library or at home)	3	10	30
	Final preparation for the exam	4	13	52
	Time spent on assessment (tests, quizzes, final exam)	2	5	10
	Projects, presentations, etc.	1	3	3
	<b>Total</b>			<b>175 = 7 ECTS</b>
<b>EVALUATION</b>	<b>Evaluation methods</b>			
	Evaluation %			
	Evaluation of the first test	20 %		
	Evaluation of the second test	20 %		
	Seminary work	20 %		
	Final exam	40 %		
	Total	100%		
<b>ACAD EMIC POLI CIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.			

**Mitrovicë**

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**Lecturer:  
Prof. Asoc. Dr. Ismet Mulliqi**

\_\_\_\_\_  
(Name Surname)

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(Signature)



**UNIVERSITY OF MITROVICA**  
**“ISA BOLETINI”**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	210.ITU.I	
<b>Subject:</b>	Analytical Chemistry	
<b>Subject Status:</b>	Obligatory	(Compulsory or Elective)
<b>Semester:</b>	IV	<b>Summery</b>
<b>Total hours:</b>	2+2	(According to approved programe)
<b>ECTS:</b>	6	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule announced at the beginning of the semester / Mitrovica	
<b>Academic year:</b>	2021/2022	
<b>Professor:</b>	Prof. Asoc. Dr. Sadija Kadriu	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:sadija.kadriu@umib.net">sadija.kadriu@umib.net</a>	
	Telefon: +38344736510	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>The theoretical and practical bases of Analytical Chemistry will be treated, such as: Disperse systems; Equilibrium of chemical reactions and in the electrolyte solution; Ionic product of water; Salt Hydrolysis; Buffer solutions; Solubility and solubility product; Quantitative analysis; Gravimetric methods; Volumetric methods; Preparation of standard solutions; Indicators in volumetric analysis; Acidimetry and Alkalimetry; Permanganometry and Iodometry; Silverometry; Complexometry; Volumetric calculations; Instrumental methods in analytical chemistry.</p>
<b>AIMS</b>	<p>To expand and deepen the knowledge of Analytical Chemistry. To know and clearly distinguish analytical reactions, their sensitivity, selectivity and specificity. To know the way of sampling and preparation of the representative sample as well as their chemical treatment.</p> <p>To develop their personality through the creation of habits and skills for independent experimental work in different experimental and laboratory conditions and situations.</p> <p>To extend knowledge and understanding for their own good as well as to contribute with their participation in the economic and social development of the country.</p>

<b>EXPECTED LEARNING OUTCOMES</b>	<p>At the end of the lectures, students will achieve:</p> <ol style="list-style-type: none"> <li>1. How is the sample taken in this case;</li> <li>2. Which analytical and instrumental method to use for the analysis of the concrete sample;</li> <li>3. Will know how to do calculations;</li> <li>4. Understand the qualitative and quantitative composition of solutions and know how to pass from one type concentration in another concentration;</li> <li>5. Will know how to make analytical report based on standards;</li> <li>6. Evaluate and interpret the results of representative sample analysis;</li> <li>7. I will put the acquired theoretical and experimental knowledge into practical application.</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Introduction to analytical chemistry.
	<b>Week - II</b>	Disperse systems. Solutions. Concentration of solute. Dilution of solutions.
	<b>Week - III</b>	Chemical equilibrium and chemical equilibrium constant.
	<b>Week - IV</b>	Equilibrium in electrolyte dissolving. Balance of acids and weak bases.
	<b>Week - V</b>	Ionic product of water.
	<b>Week - VI</b>	Salts Hydrolysis.
	<b>Week - VII</b>	Buffer solutions.
	<b>Week - VIII</b>	Dissolubility and product of dissolubility.
	<b>Week - IX</b>	Quantitative analysis. Sampling and preparation of representative sample for analysis. Gravimetric methods. Operations and tools in gravimetric analysis. Gravimetric calculations.
	<b>Week - X</b>	Volumetric methods. Preparation of standard solutions. Volumetric calculations. Classification of volumetric methods.
	<b>Week - XI</b>	Acid-alkalimetric methods. Indicators on acid-alkalimeter. Acidimetry. Alkalimetry.
	<b>Week - XII</b>	Oxidoreduction methods. Redox indicators. Permanganometry. Iodometry.
	<b>Week - XIII</b>	Volumetric methods based on precipitate formation. Indicators for precipitating volumetric titrations. Silverometry.
	<b>Week - XIV</b>	Complexometric methods. Indicators in complexometry. Examples of complexometric definitions.
	<b>Week - XV</b>	Instrumental methods in analytical chemistry.

LITERATURE	<p><u>Principal literature:</u></p> <ol style="list-style-type: none"> <li>1. Vezi D. Bazat teorike të kimisë analitike. Tiranë. 2012.</li> <li>2. Vezi D., Duka S., Vallja Loreta. Praktikum i laboratorit të kimisë analitike. Tiranë. 2014.</li> <li>3. Daniel C. Harris. Quantitative Chemical Analysis. 2015.</li> </ol> <p><u>Recommended Literature:</u></p> <ol style="list-style-type: none"> <li>1. Douglas A. Skoog, Donald M. West, F. James Holler, Stanley R. Crouch. Fundamentals of analytical chemistry, 9th edition. 2014.</li> <li>2. Rajković M.B. Uvod u analitičku hemiju-klasične osnove. Pergament. Beograd. 2007.</li> </ol>																																																
TEACHING METHODOLOGY	<p>Direct teaching (through explanation, clarification, numerical and experimental exercises). Learning through projects, field research, study visits to laboratories and various industrial departments that are correlated with the subject.</p> <p>In all cases the application of teaching methods or techniques will be accompanied by the use of relevant didactic materials and tools without which the expected results can not be achieved.</p>																																																
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ACADEMIC POLICIES	<p>Every student should comply with the rules prescribed by the Statute of University "Isa Boletini" Mitrovicë. The student is obliged to regularly attend lectures, exercises and seminars. To behave in accordance with the code of conduct and adhere to the rules of work in research laboratories.</p>																																																

**Mitrovica**

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**Subject teaching professor:  
Prof. Asoc. Dr. Sadija Kadriu**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and food technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	211. ITU.I	
<b>Subject:</b>	Choloidal chemistry	
<b>Status of subject:</b>	Elective	
<b>Semester:</b>	IV	
<b>Fund of hours:</b>	2+2	
<b>ECTS:</b>	4	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Mehush Aliu	
<b>Assistant/e:</b>	MSc. Malësore Pllana	
<b>Contacts:</b>		
	Email: mehush.aliu@umib.net	malesore.pllana@umib.net
	Phone: +383 (0) 44633263	

<b>CONTENTS</b>	The following topics will be covered in this course: Fundamental principles of colloid chemistry. Surface tension, capillarity. Thermodynamic of interface phase (Gibbs equation), adsorption and interacting surfaces. Adsorption isotherms: Langmuir isotherms, Freundlich equation and BET model. Colloid systems, classification. Physico-chemical properties of molecular systems. Size shape and structure of colloid particles,. Kinetic properties of colloid systems (diffusion, sedimentation, osmosis).
<b>PURPOSE</b>	The objective of this course is to give to students a basic knowledge about colloids chemistry. Development of skills for independent experimental work, the correct use of chemical reagents and laboratory equipment.
<b>ACHIEVEMENT</b>	Student: <ol style="list-style-type: none"> <li>1. Explains the surface phenomena of different colloidal systems.</li> <li>2. Describe different colloidal systems.</li> <li>3. Explain the importance of the optical properties of colloidal systems.</li> <li>4. Conducts experimental laboratory work independently.</li> <li>5. Identifies the most appropriate methods for conducting various experiments.</li> </ol>



	Weeks	THEME
<b>PROGRAM</b>	<b>Week - I</b>	Matter in the colloidal state, surface properties, interface phase.
	<b>Week - II</b>	Liquid –vapour and liquid – liquid interfaces: surface tension, capillary and surface activity. Thermodynamic of interface phase (Gibs equation).
	<b>Week - III</b>	Adsorption isotherms: Langmuir isotherms, Freundlich equation and BET model.
	<b>Week - IV</b>	Adsorption at solid – liquid interface.
	<b>Week - V</b>	Colloid systems, classification. Colloids: definition, structure, size and nomenclature specific surface area
	<b>Week - VI</b>	Kinetic properties of colloid systems. Thermal molecular motion and Brownian motion. Osmotic pressure (diffusion, sedimentation, osmosis).
	<b>Week - VII</b>	Dispersions, sedimentation stability. Evaluation of the first test.
	<b>Week - VIII</b>	Optical properties of colloids. Light scattering
	<b>Week - IX</b>	Electrokinetic properties of colloid systems. The electric double layer. Zeta-potential .Electrokinetic phenomena: Streaming potential, Electrophoresis Electro-osmosis, sedimentation potential.
	<b>Week - X</b>	Colloidal stability of dispersed systems.
	<b>Week - XI</b>	Preparation and purification of colloidal systems. Dispersion Methods. Condensation or Aggregation Methods Peptisation. Purification of Colloidal Solutions
	<b>Week - XII</b>	Systems with gas dispersed medium. Aerosols: classification and formation.
	<b>Week - XIII</b>	Systems with liquid dispersed medium. Emulsions, micro emulsions and foam.
	<b>Week - XIV</b>	Characteristics of macromolecules. Formation and aggregative stability of macromolecules
	<b>Week - XV</b>	Evaluation of the second test
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>Georgios M. Kontogeorgis, Soren Kiil, Introduction to Applied Colloid and Surface Chemistry 1st Edition. United Kingdom, 2016.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>M. Nake, Kimia fizike dhe koloidale, Tiranë, 2007.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>																																																
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<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.</p>																																																

**Mitrovicë**

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**Lecturer:  
Prof. Asoc. Dr. Mehush Aliu**

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(Name Surname)

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(Signature)



## UNIVERSITY OF MITROVICA “ISA BOLETINI”

Course Outline Model (Syllabus)		
<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	212.ITU.I	
<b>Subject:</b>	Sensor Analyze	
<b>Subject Status:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	IV	<b>Summery</b>
<b>Total hours:</b>	2+2	(According to approved programe)
<b>ECTS:</b>	4	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule announced at the beginning of the semester	
<b>Academic year:</b>	2021/2022	
<b>Professor:</b>	Prof. Asoc. Dr. Sadija Kadriu	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:sadija.kadriu@umib.net">sadija.kadriu@umib.net</a>	
	Telefon: +38344736510	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>In this subject (course) will be addressed the importance of sensory analysis of food products using the senses of taste, aroma, smell, touch and sight, so that the food product is liked by the consumer.</p> <p>How to select the panel for sensory analysis will be addressed.</p> <p>The main qualitative and quantitative tests will be treated, then the time-intensity test, etc. The relevance of instrumental and sensory analysis as well as the importance of the formation of specialized panels in food companies.</p>
<b>AIMS</b>	<p>It is about expanding and deepening students' knowledge about the importance of sensory analysis of food products in manufacturing enterprises.</p> <p>To develop the training of students for sensory analysis, the organization of the selection of panelists, the conditions that must be met by a laboratory for sensory analysis, etc.</p> <p>Based on sensory evaluation, conclude impartially about the quality of the product.</p> <p>Based on the acquired knowledge to contribute with their participation in maintaining the quality of food products, consumer health and economic and social development of the country.</p>
<b>EXPECTED LEARNING OUTCOMES</b>	<p>After the subject completion the student will know:</p> <ol style="list-style-type: none"> <li>1. The senses evaluation of a food product;</li> <li>2. To propose concepts and guidelines for a scientific approach to sensory analysis;</li> <li>3. Assess the candidate's skills for sensory analysis and the appropriateness of the selection of sensory tests;</li> <li>4. Implement a special sensory test combined with statistical methods;</li> <li>5. To elect the chairman of the panel of a group of tasters;</li> <li>6. Introduce the issue of sensory evaluation on the basis of food quality control.</li> </ol>

	Weeks	Topic
<b>PROGRAM</b>	<b>Week - I</b>	Senses analysis in quality control of food products
	<b>Week - II</b>	Sensitive taste towards sensorial characteristics.
	<b>Week - III</b>	Taste and smell in some specific cases.
	<b>Week - IV</b>	Laboratory of senses analysis
	<b>Week - V</b>	Panelists classification.
	<b>Week - VI</b>	Distinctive quality test, comparing the copy, triple test.
	<b>Week - VII</b>	Distinctive quality test. Descriptive tests.
	<b>Week - VIII</b>	Panelist's selection. Scads.
	<b>Week - IX</b>	Connectivity between the senses and instrumental analysis. Techniques time/intensity.
	<b>Week - X</b>	Cases made for some senses. Sense assess for some products. Evaluation of meat taste.
	<b>Week - XI</b>	Sense analyze of the oil. Taste evaluation of the olives oil.
	<b>Week - XII</b>	Assessing the cheese quality. Traditional procedure of cheese evaluation.
	<b>Week - XIII</b>	Sense evaluation of milk. Taste evaluation of honey.
	<b>Week - XIV</b>	Sense evaluation of wines and vinegar.
	<b>Week - XV</b>	Evaluation of smell in nonalcohol drinks.
<b>LITERATURE</b>	<p><u>Principal literature:</u></p> <ol style="list-style-type: none"> <li>1. Prifti D. Analiza shqisore te produktet ushqimore. Tirane. 2001.</li> <li>2. Grujić, S. Senzorna ocjena kvaliteta i prihvatljivost prehrambenih proizvoda. Univerzitet u Banja Luci. Tehnološki fakultet Banja Luka. 2015.</li> </ol>	
	<p><u>Recommended Literature:</u></p> <ol style="list-style-type: none"> <li>1. Lawless Harry T., Heymann H. Sensory Evaluation of Food. Principles and Practices. Springer New York. USA .2010.</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, clarification, tasting demonstration and experimental exercises).</p> <p>Learning through projects, field research, study visits to laboratories and various departments of the food industry.</p> <p>In all cases, the application of teaching methods or techniques, except the sensory side, will be accompanied by the use of relevant materials and experimental tools without which the expected results can not be achieved.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	15	30
Exercise sessions - theoretical	2	15	30
Practical work			
Consultation with the professor / assistant	0.5	2	1
Colloquiums / seminars	1	1	1
Independent tasks (work)	1	1	1
Student self study time (in library or at home)	2	7	14
Final exam preparation	4	4	16
Time spent in assessment (tests, quizzes, final exams)	2	3	6
Projects, presentations, etc.	1	1	1
<b>Total</b>			<b>100 = 4 ECTS</b>
<b>EVALUATION</b>	<i>Evaluation in %</i>		
	Tests 1 and 2	40%	
	Colloquia, seminars	10%	
	Laboratory exercises	20%	
	Final exam	30%	
	Total	100%	
<b>ACADEMIC POLICIES</b>	Every student should comply with the rules prescribed by the Statute of University "Isa Boletini" Mitrovicë. The student is obliged to regularly attend lectures, exercises and seminars. To behave in accordance with the code of conduct and adhere to the rules of work in research laboratories.		

**Mitrovica**

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**Subject teaching professor:  
Prof. Asoc. Dr. Sadija Kadriu**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of Food Technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Department of Technology; Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>Code of the course:</b>	213.FET.I	
<b>Title of the course:</b>	Materials of Animal Origin	
<b>Course Status:</b>		Optional
<b>Semestri / Semester:</b>		Summer Semester
<b>Fondi i orëve/ Fund of hours:</b>	2+2	According to the approved program
<b>ECTS:</b>	4	According to the approved program
<b>Time/Location</b>	08:45 -10:15 / 105	
<b>Academic Year:</b>	2021/2022 – 3d year – 5th semester	
<b>Lecturer:</b>	Prof. Dr. Alush Musaj	
<b>Asisstant:</b>	Prof. Ass. Bahtir Hyseni	
<b>Contacts:</b>	<b>Lecturer:</b>	<b>Assistant:</b>
	Email: alush.musaj@umib.net	bahtir.hyseni@umib.net
	Telefon/ Phone number: + 383 (0) 44 245 801	+ 383 (0) 44 561 660

<b>CONTENT</b>	<p>The course includes basic knowledge on raw materials of animal origin. It describes in details characteristics of products as raw materials intended for industrial processing and for ready usage. It provides information on milk and its sub-products, meat and its sub-products, fish, egg, honey, fats of animal origin, etc.</p>
<b>SCOPE</b>	<p>Obtaining of basic knowledge about chemical and biological composition of animal origin foods, equipping students with clear understanding of main principles of production, processing and progressing of animal origin foods, and obtaining of basic knowledge on methods of receiving materials as raw materials, collection and analysis of data, related to the quality of food products intended for industrial processing or semi products.</p>
<b>ACCESSIBILITY</b>	<p>Upon completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> <li>1. Know how to evaluate materials of animal origin in the quality of dairy raw materials, which serve as basis for the progress of technological processes of Food Industry, made subject of technological treatments, of transformation of the end products, with nutritional value and desirable sensory organ characteristics.</li> <li>2. Know how to treat products of animal origin based on principles of sanitary hygiene.</li> <li>3. Know his/her role in the prevention of risks arise consumers, through the food chain, maintaining nutritional values of animal origin products.</li> </ol>

<b>PROGRAM</b>	<b>Weeks</b>	<b>Topics</b>
	<b>Week-I</b>	Introduction to the content of the course, learning methodology. Control and sanitary-hygienic evaluation of milk and its derivatives.
	<b>Week- II</b>	Microbiology of breast milk, production and milking hygiene, transport and conservation impact of milk.
	<b>Week- III</b>	Milk and its products. Chemical ingredients and physical condition. Quality of milk intended for immediate consumption, hygienic evaluation of milk.
	<b>Week-IV</b>	Abnormal milk characteristics, acute food disease from milk consumption, antibiotics, insecticides and disinfectants in milk.
	<b>Week-V</b>	Thermal treatment of milk. Technology. Quality changes depending in processing. Mil products and its derivatives.
	<b>Week-VI</b>	Meat and its products. Definition and overall characteristics.
	<b>Week-VII</b>	The composition of meat, processed meat products.
	<b>Week-VIII</b>	Conserves and semi-conserves.
	<b>Week-IX</b>	Technology of sausages, control methods. Contaminations, defects and negative changes.
	<b>Week-X</b>	Fish. Control and sanitary-hygienic evaluation.
	<b>Week- XI</b>	Changes that fish undergoes during the conservation. Acute food diseases, hazards of chemical nature, storage technology. Evaluation according to EU laws.
	<b>Week-XII</b>	Egg. Control and evaluation of eggs. Nutritional value, chemical composition, classification.
	<b>Week-XIII</b>	Microbiology of eggs, damages, defects of different nature, their conservation.
	<b>Week-XIV</b>	Honey, Control and its evaluation.
<b>Week XV</b>	Infections and intoxications of honey origin,organo-leptik control and hygiene controls.	
<b>LITERATURE</b>	<p>Basic Literature:</p> <ol style="list-style-type: none"> <li>1. B. Bijo, 2012 Higjiena e Ushqimeve me Origjine Shtazore</li> </ol> <p>Additional Literature:</p> <ol style="list-style-type: none"> <li>1. K. Berxholi, “Zoonozat”, 2007,</li> <li>2. Y. Motarjemi and M. Adams “Emerging foodborne pathogens”, 2006,</li> <li>3. Andreas Vasconcellos, “Quality Assurance for the Food Industry”, Edition published in the Taylor &amp; Francis e-Library, 2005</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Lectures, practical laboratory exercises, discussions, comments, group work, study visits to the industry of processing products and by-products with animal care.</p>	

	<b>Student Workload (which should correspond to the student's learning outcomes - 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Days/Weeks</b>	<b>Total</b>
	Lectures	2	15	30
	Exercise Sessions	2	15	30
	Lecturer Consultation	0.5	8	4
	Colloquium/Seminars	1	2	2
	Independent Tasks	1	2	2
	Student's own study time (in the library or at home)	2	6	12
	Final preparation for the exam	2	7	14
	Time spent on assessment (tests, quizzes, final exam)	2	2	4
	Projects, presentations etc.	1	2	2
<b>Total</b>			<b>100 = 4 ECTS</b>	
<b>EVALUATION</b>	<b>Evaluations Methods</b>			
	<u>Evaluation on %</u>			
	1st test, in written ..... 35%			
	2nd test, in written ..... 35%			
	Participation in lectures and exercises..... 20%			
	Seminar Works.....10%			
	Written Exam .....100%			
	<b>Grade scales :</b>			
	50- less - grade 5 (five)			
	51-60 % - grade 6 (six)			
	61-70 % - grade 7 (seven)			
71-80 % - grade 8 (eight)				
81-90 % - grade 9 (nine)				
91-100 % - grade 10 (ten)				
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.			

Mitrovicë

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Course bearer:

**Prof. Dr. Alush Musaj**

\_\_\_\_\_

(Name Surname)

\_\_\_\_\_

(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	301.ITU.I	
<b>Subject:</b>	Microbiology of food	
<b>Subject Status:</b>	Compulsory	(Compulsory or Elective)
<b>Semester:</b>	Summer	(Winter / Summer)
<b>Total hours:</b>	3+2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Schedule / Hall</b>	Tuesday, 11:45-14:00 /L S103	
<b>Academic year:</b>	Year- III , semester V	
<b>Professor:</b>	Prof.Dr, Dilaver Salihu	
<b>Assistants:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>	Professor	Assistant
	Email: dilaver.salihu@umib.net	arber.hyseni@ubt-uni.net
	Telefon: +38349303138	+38349665988

<b>BRIEF CONTENT OF SUBJECT</b>	Microbiology is the science which studies the microorganisms and activity of microorganisms. Started by changes of food and nutritional values, have acquired knowledge on the use of methods for increasing the sustainability and quality of food products.
<b>AIMS</b>	Students should be enabled to analyze physiological and morphological properties of microorganisms, their classification. Describe the shape and structure of cells of microorganisms.
<b>EXPECTED LEARNING OUTCOMES</b>	After completion of this course the student will be able to: 1. Learn the methods for enumeration of microorganisms, 2. Direct identification by microscope, 3. Counting and determination of food-borne microorganisms, 4. Physical, chemical and immunological methods. 5. Importance of microorganisms in food.

<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Microbiology as a science, the history of microorganisms in food, microbiotic rules on food.
	<b>Week - II</b>	Morphology of microorganisms in food products
	<b>Week - III</b>	Bacteria, shape, structure, multiplication and growth, their classification.
	<b>Week - IV</b>	Yeasts, form, structure, and systematic identification of their physiological, preventive measures
	<b>Week - V</b>	Mold, structure, development conditions, and systematic identification of mold, elaboration and the differences biochemical in the mold, preventive measures
	<b>Week - VI</b>	Viruses and bacteriophage lytic Lysogenic
	<b>Week - VII</b>	first test
	<b>Week - VIII</b>	Origin of microorganisms in food, influence factors, pH, water activity, temperature, humidity, oxido-reduction potential
	<b>Week - IX</b>	Microorganisms in food and diseases, food intoxication, toxins infections, mycotoxin.
	<b>Week - X</b>	Microflora of various food products, for drinking water, milk, meat, microorganisms in fish eggs, and seafood products.
	<b>Week - XI</b>	Microflora in cereals and their products, fruits and vegetables, spices and preserved products
	<b>Week - XII</b>	Second test
	<b>Week - XIII</b>	Microflora in soft drinks, fermented products beer, wine and alcoholic drink,
	<b>Week - XIV</b>	Methods of braking and elimination of microorganisms, disinfection, thermal processing, sterilizing filtration, treatment radiation, cooling and freezing
	<b>Week - XV</b>	Increasing the sustainability of products, drying, freezing, refrigeration, food conservation, sanitation and prevention of corruption, food microbiological control.

<b>LITERATURE</b>	<p>Reference:</p> <ol style="list-style-type: none"> <li>1. Prof. Dr. Elna Karova, Mikrobiologia po hranitelnite vkysova promishellnost-Plovdiv.[2010].ISBN954-24-0002-0.</li> <li>2.Rhea Femande,[2009]Microbiology Handbook Dairy Productis. Britania e Madhe.[UK].ISBN.978-1-905224-62-3.</li> <li>3. Reneta Kongoli,Rozeta Hasalliu.Ariola Morina,[2014], Rreziqet në ushqime dhe montorimi i tyre, Tiranë.ISBN.978-9928-134-47-9.</li> <li>4. Prof.dr.Ivan Myrgov, Prof. Dr. Zarjana Dinkova. Mikrobiologia, Teoria i praktika pri proizvodstvoto na hranitelni produkti . Plovdiv [ 2010]. ISBN978-24-0133-9.</li> <li>5. Prof. Donika Prifti [2007] “ Mikrobiologjia ushqimore” Tiranë.</li> <li>6. Dragutin A. Đukić, Leka G. Mandić, Slavica M. Vesković, Opšta i industrijska mikrobiologjia, Agronomski fakultet, Čačak, 2015.</li> </ol> <p>Additional reference:</p> <ol style="list-style-type: none"> <li>1.Doc.dr. Velicka Petrova Nestorova. Higjena na Hraneto i hranitelno zakonodetstvo. Matocom 2010.ISBN978-954-68-9</li> <li>2. Prof Kristaq Sini[2003] “Mikrobiologjia ushqimore dhe higjena” Tiranë.</li> <li>3.Duraković S.,Duraković L.Prirucnik [1998] za rada u mikrobioloskim laboratorija</li> <li>4.www.microbes.info./nesoures/Gemeral Mikrobiologia.</li> </ol>																																																								
<b>TEACHING METHODOLOGY</b>	<p>During lectures students will be able not only debates during the elaboration of the unit by the teacher but also during treatment worked and seminar projects presented by students during semester. Project work will do individually or in groups. The lectures developed with the help of video-projector through visual presentation program PowerPoint Presentation</p>																																																								
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b></th> </tr> <tr> <th style="text-align: center;">Activity</th> <th style="text-align: center;">Hours</th> <th style="text-align: center;">Day/Week</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">3</td> <td style="text-align: center;">15</td> <td style="text-align: center;">45</td> </tr> <tr> <td>Exercise sessions - theoretical</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Field exercises</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Practical work</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Consultation with the professor / assistant</td> <td style="text-align: center;">1</td> <td style="text-align: center;">5</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Colloquiums / seminars</td> <td style="text-align: center;">2</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Independent tasks (work)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> <td style="text-align: center;">6</td> </tr> <tr> <td>Student self study time (in library or at home)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">6</td> <td style="text-align: center;">12</td> </tr> <tr> <td>Final exam preparation</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> <td style="text-align: center;">16</td> </tr> <tr> <td>Time spent in assessment (tests, quizzes, final exams)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Projects, presentations, etc.</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td></td> <td style="text-align: center;"><b>125=5 ECTS</b></td> </tr> </tbody> </table>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>				Activity	Hours	Day/Week	Total	Lectures	3	15	45	Exercise sessions - theoretical	2	15	30	Field exercises	2	2	4	Practical work	1	1	1	Consultation with the professor / assistant	1	5	5	Colloquiums / seminars	2	1	2	Independent tasks (work)	2	3	6	Student self study time (in library or at home)	2	6	12	Final exam preparation	2	8	16	Time spent in assessment (tests, quizzes, final exams)	1	2	2	Projects, presentations, etc.	1	2	2	<b>Total</b>			<b>125=5 ECTS</b>
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<b>EVALUATION</b>	<div style="border: 1px solid black; padding: 5px; margin: 0 auto; width: 80%;"> <p><b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]</p> </div> <p>Regular continuation – 5% Colloquium 1- 15% Colloquium 2- 10% Activity in lecture and seminars 15 % Final exam 55% Total 100%</p>
<b>ACADEMIC POLICIES</b>	<p>Criteria for regular attendance and etiquette are set during the organization of the lesson. Further instructions:</p> <ul style="list-style-type: none"> <li>• Computer work Written works must be computer written. In the works are obligatory the observance of the criteria both for the visual aspect and the content of the required works. During the works, it is required to respect the spelling rules and APA style</li> <li>• Ethics in teaching The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.</li> <li>• Deadlines In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he/she deems it reasonable and necessary to carry out his / her work.</li> <li>• Rules of conduct and academic policies: <ul style="list-style-type: none"> <li>o active participation of students in lectures</li> <li>o participation in discussion, comments, and free expression of opinion, opinion, and academic position (with arguments)</li> <li>o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)</li> <li>o Respecting lecture schedules without compromising academic freedom (silent cell phones)</li> <li>o respecting the word, thoughts, and ideas of colleagues</li> <li>o low tolerance for late arrivals and departures without any valid reason</li> <li>o preparation and equipping with relevant lectures, (obligation of the teacher).</li> </ul> </li> </ul>

**Mitrovica**

10.01.2022

**Subject teaching professor:**

Prof.Dr. Dilaver Salihu  
(Name Surname)

(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	302.ITU.I	
<b>Subject:</b>	Basics reactors engineering	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	V	Sommer
<b>Total hours:</b>	2+2	According to approved programe
<b>ECTS:</b>	5	According to approved programe
<b>Schedule / Hall</b>	Friday, 10:00-12:15; S105	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Asoc. Dr. Milaim SADIKU	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	milaim.sadiku@umib.net	
Telefon:	+383/44639133	

<b>BRIEF CONTENT OF SUBJECT</b>	The course deals with chemical reactions and kinetic expressions for the speed of the chemical reaction; Dimensioning of ideal reactors and comparison of efficiency; Non-stationary operation of ideal reactors; Collection of experimental kinetic data and their analysis; Pipe reactor with recirculation and autocatalytic reactions; Non-isothermal operation of ideal reactors; Dimensioning of non-isothermal reactors; Reactor design for complex reactions. The engineering aspect of bioprocesses; Discontinuous tube bioreactors; Mixed flow bioreactor.	
<b>AIMS</b>	Knowledge attainment in the field of reactor design referred to: concept of ideal chemical reactors, design of ideal reactors, nonisothermal reactor design, unsteady-state operation of ideal reactors, kinetic data analyses and reactor design for multiple reactions. Gaining basic knowledge of bioprocess engineering and bioreactors.	
<b>EXPECTED LEARNING OUTCOMES</b>	<ul style="list-style-type: none"> <li>- The student will be able to accomplish as below:</li> <li>- Analytical skills;</li> <li>- Communication skills;</li> <li>- Learning skills while working;</li> <li>- Skills of thinking and acting independently;</li> <li>- Organizational skills;</li> <li>- Leadership skills;</li> <li>- Problem-solving skills.</li> </ul>	
<b>P R O</b>	<b>Weeks</b>	<b>Topic</b>

	<b>Week - I</b>	General data for reactors
	<b>Week - II</b>	Material balance-general form; Reaction stoichiometry and concept of limiting reactant
	<b>Week - III</b>	Ideal pipe reactor; Conversion Rate; Dimensioning of isothermal chemical reactors; Dimensioning of the batch reactor for isotherm operation
	<b>Week - IV</b>	Dimensioning the flow reactor with ideal mixing for isotherm work; Dimensioning the ideal tubular reactor for isothermal operation
	<b>Week - V</b>	Ideal pipe reactor with recycling; Autocatalytic reactions
	<b>Week - VI</b>	Non-stationary operation of flow reactor with ideal mixing; Non stationary work of cascade
	<b>Week - VII</b>	Non-stationary work of the ideal tube reactor
	<b>Week - VIII</b>	Parallel (comparative) reactions; Consecutive reactions
	<b>Week - IX</b>	Non-isothermal work of the flow reactor with ideal mixing; Energy balance
	<b>Week - X</b>	Non-isothermal work of the tubular reactor
	<b>Week - XI</b>	Non-stationary work of the ideal non-isothermal tubular reactor; Non-stationary work reactor flow with ideal non-isothermal mixture
	<b>Week - XII</b>	Non-isothermal work of Batch reactors
	<b>Week - XIII</b>	Non-isothermal reactors for composite reactions
	<b>Week - XIV</b>	Bioprocess Engineering Aspects
	<b>Week - XV</b>	Discontinuous tubular bioreactors; Mixed flow bioreactor
<b>LITERATURE</b>	<ol style="list-style-type: none"> <li>1. Ligjërta të përgatitura për studentë, 2021.</li> <li>2. Levenshpil, O. 2018. Inxhinieria e reaksioneve kimike. Ars Lamina, Shkup.</li> <li>3. Basic concepts in biochemistry, McGraw-Hill, Copyright © 2000.</li> <li>4. Osnovi bioprocenog inzenjerstva, j. Baras et al. tehnoloski fakultet Leskovac, 2009.</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises, and numerical tasks). Teaching through demonstration and experiment. Interactive lesson. Learning through projects, seminars, periodic self-assessments, field research, and research itself. All this will be realized in the theoretical and practical aspects by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
Lectures	2	1/15	30
Exercise sessions - theoretical	2	1/15	30
Consultation with the professor / assistant	0.5	14	7
Colloquiums / seminars	1	10	10
Independent tasks (work)	1	10	10
Student self study time (in library or at home)	1	15	15
Final exam preparation	2	7	14
Time spent in assessment (tests, quizzes, final exams)	1.5	4	6
Projects, presentations, etc.	1	3	3
<b>Total</b>			<b>125 hours</b>

  

<b>EVALUATION</b>	Regular participation in lectures and engaging in exercises: 10% Test I 20% Test II 20% Seminar: 20% Final exam: 30%
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the University's statute and other regulations. The code of conduct applies to both students and teachers.

**Mitrovica**

**Prof. Asoc. Dr. Milaim Sadiku**

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(Name Surname)

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(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of Food Technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Department of Technology; Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>Code of the course:</b>	303.FET.I	
<b>Title of the course:</b>	Food Quality Control	
<b>Course Status:</b>		Obligatory
<b>Semester:</b>		Winter Semester
<b>Fund of hours:</b>	2+2	According to the approved program
<b>ECTS:</b>	5	According to the approved program
<b>Time/Location:</b>	8:45 – 10:15 / 105	
<b>Academic Year:</b>	2021/2022 – 3d year – 3d semester	
<b>Lecturer:</b>	Prof. Dr. Alush Musaj	
<b>Assistant:</b>	Prof. Ass. Bahtir Hyseni	
<b>Contacts:</b>	Lecturer:	Assistant:
	Email: alush.musaj@umib.net	bahtir.hyseni@umib.net
	Phone Number: + 383 (0)44 245 801	+ 383 (0) 44 561 660

<b>CONTENT</b>	<p>The course provides basic knowledge on food quality control, concept, tools, improvement, and equipping of food safety systems terminology with those of the quality management system. Obtaining overall theoretical and practical knowledge for quality and its management. Documentation drafting for previous programs. Introduction to improvement tools for the food quality. Quality control in the stage of raw materials, process, and final product stage. Supporting hours of the course (exercises) will be based on introduction of prerequisite programs (PP) of hygiene affecting food quality. Study visits in food production industry or food processing. Introduction to adoption conditions and implementation of quality control in industry.</p>
<b>SCOPE</b>	<p>The field of food quality control has evolved considerably over the last decade and these important developments are widely recognized in university science. Through this course students will obtain a clearer scientific and legislative presentation of food quality management systems.</p>
<b>ACCESSIBILITY</b>	<p>Upon completion of this course, the student will be able to:</p> <ol style="list-style-type: none"> <li>1. Recognise evaluation of principles, practices and terminology of food quality control field, and the role and importance their implementation;</li> <li>2. Recognise the concepts of food quality and food quality control methods;</li> <li>3. Recognise the aspects of relevant legislation in the field of food quality control, and three basic systems of food quality control: good working practices (documentation drafting), prerequisite programs, biological, physical and chemical hazards in the process;</li> <li>4. Basic knowledge on the HACCP system.</li> </ol>

	<b>Weeks</b>	<b>Topics</b>
<b>PROGRAM</b>	<b>Week I</b>	Introduction; The purpose of food quality control; Introduction to content of the course; Learning methodology; History of food quality.
	<b>Week II</b>	Quality and evaluation of food products. Microbial contamination of food. Technological interventions with impact on microorganisms.
	<b>Week III</b>	Quality concepts; Internal features of quality; The future of the food chain.
	<b>Week IV</b>	External quality features;
	<b>Week V</b>	Strains indicator of hygiene and of process;
	<b>Week VI</b>	Technological tools and methods used in quality control;
	<b>Week VII</b>	Admissibility of samples; Statistical control of the process;
	<b>Week VIII</b>	Quality analysis and measurements; Sample preparation;
	<b>Week IX</b>	Quality improvement in the food industry, PP,
	<b>Week X</b>	Quality assurance; Good Manufacturing Practices and the Evolution of the HACCP System;
	<b>Week XI</b>	Critical point risk analysis;
	<b>Week XII</b>	Necessary knowledge for quality control in the production process;
	<b>Week XIII</b>	Standards of quality systems; Steering systems;
	<b>Week XIV</b>	Quality control in the food industry. The main stages of production. Contemporary analytical techniques.
	<b>Week XV</b>	Food legislation, Basic acts: EU regulation, horizontal and vertical food legislation. National food legislation. Local and international food safety related agencies.

<b>LITERATURE</b>	<p>Basic Literature:</p> <ol style="list-style-type: none"> <li>1. B.Bijo. Z.Malaj. 2008, Sistemet e sigurimit të cilësisë në industrinë ushqimore dhe legjislacioni mbështetës,</li> <li>2. R. Kongoli, 2010, Drejtimi i cilësisë në industrinë agro-ushqimore,</li> <li>3. J. Andreas Vasconcellos, CRC Press, 2005“Quality assurance for the food industry”</li> <li>4. Andre Gordon, PhD, (2017) Technological Solutions Limited Kingston, Jamaica, “Food Safety and Quality Systems in Developing Countries” Published by Nikki Ley</li> </ol> <p>Additional Literature:</p> <ol style="list-style-type: none"> <li>1. Codex Alimentarius (2003, 2007) Ligjet dhe rregullat nacionale, BE-së dhe ndërkombëtare mbi vlerësimin e produkteve me origjinë shtazore; Ligji i ushqimit, 93/43/EEC, Rregullorja nr. 178/2002/BE-së, 1774/2002/BE,</li> <li>2. V. N. Scott. Stevenson K. E. (2006). HACCP – A Systematic Approach to Food Safety: A Comprehensive Manual for Developing and Implementing a Hazard Analysis and Critical Control Point Plan. Washington, D. C.: Food Products Association,</li> <li>3. R. Gaze (2003) HACCP a practical guide, CCFRA , UK</li> </ol>																																												
<b>TEACHING METHODOLOGY</b>	<p>Lectures, practical laboratory exercises, discussions, comments, group work, study visits to the industry of processing products and by-products with animal care.</p>																																												
	<p><b>Student Workload (which should correspond to the student's learning outcomes - 1 ECTS credit = 25 hours)</b></p> <table border="1" data-bbox="310 1081 1542 1570"> <thead> <tr> <th>Activity</th> <th>Hours</th> <th>Days/Weeks</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td>2</td> <td>15</td> <td>30</td> </tr> <tr> <td>Exercise Sessions</td> <td>2</td> <td>15</td> <td>30</td> </tr> <tr> <td>Lecturer Consultation</td> <td>0.5</td> <td>10</td> <td>5</td> </tr> <tr> <td>Colloquium/Seminars</td> <td>2</td> <td>2</td> <td>4</td> </tr> <tr> <td>Independent Tasks</td> <td>1</td> <td>2</td> <td>2</td> </tr> <tr> <td>Student's own study time (in the library or at home)</td> <td>3</td> <td>6</td> <td>18</td> </tr> <tr> <td>Final preparation for the exam</td> <td>4</td> <td>7</td> <td>28</td> </tr> <tr> <td>Time spent on assessment (tests, quizzes, final exam</td> <td>2</td> <td>2</td> <td>4</td> </tr> <tr> <td>Projects, presentations etc.</td> <td>2</td> <td>2</td> <td>4</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td></td> <td><b>125</b></td> </tr> </tbody> </table>	Activity	Hours	Days/Weeks	Total	Lectures	2	15	30	Exercise Sessions	2	15	30	Lecturer Consultation	0.5	10	5	Colloquium/Seminars	2	2	4	Independent Tasks	1	2	2	Student's own study time (in the library or at home)	3	6	18	Final preparation for the exam	4	7	28	Time spent on assessment (tests, quizzes, final exam	2	2	4	Projects, presentations etc.	2	2	4	<b>Total</b>			<b>125</b>
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Exercise Sessions	2	15	30																																										
Lecturer Consultation	0.5	10	5																																										
Colloquium/Seminars	2	2	4																																										
Independent Tasks	1	2	2																																										
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<b>EVALUATION</b>	<p><b>Evaluations Methods</b></p> <p><u>Evaluation on %</u></p> <p>1st test, in written ..... 35%</p> <p>2nd test, in written ..... 35%</p> <p>Participation in lectures and exercises..... 20%</p> <p>Seminar Works.....10%</p> <p>Written Exam .....100%</p> <p><b>Grades Scales :</b></p> <p>50- less – grade 5 (five)</p> <p>51-60 % - grade 6 (six)</p> <p>61-70 % - grade 7 (seven)</p> <p>71-80 % - grade 8 (eight)</p> <p>81-90 % - grade 9 (nine)</p> <p>91-100 % - grade 10 (ten)</p>
<b>ACADEMIC POLITICS</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>

**Mitrovicë**

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**Course bearer:**

**Prof.Dr. Alush Musaj**

\_\_\_\_\_

(Name Surname)

\_\_\_\_\_

(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	304.ITU.I	
<b>Subject:</b>	Technology of milk treatment	
<b>Subject Status:</b>	Compulsory	(Compulsory or Elective)
<b>Semester:</b>	Summer	(Winter / Summer)
<b>Total hours:</b>	2+3	(According to approved program)
<b>ECTS:</b>	5	(According to approved program)
<b>Schedule / Hall</b>	Tuesday, 14:30-16:00 /L S103	
<b>Academic year:</b>	Year- III , semester V	
<b>Professor:</b>	Prof.Dr, Dilaver Salihu	
<b>Assistants:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>	Professor	Assistant
	Email: dilaver.salihu@umib.net	arbër.hyseni@ubt-uni.net
	Telefon: +38349303138	+38349665988

<b>BRIEF CONTENT OF SUBJECT</b>	The matter of milk processing technology will gain knowledge in the cluster and milk composition, mechanical and thermal processing it.
<b>AIMS</b>	Students of attitudes in possession rule sensory organ analysis, physico-chemical and microbiological analysis
<b>EXPECTED LEARNING OUTCOMES</b>	Upon completion of the lectures and student exercises will be in life: 1. Know the milk that is intended for consumption 2. Understand heat treatment-sterilization 3. Understand fat standardization 4. To know the bacterial cultures for the beginning of yogurt 5. Check the composition of milk

	Weeks	Topic
<b>PROGRAM</b>	<b>Week - I</b>	Milk, milk formation in the animal Bay
	<b>Week - II</b>	Milking, mechanized milking
	<b>Week - III</b>	Collecting, buying milk
	<b>Week - IV</b>	Quality control of milk
	<b>Week - V</b>	Milk Features: organo-sensory features of milk, physico-chemical features, biochemical ingredient, microbiological
	<b>Week - VI</b>	Mechanical and thermal processing of milk-separator
	<b>Week - VII</b>	First test controller
	<b>Week - VIII</b>	Rules and standard of milk, prepare of fat content, standardization
	<b>Week - IX</b>	Baktofugation, homogenization
	<b>Week - X</b>	Electro pumps of milk, sterilization
	<b>Week - XI</b>	Milk on the market (consumption) UHT
	<b>Week - XII</b>	Second test controller
	<b>Week - XIII</b>	Probiotic, Aktiva and Aktimel
	<b>Week - XIV</b>	Products of lactic acid, bacterial cultures
	<b>Week - XV</b>	Technology of preparing of mow and the secondary product- ricotta
<b>LITERATURE</b>	<p>Reference:</p> <ol style="list-style-type: none"> <li>1. Fatlum D.,[2012] “Njohuri te hollesishme dhe bashkekohore per trajtimin dhe industrializimin e qumeshtit” Tirane</li> <li>2. Bizano B.,[2011] “Higjena e ushqimeve me origjine shtazore” Tirane.</li> <li>3. Fatlum D.,[2013] “Probiotiket produktet e qumeshtit te shendeteshem “Tirane.</li> <li>4. Prof Mariana Cariq, Prof Spasenia Milanoviq,Dp Dragica Vucelja :[2000]“Standarden metode analize mleka i Mlechni Proizvoda” Novi-Sad.</li> <li>5. Marijana Carić, Spasenija Milanović, Mleko u prahu i srodni proizvodi, Tehnološki fakultet, Novi Sad, 2016.</li> </ol> <p>Additional reference:</p> <ol style="list-style-type: none"> <li>1.Maria Baltegjieva[1981] “Teknologia na mlekoto i mlechnite konzervi” Plovdive</li> <li>2.Lj.Tratnik:Mljeko-tehnologija,bikimija I mikrobiologija[1998] .Hrvatska mlekarska udruga, Zagreb.</li> <li>3.Jovan Gjorgjeviq:[1982] “Mleko- Himia I fizika mlek” Beograd .</li> <li>4.Vladimir Velkov- Welkov, Darina Todorov Petkova, Boris Nikollov[1993] “Saniterno Higena pravila I normi pri prerabotka na mleko I mlechni produkti” Sofje .</li> </ol>	

<b>TEACHING METHODOLOGY</b>	<p>During lectures students will be able not only debates during the elaboration of the unit by the teacher but also during treatment worked and seminar projects presented by students during semester. Project work will do individually or in groups. The lectures developed with the help of video-projector through visual presentation program PowerPoint Presentation</p>																																																							
	<p style="text-align: center;"><b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b></p> <table border="1" data-bbox="256 472 1521 1075"> <thead> <tr> <th data-bbox="256 472 695 510">Activity</th> <th data-bbox="695 472 889 510">Hours</th> <th data-bbox="889 472 1203 510">Day/Week</th> <th data-bbox="1203 472 1521 510">Total</th> </tr> </thead> <tbody> <tr> <td data-bbox="256 510 695 548">Lectures</td> <td data-bbox="695 510 889 548">2</td> <td data-bbox="889 510 1203 548">15</td> <td data-bbox="1203 510 1521 548">30</td> </tr> <tr> <td data-bbox="256 548 695 585">Exercise sessions - theoretical</td> <td data-bbox="695 548 889 585">3</td> <td data-bbox="889 548 1203 585">15</td> <td data-bbox="1203 548 1521 585">45</td> </tr> <tr> <td data-bbox="256 585 695 623">Field exercises</td> <td data-bbox="695 585 889 623">5</td> <td data-bbox="889 585 1203 623">1</td> <td data-bbox="1203 585 1521 623">5</td> </tr> <tr> <td data-bbox="256 623 695 661">Practical work</td> <td data-bbox="695 623 889 661">1</td> <td data-bbox="889 623 1203 661">1</td> <td data-bbox="1203 623 1521 661">1</td> </tr> <tr> <td data-bbox="256 661 695 737">Consultation with the professor / assistant</td> <td data-bbox="695 661 889 737">1</td> <td data-bbox="889 661 1203 737">2</td> <td data-bbox="1203 661 1521 737">2</td> </tr> <tr> <td data-bbox="256 737 695 774">Colloquiums / seminars</td> <td data-bbox="695 737 889 774">2</td> <td data-bbox="889 737 1203 774">2</td> <td data-bbox="1203 737 1521 774">4</td> </tr> <tr> <td data-bbox="256 774 695 812">Independent tasks (work)</td> <td data-bbox="695 774 889 812">2</td> <td data-bbox="889 774 1203 812">2</td> <td data-bbox="1203 774 1521 812">4</td> </tr> <tr> <td data-bbox="256 812 695 888">Student self-study time (in library or at home)</td> <td data-bbox="695 812 889 888">2</td> <td data-bbox="889 812 1203 888">6</td> <td data-bbox="1203 812 1521 888">12</td> </tr> <tr> <td data-bbox="256 888 695 926">Final exam preparation</td> <td data-bbox="695 888 889 926">3</td> <td data-bbox="889 888 1203 926">4</td> <td data-bbox="1203 888 1521 926">12</td> </tr> <tr> <td data-bbox="256 926 695 1001">Time spent in assessment (tests, quizzes, final exams)</td> <td data-bbox="695 926 889 1001">3</td> <td data-bbox="889 926 1203 1001">2</td> <td data-bbox="1203 926 1521 1001">6</td> </tr> <tr> <td data-bbox="256 1001 695 1039">Projects, presentations, etc.</td> <td data-bbox="695 1001 889 1039">2</td> <td data-bbox="889 1001 1203 1039">2</td> <td data-bbox="1203 1001 1521 1039">4</td> </tr> <tr> <td data-bbox="256 1039 695 1075"><b>Total</b></td> <td data-bbox="695 1039 889 1075"></td> <td data-bbox="889 1039 1203 1075"></td> <td data-bbox="1203 1039 1521 1075"><b>125=5 ECTS</b></td> </tr> </tbody> </table>				Activity	Hours	Day/Week	Total	Lectures	2	15	30	Exercise sessions - theoretical	3	15	45	Field exercises	5	1	5	Practical work	1	1	1	Consultation with the professor / assistant	1	2	2	Colloquiums / seminars	2	2	4	Independent tasks (work)	2	2	4	Student self-study time (in library or at home)	2	6	12	Final exam preparation	3	4	12	Time spent in assessment (tests, quizzes, final exams)	3	2	6	Projects, presentations, etc.	2	2	4	<b>Total</b>			<b>125=5 ECTS</b>
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**ACADEMIC POLICIES**

Criteria for regular attendance and etiquette are set during the organization of the lesson.

Further instructions:

- Computer work

Written works must be computer written. In the works are obligatory the observance of the criteria both for the visual aspect and the content of the required works. During the works, it is required to respect the spelling rules and APA style

- Ethics in teaching

The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.

- Deadlines

In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he/she deems it reasonable and necessary to carry out his / her work.

- Rules of conduct and academic policies:

- o active participation of students in lectures

- o participation in discussion, comments, and free expression of opinion, opinion, and academic position (with arguments)

- o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)

- o Respecting lecture schedules without compromising academic freedom (silent cell phones)

- o respecting the word, thoughts, and ideas of colleagues

- o low tolerance for late arrivals and departures without any valid reason

- o preparation and equipping with relevant lectures, (obligation of the teacher).

**Mitrovica**

10.01.2022

**Subject teaching professor:**

Prof.Dr. Dilaver Salihu  
(Name Surname)

\_\_\_\_\_  
(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and food technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	305.ITU.I	
<b>Subject:</b>	Fruit and Vegetable Processing Technology	
<b>Status of subject:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	V	(Winter/Summer)
<b>Fund of hours:</b>	2+2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Ass. Dr. Bahtir Hyseni	
<b>Assistant/e:</b>	MSc. Dafina Llugaxhiu	
<b>Contacts:</b>	Professor	Assistant
	Email: bahtir.hyseni@umib.net	dafina.llugaxhiu@umib.net
	Phone: +383 (0) 49113367	+383 (0) 44783166

<b>CONTENTS</b>	In this course, raw material of fruits, vegetables and processing aids are subject of the studying. Furthermore, their preparation and storage before processing, as well as the technological processes of their processing up to final products are subject of the course.
<b>PURPOSE</b>	The aim of the course is to expand the knowledge on how to provide the raw material of fruits, vegetables and auxiliary materials, their quality control techniques, as well as their preparation and storage before processing. Students are provided with detailed knowledge of different processing techniques, monitoring and controlling of various product processing (technological), sampling and laboratory control of the quality of finished products, as well as their storage. They will also gain knowledge about the complete hygiene in the preparatory and processing facilities, the aspects of quality assurance of production during the preparation and technological processing in the finished product.

<b>ACHIEVEMENT</b>	Student: 1. Describe the ways of providing raw materials and auxiliary materials as well as their storage until processing. 2. Explain the ways and preparatory actions with raw materials and auxiliary materials before processing. 3. To sketch the technological processes of processing fruits and vegetables up to final products. 4. Use processes to produce products from fruits and vegetables. 5. Use packaging processes for any type of final product, as well as their storage and ways of storage; 6. Demonstrate how to take samples (raw materials, auxiliaries and final products), their preparation for analysis and methods of evaluation and laboratory control. 7. Analyze hygienic practices for processing and storage of fruit and vegetable products.																														
	<b>PROGRAM</b>	<table border="1"> <thead> <tr> <th style="text-align: center;">Weeks</th> <th style="text-align: center;">THEME</th> </tr> </thead> <tbody> <tr> <td><b>Week - I</b></td> <td>Introduction. The importance of processing fruits and vegetables.</td> </tr> <tr> <td><b>Week - II</b></td> <td>Chemical composition of fruits and vegetables. Auxiliary subjects. Study case</td> </tr> <tr> <td><b>Week - III</b></td> <td>Maturity of fruits and vegetables and their harvest: physiological maturity, technological maturity. Harvesting and transportation process.</td> </tr> <tr> <td><b>Week - IV</b></td> <td>Preparatory actions in processing and conservation. Receiving and storing raw materials. Preparatory processes.</td> </tr> <tr> <td><b>Week - V</b></td> <td>Conservation techniques. Conservation with low and high temperature.</td> </tr> <tr> <td><b>Week - VI</b></td> <td>Conservation by drying, Conservation by concentration, Conservation by using high concentrations of sugar. First assessment</td> </tr> <tr> <td><b>Week - VII</b></td> <td>Conservation with the use of chemicals, Biological conservation, Radiation conservation, Filtration and bactofugation, Pressure conservation.</td> </tr> <tr> <td><b>Week - VIII</b></td> <td>Fruit products: Frozen fruit, Frozen fruit porridge, Pasteurized fruit, Pasteurized fruit porridge</td> </tr> <tr> <td><b>Week - IX</b></td> <td>Fruit Juice, Concentrated Fruit Juice, Fruit Nectar, Fruit Syrup, Compote, Cakes</td> </tr> <tr> <td><b>Week - X</b></td> <td>Fruits, Marmalades, Pekmezi, Fruit Jellies, Fruit Cheese, Candied Fruits, Dried Fruits, Fruit Juice, Mixed Fruit and Vegetable Products, Low Calorie Fruit Products, Citrus based products, Other Fruit Products</td> </tr> <tr> <td><b>Week - XI</b></td> <td>Vegetable products: Frozen vegetables, Sterilized vegetables, Pasteurized vegetables, Marinated vegetables (vegetables in vinegar).</td> </tr> <tr> <td><b>Week - XII</b></td> <td>Biologically Preserved (Dried) Vegetables, Vegetable Juice, Concentrated Vegetable Juice, Dried Vegetables, Vegetable Sauce, Ketchup, Other Vegetable Products. Second assessment</td> </tr> <tr> <td><b>Week - XIII</b></td> <td>Hygiene in fruit and vegetable processing factories.</td> </tr> <tr> <td><b>Week - XIV</b></td> <td>Packaging. Packaging material and types of packaging.</td> </tr> </tbody> </table>	Weeks	THEME	<b>Week - I</b>	Introduction. The importance of processing fruits and vegetables.	<b>Week - II</b>	Chemical composition of fruits and vegetables. Auxiliary subjects. Study case	<b>Week - III</b>	Maturity of fruits and vegetables and their harvest: physiological maturity, technological maturity. Harvesting and transportation process.	<b>Week - IV</b>	Preparatory actions in processing and conservation. Receiving and storing raw materials. Preparatory processes.	<b>Week - V</b>	Conservation techniques. Conservation with low and high temperature.	<b>Week - VI</b>	Conservation by drying, Conservation by concentration, Conservation by using high concentrations of sugar. First assessment	<b>Week - VII</b>	Conservation with the use of chemicals, Biological conservation, Radiation conservation, Filtration and bactofugation, Pressure conservation.	<b>Week - VIII</b>	Fruit products: Frozen fruit, Frozen fruit porridge, Pasteurized fruit, Pasteurized fruit porridge	<b>Week - IX</b>	Fruit Juice, Concentrated Fruit Juice, Fruit Nectar, Fruit Syrup, Compote, Cakes	<b>Week - X</b>	Fruits, Marmalades, Pekmezi, Fruit Jellies, Fruit Cheese, Candied Fruits, Dried Fruits, Fruit Juice, Mixed Fruit and Vegetable Products, Low Calorie Fruit Products, Citrus based products, Other Fruit Products	<b>Week - XI</b>	Vegetable products: Frozen vegetables, Sterilized vegetables, Pasteurized vegetables, Marinated vegetables (vegetables in vinegar).	<b>Week - XII</b>	Biologically Preserved (Dried) Vegetables, Vegetable Juice, Concentrated Vegetable Juice, Dried Vegetables, Vegetable Sauce, Ketchup, Other Vegetable Products. Second assessment	<b>Week - XIII</b>	Hygiene in fruit and vegetable processing factories.	<b>Week - XIV</b>
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	<b>Week - XV</b>	Safety and quality of processed products from fruits and vegetables																
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <p>1. R. Kongoli, I. Boci, Teknologjia e përpunimit të frutave dhe perimeve (industria e konservimit). Universiteti Bujqësor i Tiranës. Departamenti i Teknologjisë Agrorshqimore. Tiranë, 2007</p> <p><b>Additional literature:</b></p> <p>1. W. Jongen, Fruit and Vegetable Processing: Improving Quality (Woodhead Publishing in Food Science and Technology) (Hardcover). CRC, 1 edition, 2002</p>																	
<b>TEACHING METHODOLOGY</b>	<p>The theoretical and practical part will be realized by presenting the materials in audiovisual form through electronic technology with Microsoft Office programs. The padlet program will be used to promote interactivity during the lesson.</p> <p>Active learning will be promoted through the use of techniques such as Discussion ground rules, Jigsaw Discussion, Role Playing, and Experimental Learning.</p> <p>In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>																	
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	Activity	Hours	Day/week	Total														
	Lectures	2	15	30														
	Exercises	2	15	30														
	Field exercises	1	2	2														
	Practical work	2	4	8														
	Consultations with the teacher/assistant	1	4	4														
	Colloquia/seminars	1	2	2														
	Independent tasks	2	4	8														
	Student's own study time (in the library or at home)	3	5	15														
	Final preparation for the exam	4	5	20														
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	Projects, presentations, etc.	1	2	2														
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**Mitrovicë**

\_\_\_\_/\_\_\_\_/\_\_\_\_

**Lecturer:  
Prof. Ass. Dr. Bahtir Hyseni**

\_\_\_\_\_  
(Name Surname)

\_\_\_\_\_  
(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	306.ITU.I	
<b>Subject:</b>	Technology of fermentation	
<b>Subject Status:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	Winter	(Winter / Summer)
<b>Total hours:</b>	2+2	(According to approved program)
<b>ECTS:</b>	5	(According to approved program)
<b>Schedule / Hall</b>	Monday, 11:15-12:45 /L S103	
<b>Academic year:</b>	Year- III , semester V	
<b>Professor:</b>	Prof.Dr. Dilaver Salihu	
<b>Assistants:</b>	Prof. Ass. Bahtir Hyseni	
<b>Contacts:</b>	Professor	Assistant
	Email: dilaver.salihu@umib.net	bahtir.hyseni@umib.net
	Telefon: +38349303138	+38344561660

<b>BRIEF CONTENT OF SUBJECT</b>	Within the subject of fermentation technology will gain knowledge about the selection criteria and evaluation of industrial strains in fermentation processes.
<b>AIMS</b>	Students to get qualified with the definition of useful microorganisms "Virus" profoundly modifications to food quality improvement and important to consumer health protection.
<b>EXPECTED LEARNING OUTCOMES</b>	Upon completion of lectures and laboratory exercises students will be able to: 1. To develop knowledge on selected microorganisms, the form of Sartre cultures. 2. Evaluate fermentation processes, their anaerobic, metabolic reactions. 3. To get acquainted with the fermentation of food products of plant and animal origin 4. To develop knowledge about the cultivation systems of microorganisms 5. To get acquainted with chemical developments during the fermentation process, as well as the consequences on fermented products

	Weeks	Topic
<b>PROGRAM</b>	<b>Week - I</b>	Food fermentation microorganisms
	<b>Week - II</b>	Classification of microorganisms, their importance, bacteria, tops, mold,
	<b>Week - III</b>	Metabolism of microorganisms, basic and secondary metabolism
	<b>Week - IV</b>	Systems of cultivation of microorganisms, the laws of growth, exponential, logistic growth
	<b>Week - V</b>	Pure cultures of microorganisms, industrial selection
	<b>Week - VI</b>	Chemical changes during fermentation, fermentation lactic, citric acid, alcohol
	<b>Week - VII</b>	First test
	<b>Week - VIII</b>	Rules of biotechnological processes of fermentation
	<b>Week - IX</b>	Fermentation of animal products, fermented milk
	<b>Week - X</b>	Fermentation of meat product
	<b>Week - XI</b>	Fermentation products of the pulp plant
	<b>Week - XII</b>	Second test
	<b>Week - XIII</b>	Fermentation of beer, soft drinks
	<b>Week - XIV</b>	Fermentation of wine and alcoholic beverages
	<b>Week - XV</b>	Benefits of fermented products and the effects of fermented products
<b>LITERATURE</b>	<p>Reference:</p> <ol style="list-style-type: none"> <li>1.Kristaq Sini [2012] Bioteknologjia e fermentimeve ,Tiranë. ISBN.978-9928-149-00-8.</li> <li>2. Zhivka Aleksandrova Popova, [2012], Mikrobiologia na pivoto i bezalkonite napitki-Plovdiv.</li> <li>3.Abdyl Sinani [2009].Shkenca e teknologjia e produkteve te pjekjes . Tiranë.</li> <li>4. Renta Kongulli,Vangjel Zigori [2008], Shkenca dhe teknologjia e prodhimit te verse Tiranë.</li> <li>5. Spasenija Milanović, Mirela Iličić, Marijana Cari, Fermentisani mlečni proizvodi (2017), Novi Sad.</li> </ol> <p>Additional reference:</p> <ol style="list-style-type: none"> <li>1. Dr. Kristaq Sini ,2008.“Bazat e bioteknologjise” Tirane</li> <li>2. Lauresha Shabani 2003“Mikrobiologjia e ushqimeve te fermentuara” Tirane</li> <li>3.Bozheniq R.,Trantik,Lj:Kakovoqa kravljegi kozjek fermentiranog bifido-mljeka tijekom uvanje. Food Technology and Biotehnology, 2001.</li> <li>4. Dr. Pjeter Griev “ Mikrobiologia na mlekoto I mleçnite produkti” Sofje 1995</li> <li>5. Frederc J. Post “Food Microbiology and Biotechnology” 1988.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	During lectures students will be able not only debates during the elaboration of the unit by the teacher but also during treatment worked and seminar projects presented by students during semester. Project work will do individually or in groups. The lectures developed with the help of video-projector through visual presentation program PowerPoint Presentation				
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>				
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>	
	Lectures	2	15	30	
	Exercise sessions - theoretical	2	15	30	
	Field exercises	5	1	5	
	Practical work	1	1	1	
	Consultation with the professor / assistant	1	2	2	
	Colloquiums / seminars	2	2	4	
	Independent tasks (work)	2	2	4	
	Student self-study time (in library or at home)	3	5	15	
	Final exam preparation	3	7	24	
	Time spent in assessment (tests, quizzes, final exams)	3	2	6	
	Projects, presentations, etc.	2	2	4	
	<b>Total</b>				<b>125=5 ECTS</b>
<b>EVALUATION</b>	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;"><b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]</td> </tr> </table> <p>Regular continuation – 5% Colloquium 1- 15% Colloquium 2- 10% Activity in lecture and seminars 15 % Final exam 55% Total 100%</p>				<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]
<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]					

**ACADEMIC POLICIES**

Criteria for regular attendance and etiquette are set during the organization of the lesson.

Further instructions:

- Computer work

Written works must be computer written. In the works are obligatory the observance of the criteria both for the visual aspect and the content of the required works. During the works, it is required to respect the spelling rules and APA style

- Ethics in teaching

The different semester papers should be papers of each student. There will be no tolerance for copying, "borrowing" from the Internet or any other material. The same or similar works will have negative evaluations in the final evaluation of the student.

- Deadlines

In agreement with the students, the deadlines for submitting works will be determined. There will be no tolerance for delays in the submission of works. Failure to arrive at the time when the assignment is explained does not justify the student for not submitting the paper. The deadline will be given earlier. If you are going to travel abroad, then you need to submit the paperwork in advance. The student has the right to request a consultation with the professor whenever he/she deems it reasonable and necessary to carry out his / her work.

- Rules of conduct and academic policies:

- o active participation of students in lectures

- o participation in discussion, comments, and free expression of opinion, opinion, and academic position (with arguments)

- o Mandatory independent work and use of additional sources of information (various scientific websites, scientific journals, conference proceedings, etc.)

- o Respecting lecture schedules without compromising academic freedom (silent cell phones)

- o respecting the word, thoughts, and ideas of colleagues

- o low tolerance for late arrivals and departures without any valid reason

- o preparation and equipping with relevant lectures, (obligation of the teacher).

**Mitrovica**

10.01.2022

**Subject teaching professor:**

Prof.Dr. Dilaver Salihu  
(Name Surname)

\_\_\_\_\_  
(Signature)





**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and Foot Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	307. ITU.I	
<b>Subject:</b>	Application software in Food Engineering	
<b>Status of subject:</b>	Election	
<b>Semester:</b>	V	
<b>Fund of hours:</b>	2+2	
<b>ECTS:</b>	5	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Mensur Kelmendi	
<b>Assistant/e:</b>		
<b>Contacts:</b>		
	Email:	<a href="mailto:mensur.kelmendi@umib.net">mensur.kelmendi@umib.net</a>
	Phone:	+383 (0) 44214732

<b>CONTENTS</b>	The course includes comprehensive treatment concepts that have to do with knowledge of advanced engineering software application, especially for Excel, the paving techniques and ways of solving problems and theoretical calculations praktike. Examples of data tables and graphical reports in Excel
<b>PURPOSE</b>	Students will gain knowledge of advanced engineering software application, especially for Excel, the paving techniques and methods and solving theoretical and practical problems within the food technology.
<b>ACHIEVEMENT</b>	<p>Students:</p> <ol style="list-style-type: none"> <li>1. Explains application software in the field of Food Technology.</li> <li>2. Explains problems in practice.</li> <li>3. Performs quality control of quantitative data.</li> <li>4. Operates with this software in engineering achieving the solution of many problems.</li> <li>5. Conducts experimental laboratory work independently.</li> <li>6. Identifies the most appropriate methods for conducting various experiments.</li> </ol>

	Weeks	THEME
<b>PROGRAM</b>	<b>Week - I</b>	Applied software
	<b>Week - II</b>	Pivot Table
	<b>Week - III</b>	Diagrams, Graphs
	<b>Week - IV</b>	Functions
	<b>Week - V</b>	Chemical Kinetics in Food Processing
	<b>Week - VI</b>	Microbial destruction in thermal processing of foods.
	<b>Week - VII</b>	Statistical Quality Control in Food Processing
	<b>Week - VIII</b>	Sensory evaluation of food
	<b>Week - IX</b>	Mechanical transport of liquid foods
	<b>Week - X</b>	Forecast temperatures in liquid foods in a hot steam.
	<b>Week - XI</b>	Steady State Heat Transfer in Food Processing
	<b>Week - XII</b>	Transient Heat Transfer in Food Processing
	<b>Week - XIII</b>	Refrigeration, Freezing, and Cold Chain
	<b>Week - XIV</b>	Evaporation, Steam Properties.
	<b>Week - XV</b>	Using a mathematical model
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>1. Computer Applications in Food Technology Use of Spreadsheets in Graphical, Statistical, And Process Analysis (Food Science and Technology) by R. Paul Singh (z-lib.org)</li> <li>2. Quirk, Thomas J, Quirk-Excel 2016 for Environmental Sciences Statistics.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>1. Excel: Basic Computing Skills-Indiana University 2010</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks).  Teaching through demonstration and experiment.  Learning through projects, seminars, periodic self-assessments, field research and research itself.  All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

	<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>			
	Activity	Hours	Day/week	Total
	Lectures	2	15	30
	Exercises	2	15	30
	Consultations with the teacher/assistant	1	4	4
	Colloquia/seminars	2	2	4
	Independent tasks	2	2	4
	Student's own study time (in the library or at home)	2	15	30
	Final preparation for the exam	1	15	15
	Time spent on assessment (tests, quizzes, final exam)	1	4	4
	Projects, presentations, etc.	2	1	2
<b>Total</b>			<b>125= 5 ECTS</b>	
<b>EVALUATION</b>	<b>Evaluation methods</b>			
	Evaluation %			
	Evaluation of the first test		20 %	
	Evaluation of the second test		20 %	
	Seminary work		20 %	
	Final exam		40 %	
Total		100 %		
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.			

**Mitrovicë**

\_\_\_\_ / \_\_\_\_ / \_\_\_\_

**Lecturer:**

**Prof. Asoc. Dr. Mensur Kelmendi**

\_\_\_\_\_  
(Name Surname)

\_\_\_\_\_  
(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

**Syllabus**

<b>Faculty:</b>	Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>		
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	308.ITU.I	
<b>Subject:</b>	Meat Technology	
<b>Subject Status:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	Winter	(Winter / Summer)
<b>Total hours:</b>	2:2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Schedule / Hall</b>		
<b>Academic year:</b>	2020-2021	
<b>Professor:</b>	Bizena Bijo	
<b>Assistants:</b>	Bahtir Hyseni	
<b>Contacts:</b>	Professor	Assistant
	Email: bizena,bijo@umib.net	bahtir.hyseni@umib.net
	Telefon: +355682014014	+38649113367

<b>BRIEF CONTENT OF SUBJECT</b>	Animal slaughter technology. Meat characteristics depending on the animal species. Meat rye and meat classification according to the SEUROP system. Meat preserving technology in the refrigeration regime and the problems of this technology
<b>AIMS</b>	Through this course students will deal with sufficient knowledge about the act of slaughter, the best characteristics of meat at the time of consumption, the calculation of meat rye, meat classification according to the SEUROP system. The students will perform knowledge on meat preserving conditions in cool and freezing regime.

**EXPECTED LEARNING OUTCOMES**

- **Knowledgeable:** Have a basic knowledge of slaughtering and meat producing from different animal species
- **Understanding:** Clarify the knowledge of the basic meat characteristics to provide the consumer with the best characteristics of meat
- **Implementation:** To know how to apply all the technological steps that support the production of fresh and preserved meat
- **Analysis:** To analyze the different situations that can be exposed in meat production in order to enable a perfect meat product
- **Evaluation:** Evaluate and recommend the best quality product and distinguish it from poorly quality standard
- **Synthesis:** To manage better the fresh meat in the plant production but also in the market conditions

Through this course students will be able to:

1. Recognize the act of animal slaughtering following all technological rules
2. Know and understand the basic characteristics of fresh meat according to animal species, and distinguishing matured from unmatured meat
3. Know how to calculate the meat yield through technological formulas
4. Know how to produce fresh meat in perfect hygiene conditions
5. Know how to preserve meat in cool and freezing regime
6. Know how to produce by-products that flowing from slaughtering process

**PROGRAM**

<b>Weeks</b>	<b>Topic</b>
<b>Week - I</b>	Human slaughter and its methodology
<b>Week - II</b>	Slaughter technology, stages and preparation of fresh meat
<b>Week - III</b>	Meat yield according to animal species
<b>Week - IV</b>	Classification of meat based on SEUROPE system
<b>Week - V</b>	Slaughterhouses, their construction rules and specific slaughterhouse facilities
<b>Week - VI</b>	Statistical data on meat production in the world, Europe and Kosovo
<b>Week - VII</b>	Meat and its characteristics

	<b>Week - VIII</b>	The color and aroma of the meat
	<b>Week - IX</b>	The tenderness of the meat and all the factors that affect on it
	<b>Week - X</b>	Meat liquidity and changes according to meat categories
	<b>Week - XI</b>	Meat with technological defects
	<b>Week - XII</b>	Meat by-products and their technology
	<b>Week - XIII</b>	Meat preserve in cool regime
	<b>Week - XIV</b>	Preservation of meat in the freezing regime
	<b>Week - XV</b>	Technological problems of meat in cool and freezing regime
<b>LITERATURE</b>	<p>Meat and slaughterhouse Hygiene , Author Bizena Bijo ( textbook 345 pages, publicshed on 2018)</p> <p>Addition Literature:</p> <p>Meat inspection and control in slaughterhouse Authors Th Ninios, j Lunden, H korkeala, M frediksson-Ahomaa ( 673 pages, published 2014</p> <p>Advances in Meat Processing Technology. Author Alaa El-Din A. Bekhit ( 604 pages, published in 2017)</p>	
<b>TEACHING METHODOLOGY</b>	<p>The program of this course will be obtained through lectures tutored in the auditorium. Interesting videos are also presented along the lectures</p> <p>In the internships students work in laboratories where they perform simple experiments to detect the quality of the meat. They also visit meat production plant, slaughterhouses,meat stores and meat market.</p>	

	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>		
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>
	Lectures	2	14
	Exercise sessions - theoretical	2	12
	Field exercises	2	2
	Practical work		
	Consultation with the professor / assistant	1	1
	Colloquiums / seminars	2	12
	Independent tasks (work)	1	15
	Student self study time (in library or at home)	1	14
	Final exam preparation	2	5
	Time spent in assessment (tests, quizzes, final exams)	2	2
	Projects, presentations, etc.	1	1
<b>Total</b>			<b>125 ( 5 credits x 25hours)</b>
<b>EVALUATION</b>	<b>Evaluation methods</b> [according to the Statute and Regulation of UMIB Studies]		
	Practical test during exercises		5%
	Seminary work (in word)		5%
	Interpretation and presentation of seminary work		10%
	Tasks and essays during the semester		5%
	Final exam		70%
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct is applied to both students and teachers.		

Mitrovica

5/05/2021\_

Subject teaching professor:

Prof. Dr. Bizena Bijo\_





# UNIVERSITETI I MITROVICËS 'ISA BOLETINI'

## Course Outline Model (Syllabus)

<b>Faculty:</b>	Faculty of Food technology	
<b>Department:</b>	Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	309.ITU.I	
<b>Subject:</b>	Honey Production Technology and beekeeping by-products	
<b>Subject Status:</b>		(Compulsory or <b>Elective</b> )
<b>Semester:</b>	5	(Winter / <b>Summer</b> )
<b>Total hours:</b>	2 + 2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site	
<b>Academic year:</b>	-	
<b>Professor:</b>	Prof. asoc. Dr. Valdet Gjinovci	
<b>Assistants:</b>		
<b>Contacts:</b>		Assistant
	Email: <a href="mailto:valdet.gjinovci@umib.net">valdet.gjinovci@umib.net</a>	
	Telefon: +383 (0) 49 702 002	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>In this course will be examined the Hymenopterin Apis mellifera (honey bee) as one of the most important pollinators in nature. It provides an overview of their role in protecting the environment, food safety and the production of beekeeping products. Of course, the emphasis here is on the technology of honey production, as well as its physico-chemical analysis. This module is organized into four parts. Part I focuses on wild and managed pollinators, their colonial organization, and their importance in rural development and agricultural development. In part II, the emphasis is on the formation of honey, its main types, uses and technology of honey extraction in amateur parks and industrial parks. In part III, the emphasis is on the physico-chemical analysis of honey and its forgeries. Part IV focuses on other bee by-products (bee milk, propolis, wax, pollen and bee venom), their importance and uses. Each section is divided into topic review chapters and detailed technical information. This module will provide knowledge in apiculture in general and food safety specialists in the field. Thanks to management demonstrations, students can have an opportunity to treat bee colonies and beekeeping products (honey and other by-products).</p>
<b>AIMS</b>	<p>Students of Food Technology must gain basic knowledge on beekeeping, their role in environmental protection, food safety, for the production of beekeeping products, honey production technology, its physico-chemical analysis, honey formation, types its main, other bee by-products (bee milk, propolis, wax, pollen and bee venom) and the importance of their use. This module will provide knowledge in apiculture in general and food safety specialists in the field,</p>



<b>EXPECTED LEARNING OUTCOMES</b>	<p>Student:</p> <ol style="list-style-type: none"> <li>1. Basic knowledge and concepts in Apiculture, the organization of the individual bee and its colonial organization.</li> <li>2. To analyze the stages of honey formation and its uses.</li> <li>3. To describe the technology of honey extraction in amateur and industrial parks. Observations and observations inside and outside the classroom premises.</li> <li>4. To perform experiments for the physico-chemical analysis of honey as well as to perform tricks for the detection of its falsification.</li> <li>5. To analyze other beekeeping by-products, their importance, production and uses.</li> </ol>																																
	<b>PROGRAM</b>	<table border="1"> <thead> <tr> <th><b>Weeks</b></th> <th><b>❖ Topic</b></th> </tr> </thead> <tbody> <tr> <td><b>Week - I</b></td> <td>Pollinator insects. Importance of pollinators in rural development and agriculture</td> </tr> <tr> <td><b>Week - II</b></td> <td>Nutrition of bees (impact on honey quality). Honey flora. The most important pollinator / bee</td> </tr> <tr> <td><b>Week - III</b></td> <td>Organizing honey bee colonies</td> </tr> <tr> <td><b>Week - IV</b></td> <td>Honey formation, main types and its uses</td> </tr> <tr> <td><b>Week - V</b></td> <td>The composition of honey. Organic standards and composition criteria for honey</td> </tr> <tr> <td><b>Week - VI</b></td> <td>Harvesting technique. Centrifugation of honey</td> </tr> <tr> <td><b>Week - VII</b></td> <td>Decantation, Hygiene and Packaging</td> </tr> <tr> <td><b>Week - VIII</b></td> <td>Test I</td> </tr> <tr> <td><b>Week - IX</b></td> <td>Technical processing of honey</td> </tr> <tr> <td><b>Week - X</b></td> <td>Physico-chemical analyzes of honey</td> </tr> <tr> <td><b>Week - XI</b></td> <td>Damage of honey</td> </tr> <tr> <td><b>Week - XII</b></td> <td>Honey counterfeits</td> </tr> <tr> <td><b>Week - XIII</b></td> <td>Other beekeeping products</td> </tr> <tr> <td><b>Week - XIV</b></td> <td>Practical activity (in the field)</td> </tr> <tr> <td><b>Week - XV</b></td> <td>Test II</td> </tr> </tbody> </table>	<b>Weeks</b>	<b>❖ Topic</b>	<b>Week - I</b>	Pollinator insects. Importance of pollinators in rural development and agriculture	<b>Week - II</b>	Nutrition of bees (impact on honey quality). Honey flora. The most important pollinator / bee	<b>Week - III</b>	Organizing honey bee colonies	<b>Week - IV</b>	Honey formation, main types and its uses	<b>Week - V</b>	The composition of honey. Organic standards and composition criteria for honey	<b>Week - VI</b>	Harvesting technique. Centrifugation of honey	<b>Week - VII</b>	Decantation, Hygiene and Packaging	<b>Week - VIII</b>	Test I	<b>Week - IX</b>	Technical processing of honey	<b>Week - X</b>	Physico-chemical analyzes of honey	<b>Week - XI</b>	Damage of honey	<b>Week - XII</b>	Honey counterfeits	<b>Week - XIII</b>	Other beekeeping products	<b>Week - XIV</b>	Practical activity (in the field)	<b>Week - XV</b>
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<b>LITERATURE</b>	<ul style="list-style-type: none"> <li>❖ <b>Literature:</b></li> <li>❖ Honey in Traditional and Modern Medicine, Edited by Laïd Boukraâ, CRC Press<sup>[1]</sup> © 2014 by Taylor &amp; Francis Group, LLC</li> <li>❖ Beekeeping – From Science to Practice, Russell H. Vreeland • Diana Sammataro Editors, © Springer International Publishing AG 2017</li> <li>❖ <b>Recommended literature:</b></li> <li>❖ Beekeeping for Poverty Alleviation and Livelihood Security, Rakesh Kumar Gupta • Wim Reybroeck Johan W. van Veen • Anuradha Gupta Editors, © Springer Science+Business Media Dordrecht 2014</li> <li>❖ Why Bees Are Important to Our Planet., Tucker, Jessica (2014)</li> <li>❖ Anatomy and Dissection of the Honeybee by IBRA, Cardiff Cramp, D (2008)</li> <li>❖ Bimët mjaltore të Shqipërisë: Paparisto K, Balza E (2003)Tiranë</li> <li>❖ Protecting our Food Systems: Dow Interdisciplinary Sustainability Fellowship, by University of Michigan (2013)</li> <li>❖ Beekeeping and Rural Development by Farooq Ahmad, Surendra R. Joshi, Min B. Gurung (2007)</li> <li>❖ Bees and their role in forest livelihoods by Food and Agriculture Organization of the United Nations, Rome (2009)</li> <li>❖ Pesticide residues in bee products: Karazafiris E., Tananaki Ch., Thrasyvoulou A., Menkissoglu-Spiroudi U. (2011)</li> </ul>																																																				
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<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>

**Mitrovica**

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**Subject teaching professor:**

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(Name Surname)

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(Signature)



# UNIVERSITETI I MITROVICËS 'ISA BOLETINI'

## Course Outline Model (Syllabus)

<b>Faculty:</b>	Faculty of Food technology	
<b>Department:</b>	Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	310.ITU. I	
<b>Subject:</b>	Legislation in Food Quality Control	
<b>Subject Status:</b>	Elective	(Compulsory or <b>Elective</b> )
<b>Semester:</b>	5	(Winter / <b>Summer</b> )
<b>Total hours:</b>	2 + 2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site	
<b>Academic year:</b>	-	
<b>Professor:</b>	Prof. asoc. Dr. Valdet Gjinovci	
<b>Assistants:</b>		
<b>Contacts:</b>		Assistant
	Email: <a href="mailto:valdet.gjinovci@umib.net">valdet.gjinovci@umib.net</a>	
	Telefon: +383 (0) 49 702 002	

<b>BRIEF CONTENT OF SUBJECT</b>	Within this course will be addressed, the definition of legislation, the subject and purpose of the course on legislation in food quality control, the importance of legislation on food safety, notions on food safety and the importance of implementing legislation. The concept of food safety, the importance of food safety in the food processing industry, risk classification, national and international food regulatory agencies, general food laws and food safety regulations.
<b>AIMS</b>	Students majoring in Food Technology should gain a basic knowledge of legislation, regulations related to food safety, their implementation and taking action to supplement their change as needed. Demonstrate a thorough understanding of the principles of quality control, assurance and management, standards and recommendations / guidelines on food.

<b>EXPECTED LEARNING OUTCOMES</b>	<p>Student:</p> <ol style="list-style-type: none"> <li>1. Interpret the terms and concepts of food quality and food safety.</li> <li>2. Use the accurate legislation related to food safety and food quality.</li> <li>3. Describe and interpret food hygiene requirements.</li> <li>4. Design information related to labelling of the specific food.</li> <li>5. Identify and discuss the responsibilities and obligations of individual food business operator.</li> <li>6. Apply legislation for certain types of food and consumer goods.</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Overview of food legislation
	<b>Week - II</b>	Law on food in the Republic of Kosovo
	<b>Week - III</b>	Official controls; implementation, obligations, responsibilities
	<b>Week - IV</b>	Providing nutritional information to consumers
	<b>Week - V</b>	Food Rapid Alert System
	<b>Week - VI</b>	Emergency measures and food crisis management
	<b>Week - VII</b>	Food hygiene and microbiological criteria for food
	<b>Week - VIII</b>	Test I
	<b>Week - IX</b>	Food additives, flavorings, enzymes and processing aids
	<b>Week - X</b>	Harmful substances in food
	<b>Week - XI</b>	Hygienic food package
	<b>Week - XII</b>	Regulation for contaminants
	<b>Week - XIII</b>	Food residues
	<b>Week - XIV</b>	Food pesticides
	<b>Week - XV</b>	Test II
<b>LITERATURE</b>	<p><b>Literature:</b></p> <ul style="list-style-type: none"> <li>❖ Regulating food law Regulating food law: Risk analysis and the precautionary principle as general principles of EU food law 2012</li> <li>❖ Law Nr. 03/L-016 for food</li> <li>❖ Microorganisms in Foods 7 Microbiological Testing in Food Safety Management Second Edition, © Springer International Publishing AG 2011, 2018</li> <li>❖ Food Safety Management Programs, Debby Newslow © 2014 by Taylor &amp; Francis Group, LLC CRC Press is an imprint of Taylor &amp; Francis Group</li> </ul>	

<b>TEACHING METHODOLOGY</b>	Direct teaching (through explanation, practical exercises). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.			
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	2	15	30
	Exercise sessions - theoretical	2	15	30
	Field exercises			
	Practical work	1	4	4
	Consultation with the professor / assistant	1	6	6
	Colloquiums / seminars	2	2	4
	Independent tasks (work)	2	3	6
	Student self study time (in library or at home)	1	15	15
	Final exam preparation	2	11	22
	Time spent in assessment (tests, quizzes, final exams)	1	4	4
	Projects, presentations, etc.	1	4	4
<b>Total</b>			125	
<b>EVALUATION</b>	<b>Evaluation methods</b> Assessment in % Assessment of the first test.....20 % Assessment of the second test.....20 % Seminar paper..... 20 % Final exam..... 40 % Total.....100 %			
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.			

Mitrovica

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**Subject teaching professor:**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food technology	
<b>Department:</b>	Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	311.FET.I	
<b>Subject:</b>	Basis Toxicology	
<b>Subject Status:</b>	Mandatory	(Mandatory or Elective)
<b>Semester:</b>	VI	(Winter / <b>Summer</b> )
<b>Total hours:</b>	3 + 2	(According to approved programe)
<b>ECTS:</b>	5	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site	
<b>Academic year:</b>	-	
<b>Professor:</b>	Prof. Asoc. Dr. Valdet Gjinovci	
<b>Assistants:</b>	Dafina Llugagjiu	
<b>Contacts:</b>		Assistant
	Email: <a href="mailto:valdet.gjinovci@umib.net">valdet.gjinovci@umib.net</a>	<a href="mailto:dafina.llugagjiu@umib.net">dafina.llugagjiu@umib.net</a>
	Telefon: +383 (0) 49 702 002	+383 (0) 44 783 166

<b>BRIEF CONTENT OF SUBJECT</b>	<p>Within this course will be addressed definition of toxicology, subject and aim of the course on toxicology, historical development of toxicology, importance of toxicology on the past and present times, notion on poisons, criteria of poisons classification, sources of poisons, chemical content of poisons, action dose, antitoxins, detoxation, preserving of food from poisons causers.</p>
<b>AIMS</b>	<p>Students of Food Technology branch shall gain the basic knowledge for nature of poisons, their sources, criteria for classification, chemical content, lethal dose, measures taken against poisons, their elimination and their source.</p> <p>Reports of basic poisons (toxins), so as to successfully follow all stages from contact of the toxin with the organism to its elimination.</p> <p>The identification, relations on intra and extracellular processes of cells and tissues, amount of toxin, neutralization, etc., shall be the objective of this program.</p>

<b>EXPECTED LEARNING OUTCOMES</b>	<p>By completion of this course the students will be able to:</p> <ol style="list-style-type: none"> <li>1. Describe the toxic chemical means, their biological, chemical and physical features and their sources.</li> <li>2. Clarify the basic techniques of identification and origin of poisons</li> <li>3. Explain the specific symptoms caused from poisoning that may derive from organic compounds, physical and chemical means, being based on their aggregate state: fluid, gaseous and solid.</li> <li>4. Discuss about basic elements of detoxification and methods of application.</li> <li>5. Determines the action taken against poisons, source and their elimination</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	<b>Topic</b>
	<b>Week - I</b>	Introduction to Toxicology
	<b>Week - II</b>	Historical development of toxicology and classification of toxicology;
	<b>Week - III</b>	Definitions and scope of toxicology
	<b>Week - IV</b>	Classification of toxic poisons, classification criteria of (poisons);
	<b>Week - V</b>	Factors affecting toxicity, biotoxins and food
	<b>Week - VI</b>	Natural laws concerning toxicology, absorption, distribution, and excretion of toxic substances, symptoms causing poisoning and identification of poisoning based on them
	<b>Week - VII</b>	Hazard and risk assessment, absorption, distribution, storage and release of toxins from organism
	<b>Week - VIII</b>	Test I
	<b>Week - IX</b>	Toxic effects of pesticides, organs targeted object of toxicity
	<b>Week - X</b>	Toxic effects of metals and toxic effects of nonmetallics
	<b>Week - XI</b>	Neurotoxic agents, toxic effects of poisons
	<b>Week - XII</b>	Principles and basic concepts of toxicokinetics
	<b>Week - XIII</b>	Poisonous foods and food poisoning
	<b>Week - XIV</b>	Toxic effects of poisonous plants, poisons of animal origin, chemical poisoning, poisoning treatment, applications in toxicology
	<b>Week - XV</b>	Test II



<b>LITERATURE</b>	<p><b>Fundamental literature:</b></p> <p><b>P.K. Gupta</b>, Fundamentals of Toxicology, Essential Concepts and Applications, Copyright © 2016 BSP Books Pvt. Ltd. Published by Elsevier Inc.</p> <p><b>Byung-Mu Lee Sam Kacew Hyung Sik Kim Lu's</b> Basic Toxicology, Fundamentals, Target Organs, and Risk Assessment Seventh Edition (© 2018 by Taylor &amp; Francis Group, LLC)</p> <p><b>Complementary literature:</b></p> <p><b>Curtis D. Klaassen, PhD, John B. Watkins III, PhD Casarett &amp; Doull's</b> (Copyright © 2015, by <b>The McGraw-Hill Companies</b> Essentials of Toxicology, third edition</p> <p><b>Parthena Kotzekidou</b> Department of Food Science and Technology, Faculty of Agriculture, Aristotle University of Thessaloniki, Thessaloniki, Greece, (Copyright © 2016 Elsevier Inc)</p> <p><b>Philip C. Burcham</b> An Introduction to Toxicology (© Springer-Verlag London 2014)</p>																																																
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<b>EVALUATION</b>	<p><b>Evaluation methods</b></p> <p><u>Assessment in %</u></p> <p>Assessment of the first test.....20 %</p> <p>Assessment of the second test.....20 %</p> <p>Seminar paper..... 20 %</p> <p>Final exam.....40 %</p> <p>Total.....100 %</p>
<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>

**Mitrovica**

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**Subject teaching professor:  
Prof. Asoc. Dr.ValdetGjinovci**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Department of Technology; Engineering and Food Technology	
<b>Level:</b>	Bachelor	
<b>Code of the course:</b>	312.FET.I	
<b>Title of the course:</b>	Food Science I	
<b>Course Status:</b>		Obligatory
<b>Semester:</b>		Winter Semester
<b>Fund of hours:</b>	2+2	According to the approved program
<b>ECTS:</b>	5	According to the approved program
<b>Time/Location:</b>	According to the schedule announced at the beginning of the semester	
<b>Academic Year:</b>	2021/2022 - 3d year - 6th semester	
<b>Lecturer:</b>	Prof. Dr. Alush Musaj, Prof. Dr. Rozana Troja	
<b>Assistant:</b>		
<b>Contacts:</b>	Lecturer	Assistant
Email:	<a href="mailto:alush.musaj@umib.net">alush.musaj@umib.net</a> <a href="mailto:rozitroja@yahoo.com">rozitroja@yahoo.com</a>	
Phone Number:	+ 383 (0)44 245 801 +355 684 057 778	

<b>CONTENT</b>	<p>The course provides detailed information on the Science of Nutrition including Nutrition. It is offered to the student with lectures with updated information based on the texts of the most famous European authors of this discipline. The course presents in detail the conception of energetic and non-energetic nutrients, their role in the body and the importance they have as part of a healthy and quality food. The problems they create in the body are also explained in detail, illustrated by the respective reactions of their decomposition in the body (the case of ethanol consumption). It provides knowledge about energy assessments to specific individuals and the calculations and respective formulas of this assessment.</p> <p>Scientific information about grouped foods such as functional foods rich in vitamins and minerals, foods classified as probiotic or prebiotic are an important part of Food Science, therefore the subject studies them in detail while providing more scientific information, new related to the above groupings. Interpretation of types and formulas of food evaluation such as RDA, RNI, etc. Respective tabular and graphical representations are the best ways, selected to calculate today's levels of healthy food intake.</p> <p>The detailed study of diseases of food origin as well as the ways of eating and selected foods in conditions when the individual is affected by diseases that require specific food are another important part of some lectures on this subject.</p> <p>The course describes in detail the cases of anorexia, bulimia, overweight and obesity, making the respective assessments and the differences between them. It also provides scientific information on the diet of diabetics, heart patients, urinary tract patients, etc.</p> <p>Special chapters scientifically explain food allergies and food intolerances, as well as summarized information on foods that cause health problems, especially the case of the presence of free peroxide radicals, etc.</p> <p>The student is also provided with information about the ways of feeding for certain groups of populations, pregnant mothers, mothers with newborns, the newborns themselves, the elderly, athletes, etc.</p>
<b>SCOPE</b>	<p>The course aims to convey to students all contemporary information related to individual / food relationships as well as detailed issues related to these relationships.</p> <p>It prepares students for the profession, making them not just good connoisseurs of food technology, but good connoisseurs of the science of food, part of which is nutrition. The acquired and updated knowledge makes students aware of the importance of the course and makes them competent professionals in this field as well as transmitters of relevant current information on nutrition and health. The course aims to convey all the material scientifically, orienting students correctly towards a information that is not merely divulgative and casual, but equipping them with accurate scientific opinion on all issues that the course undertakes to convey.</p> <p>As the science of food is very broad and updated by the new information that scientists convey, it stimulates the scientific debate among students, makes them passionate about contemporary information and extremely demanding even in the auditorium. The final aim of the course is to prepare students for the labor market where food science is required such as food chemists, nutritionists, advanced technologists who know safe and healthy food and scientific ways to produce and preserve it, good public health professionals, etc.</p>
<b>ACCESSIBILITY</b>	<p>Referring to the syllabus of different subjects and the experience in its transmission of information to consider as expected learning outcomes:</p> <ol style="list-style-type: none"> <li>1. good theoretical for the whole course;</li> <li>2. involvement in the expansion and deepening of scientific information, obtained from the work of lectures, from the independent issued with pp or subsequently published by high results;</li> <li>3. learning basic concepts and learning to learn more than scientific knowledge at the Master level in a discipline.</li> <li>4. good learning of all scientific information related to individual / science / nutrition / health ratios.</li> </ol>

	<b>Weeks</b>	<b>Topics</b>
	<b>Week-I</b>	Introduction to Food Science. General considerations, connection with other sciences.
	<b>Week-II</b>	Nutrition Requirements and Needs - requirements for energy values and basic principles supplying them. Needs for nutritional balances - general aspects and explanation of this concept.
	<b>Week-III</b>	Food chain, at the material level and at the energy level; explanation and its role in nutrition. Food Consumption Models and their prominent forms
	<b>Week-IV</b>	Theoretical problems of energy value distribution. Malnutrition - the global dimension of malnutrition - measures to address the problems of poor and unhealthy food.
	<b>Week-V</b>	Organic energy nutrients - (proteins, fats and carbohydrates) characteristics and role in the body. Non-energy nutrients Vitamins and macro and microelements, characteristics and role in the body
	<b>Week-VI</b>	Ionutrients (examples) and their negative role in the body, Alcohol as an energy ionutrient, ways of its metabolism and the problems that arise
	<b>Week-VII</b>	Probiotic and prebiotic foods, definition and importance, types.
	<b>Week-VIII</b>	Functional foods, definition and importance, types. Fortified, fortified foods, definition and importance
	<b>Week-IX</b>	Energy values and the concept of "Energy density" Consumption of energy values in the consumer society "good or biological drama".
	<b>Week-X</b>	Demographic factor in food balances-strategically variable population. Conception of food solutions for certain groups of the population.
	<b>Week-XI</b>	. Dietetics, RDA, RNI and the like. Definition Tables and usage. Contemporary information regarding these parameters and its correct use
	<b>Week-XII</b>	On weight and obesity, underweight and anorexia, bulimia - situation for population groups and problems.
	<b>Week-XIII</b>	Food for certain categories of the population (diabetics, etc.) Food for,children, pregnant and lactating women, the elderly, food for athletes, etc.
	<b>Week-XIV</b>	Nutritional supplements and their role in the body, why they are called food integrators. Classification.
	<b>Week-XV</b>	Food-related diseases and measures taken to prevent and manage them. General considerations. Food allergies and forms of intolerance, examples.
<b>LITERATURE</b>		<p>Basic Literature:</p> <ol style="list-style-type: none"> <li>1. R. Troja (2015) , "Shkenca mbi Ushqimin", lektione te shkruara, FSHN, UT. M. Costantini, C. Cannella, G. Tomassi,</li> <li>2. Alimentazione e Nutrizione Umana, 2009.</li> </ol> <p>Additional Literature:</p> <ol style="list-style-type: none"> <li>1. M. Mcguire, C. Beerman "Nutritional Sciences-from Fundamentals to Food" 2011, Wadsworth, Cengage Learning, USA</li> </ol>

<b>TEACHING METHODOLOGY</b>	Lectures, practical exercises, discussions, comments, group work, study visits to food business entities.			
	<b>Contribution to student workload (which should correspond to student learning outcomes - 1 ECTS credit = 25 hours)</b>			
	Activity	Hours	Day/Week	Total
	Lectures	2	15	30
	Exercise Sessions	2	15	30
	Lecturer Consultation	1	4	4
	Colloquium/Seminars	2	2	4
	Independent Tasks	1	5	5
	Student's own study time (in the library or at home)	3	11	33
	Final preparation for the exam	4	3	12
	Time spent on assessment (tests, quizzes, final exam)	2	3	6
	Projects, presentations etc.	1	2	1
	<b>Total</b>			<b>125 hours= 5 ECTS</b>
<b>EVALUATION</b>	<p><b>Evaluations Methods</b></p> <p><u>Evaluation on %</u></p> <p>1st test, in written ..... 35%</p> <p>2nd test, in written ..... 35%</p> <p>Participation in lectures and exercises..... 20%</p> <p>Seminar Works.....10%</p> <p>Written Exam .....100%</p> <p><b>Grade scales :</b></p> <p>50- less - grade 5 (five)</p> <p>51-60 % - grade 6 (six)</p> <p>61-70 % - grade 7 (seven)</p> <p>71-80 % - grade 8 (eight)</p> <p>81-90 % - grade 9 (nine)</p> <p>91-100 % - grade 10 (ten)</p>			
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.			

Mitrović

Course bearer:

Prof.Dr. Alush Musaj

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**Prof. Dr. Rozana Troja**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Fakulteti i Teknologjisë Ushqimore**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Name of study program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	313.FET.I	
<b>Subject:</b>	Processes in the food industry	
<b>Subject Status:</b>		Compulsory
<b>Semester:</b>	VI	Winter
<b>Total hours:</b>	2+2	According to approved programe
<b>ECTS:</b>	5	According to approved programe
<b>Schedule / Hall</b>	Tuesday, 13:00-15:15; S105	
<b>Academic year:</b>	2021/22	
<b>Professor:</b>	Prof. Asoc. Dr. Milaim SADIKU	
<b>Assistants:</b>		
<b>Contacts:</b>	Professor	Assistant
Email:	milaim.sadiku@umib.net	
Telefon:	+383/44639133	

<b>BRIEF CONTENT OF SUBJECT</b>	<p>Presentation of basic concepts; Transferring the amount of movement of fluid mechanics; Heat transfer processes in food technology; Microwave Heating; Transmission of the matter in food technology processes; Raw materials and preparatory processes: crushing, grinding and sifting of solids; Separation processes with mechanical nature, decanting, centrifuging; Filtration, crystallization; Concentrations of stages, absorption, distillation and rectification; Tub-liquid extraction, extraction solid-liquid; Thermal pasteurization and sterilization. Pasteurization and sterilization equipment, aseptic packaging systems; The use of low temperatures in storing food products, building a mechanical cooling system with dinting; Evaporation, concentration in the cold, drying.</p>
<b>AIMS</b>	<p>Introducing to students the basic operations and processes in food engineering. Knowing the calculation of matter and energy balances in the food industry. Knowing the amount of motion transfer and fluid mechanics. Transmission of heat in food technology processes. Introducing the students to the mechanical processes (crushing, grinding, separation, etc.), then the process of drying, evaporation, mixing, filtration, etc.</p>



<b>EXPECTED LEARNING OUTCOMES</b>	<p>The student will be able to accomplish as below:</p> <ul style="list-style-type: none"> <li>- Analytical skills;</li> <li>- Communication skills;</li> <li>- Learning skills while working;</li> <li>- Skills of thinking and acting independently;</li> <li>- Organizational skills;</li> <li>- Leadership skills;</li> <li>- Problem solving skills.</li> </ul>	
<b>PROGRAM</b>	<b>Weeks</b>	Topic
	<b>Week - I</b>	Introduction Introduction to the subject
	<b>Week - II</b>	Overview of food technologies
	<b>Week - III</b>	Fundamental definitions
	<b>Week - IV</b>	Mass and energy balances
	<b>Week - V</b>	Fluid dynamics
	<b>Week - VI</b>	Balance of Mechanical Energy, Bernoulli Equation
	<b>Week - VII</b>	Heat transfer in food technology processes
	<b>Week - VIII</b>	Determination of heat supply coefficients
	<b>Week - IX</b>	Microwave heating
	<b>Week - X</b>	Crushing, grinding, and sieving of solid materials
	<b>Week - XI</b>	Blending
	<b>Week - XII</b>	Decantation
	<b>Week - XIII</b>	Filtration
	<b>Week - XIV</b>	Filtration equations
	<b>Week - XV</b>	Crystallization
<b>LITERATURE</b>	<ol style="list-style-type: none"> <li>1. Kopali, A. 2019, Proceset Themelore në Teknologjinë Ushqimore, Albtipografia, Tiranë.</li> <li>2. Berk, Z. 2009, Food Process Engineering and Technology, Elsevir, UK.</li> <li>3. Ligjërata të përgatitura për studentë, 2021.</li> </ol>	

<b>TEACHING METHODOLOGY</b>	Interactive lectures, theoretical exercises, practical work, consultations, partial exams, seminars, homework, presentations.			
	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>			
	<b>Activity</b>	<b>Hours</b>	<b>Day/Week</b>	<b>Total</b>
	Lectures	2	1/15	30
	Exercise sessions - theoretical	2	1/15	30
	Field exercises	-	-	-
	Practical work	-	-	-
	Consultation with the professor / assistant	0.5	12	6
	Colloquiums / seminars	1	6	6
	Independent tasks (work)	2	4	8
	Student self study time (in library or at home)	2	6	12
	Final exam preparation	3	8	24
	Time spent in assessment (tests, quizzes, final exams)	1.5	4	6
	Projects, presentations, etc.	1	3	3
<b>Total</b>			<b>125</b>	
<b>EVALUATION</b>	Regular participation in lectures and engaging in exercises:			10%
	Test I			20%
	Test II			20%
	Seminar:			20%
	Final exam:			30%
<b>ACADEMIC POLICIES</b>	Interactive lectures, theoretical exercises, practical work, consultations, partial exams, seminars, homework, presentations			

**Mitrovica**

**Subject teaching professor:**

**Prof. Assoc. Dr. Milaim SADIKU**

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(Name Surname)

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**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Engineering and food technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	314.FET.I	
<b>Subject:</b>	Water preparation	
<b>Status of subject:</b>		Elective
<b>Semester:</b>		VI
<b>Fund of hours:</b>		2+2
<b>ECTS:</b>		3
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. Asoc. Dr. Mehush Aliu	
<b>Assistant/e:</b>	MSc. Arbër Hyseni	
<b>Contacts:</b>		
	Email: mehush.aliu@umib.net	arber.hyseni@umib.net
	Phone: +383 (0) 44633263	+383 (0) 49665988

<b>CONTENTS</b>	The course will address: the basics of water chemistry, physico-chemical properties of natural water, water quality and health, water pollution and its control, water hardness, drinking water preparation technology, water demineralization with exchangers ionic, analytical methods for chemical monitoring and control of water, preparation of water for industrial processes, treatment of impurities in soft drinks, treatment of wastewater from the food industry.
<b>PURPOSE</b>	To get acquainted with the object of study and the importance of the course Water technology and wastewater treatment from the food industry.
<b>ACHIEVEMENT</b>	<p>Student:</p> <ol style="list-style-type: none"> <li>1. applies mathematical calculations to solve the problems of Water Technology and discharge waters from the food industry.</li> <li>2. identifies the most appropriate analytical methods for conducting various experiments.</li> <li>3. explains the basic characteristics of outdoor water, drinking water and processed water.</li> <li>4. calculates the technological parameters of a water treatment process.</li> <li>5. selects the appropriate technology for water treatment based on water characteristics and requirements for treated water quality.</li> </ol>

<b>PROGRAM</b>	<b>Weeks</b>	<b>THEME</b>
	<b>Week - I</b>	Basics of water chemistry
	<b>Week - II</b>	Physico-chemical properties of natural waters
	<b>Week - III</b>	Water quality and health
	<b>Week - IV</b>	Water pollution and its control
	<b>Week - V</b>	Water hardness
	<b>Week - VI</b>	Drinking water preparation technology
	<b>Week - VII</b>	Test I
	<b>Week - VIII</b>	Demineralization of water with ion exchangers
	<b>Week - IX</b>	Analytical methods for chemical water monitoring and control
	<b>Week - X</b>	Water preparation for industrial processes
	<b>Week - XI</b>	Primary treatment processes, Sedimentation and coagulation
	<b>Week - XII</b>	Aerobic and anaerobic biological oxidation
	<b>Week - XIII</b>	Disinfection
	<b>Week - XIV</b>	Treatment of impurities in soft drinks
<b>Week - XV</b>	Test II	
<b>LITERATURE</b>	<p><b>Basic literature:</b> 1. N. Daci &amp; M. Daci-Ajvazi, Shkenca e mjedisit, Prishtinë, 2014.</p> <p><b>Additional literature:</b> 1. Qullaj, A., Kimia e mjedisit, Tiranë, 2010.</p>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks). Teaching through demonstration and experiment. Learning through projects, seminars, periodic self-assessments, field research and research itself. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>	

	<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>			
	Activity	Hours	Day/week	Total
	Lectures	2	15	30
	Exercises	2	15	30
	Consultations with the teacher/assistant	0.5	4	2
	Colloquia/seminars	1	1	1
	Independent tasks	1	1	1
	Student's own study time (in the library or at home)	2	2	4
	Final preparation for the exam	2	2	4
	Time spent on assessment (tests, quizzes, final exam)	1	2	2
	Projects, presentations, etc.	1	1	1
<b>Total</b>			<b>75</b>	
<b>EVALUATION</b>	<b>Evaluation methods</b>			
	Evaluation %			
	Evaluation of the first test		20 %	
	Evaluation of the second test		20 %	
	Seminary work		20 %	
	Final exam		40 %	
Total		100%		
<b>ACADEMIC POLICIES</b>	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.			

**Mitrovicë**

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**Lecturer:  
Prof. Asoc. Dr. Mehush Aliu**

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(Name Surname)

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(Signature)



**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Outline Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Name of study program:</b>	Engineering and Food Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>The code of subject:</b>	315.FET.I	
<b>Subject:</b>	Packaging and Storage Technology	
<b>Subject Status:</b>	Elective	(Compulsory or Elective)
<b>Semester:</b>	VI	(Winter / <b>Summer</b> )
<b>Total hours:</b>	2+2	(According to approved programe)
<b>ECTS:</b>	3	(According to approved programe)
<b>Schedule / Hall</b>	According to the schedule posted on the UIBM Web site	
<b>Academic year:</b>	-	
<b>Professor:</b>	Prof. Asoc. Dr. Valdet Gjinovci	
<b>Assistants:</b>	Dafina Llugagjiu	
<b>Contacts:</b>	Professor	Assistant
	Email: <a href="mailto:valdet.gjinovci@umib.net">valdet.gjinovci@umib.net</a>	<a href="mailto:dafina.llugagjiu@umib.net">dafina.llugagjiu@umib.net</a>
	Telefon: +383 (0) 49 702 002	+383 (0) 44 783 166

<b>BRIEF CONTENT OF SUBJECT</b>	Within this course will be addressed the packaging functions in the food industry, various materials for food packaging, in order to protect food and food products from damage, contamination, shelf life, quality and food safety, include impact of packaging on the environment.
<b>AIMS</b>	The aim of the course is for students in the course Packaging and Warehousing in the Food Industry to gain basic knowledge on the need for packaging of raw materials and food, the choice of packaging material, respectively the type of packaging according to the raw material and final products which packaged.

<b>EXPECTED LEARNING OUTCOMES</b>	<p>Students:</p> <ol style="list-style-type: none"> <li>1. Identifies the physico-chemical composition of the packaging material, taking into account the preservation of food quality for a long period of time.</li> <li>2. Explains the impact of packaging on the environment.</li> <li>3. Select or systemize the proper material for packaging having in mind the quality, durability, aroma, plasticity, extracting by chemical, physical and microbiological processes.</li> <li>4. Selects the most suitable materials for food packaging based on the physico-chemical characteristics of food products.</li> <li>5. Evaluate of regulations for materials on food contacts</li> </ol>	
<b>PROGRAM</b>	<b>Weeks</b>	Topic
	<b>Week - I</b>	Entry, Packaging of food from earlier times up to now days
	<b>Week - II</b>	Importance and function of food packaging
	<b>Week - III</b>	Types and sorts of packaging
	<b>Week - IV</b>	Physical and chemical features of packaging material
	<b>Week - V</b>	Packaging contexts
	<b>Week - VI</b>	Durability of packed food in the context with packaging material
	<b>Week - VII</b>	Factors having impact in damaging the packaging material
	<b>Week - VIII</b>	Test I
	<b>Week - IX</b>	Paper packaging material with cellulosic base, priorities and deficiencies
	<b>Week - X</b>	Types of packaging material
	<b>Week - XI</b>	Shelf life of food
	<b>Week - XII</b>	Safety and legislation in packaging
	<b>Week - XIII</b>	Packaging material and environment
	<b>Week - XIV</b>	Trends of science developments on packaging
	<b>Week - XV</b>	Test II

<b>LITERATURE</b>	<p><b>Fundamental literature</b></p> <p>1. <b>Gordon L. Robertson, 2013</b>, Food Packaging Principles and Practice, © 2013 by Taylor &amp; Francis Group, LLC.</p> <p><b>Complementary literature:</b></p> <p>2. <b>Food Packaging, Nanotechnology in the Agri-Food Industry</b>, Volume 7, Edited by ALEXANDRU MIHAI GRUMEZESCU, Copyright © 2017 Elsevier Inc.</p> <p>3. <b>FOOD PACKAGING MATERIALS, Testing &amp; Quality Assurance</b>, Edited by Preeti Singh • Ali Abas Wani • Horst-Christian Langowski, © 2017 by Taylor &amp; Francis Group, LLC</p> <p>4. <b>Food Packaging and Preservation Handbook of Food Bioengineering</b>, Volume 9, Edited by Alexandru Mihai Grumezescu Alina Maria Holban, Copyright © 2018 Elsevier Inc.</p>																																																
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises).  Teaching through demonstration and experiment.  Learning through projects, seminars, periodic self-assessments. All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.</p>																																																
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: center;"><b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b></th> </tr> <tr> <th style="text-align: center;">Activity</th> <th style="text-align: center;">Hours</th> <th style="text-align: center;">Day/Week</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Lectures</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Exercise</td> <td style="text-align: center;">2</td> <td style="text-align: center;">15</td> <td style="text-align: center;">30</td> </tr> <tr> <td>Consultation with the professor / assistant</td> <td style="text-align: center;">0.5</td> <td style="text-align: center;">4</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Colloquiums / seminars</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Independent tasks (work)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Student self study time (in library or at home)</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Final exam preparation</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> <td style="text-align: center;">4</td> </tr> <tr> <td>Time spent in assessment (tests, quizzes, final exams)</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Projects, presentations, etc.</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">1</td> </tr> <tr> <td><b>Total</b></td> <td></td> <td></td> <td style="text-align: center;"><b>75</b></td> </tr> </tbody> </table>	<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>				Activity	Hours	Day/Week	Total	Lectures	2	15	30	Exercise	2	15	30	Consultation with the professor / assistant	0.5	4	2	Colloquiums / seminars	1	1	1	Independent tasks (work)	1	1	1	Student self study time (in library or at home)	2	2	4	Final exam preparation	2	2	4	Time spent in assessment (tests, quizzes, final exams)	1	2	2	Projects, presentations, etc.	1	1	1	<b>Total</b>			<b>75</b>
<b>Contribution to student workload (which should correspond to student learning outcomes 1 ECTS credit = 25 hours)</b>																																																	
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<b>EVALUATION</b>	<p><b>Evaluation methods</b></p> <p><u>Assessment in %</u></p> <p>Assessment of the first test.....20 %</p> <p>Assessment of the second test.....20 %</p> <p>Seminar paper..... 20 %</p> <p>Final exam.....40 %</p> <p>Total.....100 %</p>
<b>ACADEMIC POLICIES</b>	<p>The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other regulations. The code of conduct applies to both students and teachers.</p>

**Mitrovica**

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**Subject teaching professor:  
Prof. Asoc. Dr.ValdetGjinovci**

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(Name Surname)

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**UNIVERSITETI - UNIVERSITY**  
**“ISA BOLETINI”**  
**MITROVICË**  
**Faculty of food technology**

**Course Curriculum Model (Syllabus)**

<b>Faculty:</b>	Faculty of Food Technology	
<b>Department:</b>	Technology	
<b>Program:</b>	Food Engineering and Technology	
<b>Specialization:</b>	-	
<b>Level:</b>	Bachelor	
<b>Subject code:</b>	316. ITU.I	
<b>Subject:</b>	Economics in Food Industry	
<b>Status of subject:</b>	Elective	
<b>Semester:</b>	VI	
<b>Fund of hours:</b>	2+2	
<b>ECTS:</b>	3	
<b>Time/room</b>	According to the schedule announced on the UIBM Web site	
<b>Academic year:</b>	2021/2022	
<b>Lecturer/e:</b>	Prof. asoc. dr. Bashkim Bellaqa	
<b>Assistant/e:</b>		
<b>Contacts:</b>		
	Email:	<a href="mailto:bashkim.bellaqa@umib.net">bashkim.bellaqa@umib.net</a>
	Phone:	+383 (0) 44
<b>CONTENTS</b>	<p>This course includes all the elements that influence the acquisition of knowledge concerning the management of the enterprise</p> <p>In the addressed problems and types of enterprises, research methods, and management of enterprise functions, tools, resources, deposits, expenses, results of production, etc. economic principles.</p>	
<b>PURPOSE</b>	<p>The device with rich knowledge of theoretical and practical in the field of economy. Includes all the elements that influence the acquisition of knowledge regarding enterprise and economy in Engineering, using scientific methods research</p>	
<b>ACHIEVEMENT</b>	<p>After completing this course (course) the student will be able to:</p> <p>To address the problems of macro-micro, type of enterprise, the functions of the enterprise, the enterprise management in the market economy, recognition of assets and resources, deposits, expenses, results of production, technical problems of production management, organization of maintenance of machines and equipment in engineering.</p>	

<b>PROGRAM</b>	<b>Weeks</b>	<b>THEME</b>
	<b>Week - I</b>	Introduction to economics
	<b>Week - II</b>	The role of enterprise
	<b>Week - III</b>	Functioning market economy
	<b>Week - IV</b>	Enterprise tools and resources
	<b>Week - V</b>	Deposits of elements in reproduction
	<b>Week - VI</b>	Costs and their types
	<b>Week - VII</b>	Results of enterprise
	<b>Week - VIII</b>	Economic principles of reproduction
	<b>Week - IX</b>	Production Management
	<b>Week - X</b>	Planning for enterprise
	<b>Week - XI</b>	Managing the technical realization of production
	<b>Week - XII</b>	Organise maintenance of machines and equipment
	<b>Week - XIII</b>	Affairs of the company
	<b>Week - XIV</b>	Protection and improvement of living ambientiti
<b>Week - XV</b>	Production control	
<b>LITERATURE</b>	<p><b>Basic literature:</b></p> <ol style="list-style-type: none"> <li>1. Management des Unternehmens, I. Tahiri –Berlin, 2015.</li> <li>2. Menaxhimi i ndërmarrjes, I. Tahiri, Libër universitar, 2013. Prishtinë.</li> </ol> <p><b>Additional literature:</b></p> <ol style="list-style-type: none"> <li>1. P. B. Merrill, Tiseh.2004. Economices, the Enterprise Sistem, New York.</li> </ol>	
<b>TEACHING METHODOLOGY</b>	<p>Direct teaching (through explanation, practical exercises and numerical tasks).  Teaching through demonstration and experiment.  Learning through projects, seminars, periodic self-assessments, field research and research itself.  All this will be realized in the theoretical and practical aspect by presenting the materials in audiovisual form through electronic technology with Windows Office programs. In theoretical terms, general scientific knowledge based on contemporary literature will be provided.  (Lectures, assigned readings, classroom demonstration,)</p>	

<b>Contribution to student workload (which should correspond to student learning outcomes – 1 ECTS = 25 hours)</b>			
Activity	Hours	Day/week	Total
Lectures	2	15	30
Exercise sessions (with TA)	2	15	30
Practical work	1	1	1
Office hours	1	1	1
Fieldwork			
Midterms, seminars	1		1
Homework			
Self-study	1	4	4
Final exam preparation	3	6	6
Time spent in exams	2	1	1
Projects, presentations, etc	1	1	1
<b>Total</b>			<b>75</b>

  

<b>EVALUATION</b>	<b>Evaluation methods</b> Evaluation % Test I - 25% Test II - 30% Work at home 10% Participation in class 5% Final Exam 30%
	The student is obliged to attend lectures and exercises. Plagiarism and copying in exams are punishable under the university's statute and other university regulations. The code of conduct applies to both students and teachers.

Mitrovicë

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**Lecturer:**  
**Prof. asoc. dr. Bashkim Bellaqa**

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(Name Surname)

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(Signature)