

Munzur University

Vocational School of Tunceli, Department of Chemistry and Chemical Processes 2018/2019 Academic Year List of courses

Code/ Credits	Course	Semester Winter/ Spring	Contents	Contact Details of Lecturer	Department
LTP 104/3	ORGANIC CHEMİSTR Y	Winter	Chemical bonding, Lewis dot structures; Formal load and resonance; Demonstration of Structure Formulas; Displacement reactions; Alkanes; Alkenes; Alkynes; Alcohols; Ethers and amines; Aromatic hydrocarbons; Aldehydes and Ketones; Carboxylic Acids and Esters; Amides, Anhydrides	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 208/2	ENVIROME NTAL CHEMISTR Y	Winter	Course description, scope and importance ; Environmental Pollution; Environmental science and environmental chemistry; Chemical foundations of environmental pollution; Environmental pollutant gases; Pollution of the environment with heavy metals; Contamination of the environment with organic materials; Major analysis methods used in environmental chemistry; Treatment of natural and wastewater; Classification and evaluation of wastes	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 216/3	THE STUDY OF VOCATION AL EDUCATIO N	Winter	General information about vocational education and its importance, Vocational Training Law; General information about vocational ethics, importance and principles; General information about developing professional skills, progress in the profession and performance improvement; General information about communication, self-development, business relations; General information about entrepreneurship, business idea creation and establishment; Environmental problems, sectoral environmental problems and measures to be taken; Research topics related to the profession; Oral presentation of the studies	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program
LTT 202/2	AGRICULT	Winter	Definition of ecology and its	Asst. Prof. Esra BARIM	Chemistry and

Dr. Öğr. Üye: GÜLİBEN TORGU T

	URELY ECOLOGY		subjects; Classification of ecology science and environmental factors; Climatic factors; Edaphic factor; Geographical and topographic factor; Pyrik factor; Biotic factor; Energy flow and substance cycles in ecosystems	esrabarim@munzur.edu.tr +905054467808	Chemical Processes/ Laboratory Technology Program
<u>LTP 209/2.5</u>	THE AGRICULTURE MEDICINE AND ANALYSIS	Spring	importance and methods of agricultural struggle; The importance of agricultural drugs, classification; Usage areas of agricultural drugs; Propagation of agricultural drugs and measures to be taken; Agricultural drug poisoning and first aid; Pesticide residue problem, RASFF, pesticides related legislation; Residue limits of pesticides in the world and Turkey; The reliability and accuracy of pesticide residue analysis; General procedures in pesticide residue analysis; steps of pesticide residue analysis; pesticide residue analysis	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program
<u>LTP 215/2</u>	THE METHODS OF ANALYTICAL SEPARATION	Spring	the purpose of analytical separation methods, general information about the classification; Physical separation methods; Distillation; Extraction; Introduction to chromatography, classification, important terms and concepts in chromatography; Basic reactions in chromatographic separations; Separation mechanisms, usage areas of chromatography; paper chromatography; Thin layer chromatography; Column chromatography; Gas chromatography; High performance liquid chromatography; Supercritical fluid chromatography	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program
<u>LTP 203/2</u>	THE TEXTILE AND DYES	Spring	History of textile, definition, subjects and classification of textile fibers; Chemical structures and properties of natural textile raw materials; Chemical processes in textile fiber; Dyestuff chemistry, necessary definitions, general properties of dyestuffs; Classification of dyes, Natural dyes; Fiber-dyestuff chemical interaction; Painting with some dyestuffs; Fastness values for	Asst. Prof. Esra BARIM esrabarim@munzur.edu.tr +905054467808	Chemistry and Chemical Processes/ Laboratory Technology Program

Dr. Öğr. Üyesi: Gülben TORGU T

LTP 110/3	BASIC MICRIBIOLOGY	Winter	dyeing and dyeing. Introduction to microbiology, Terminology, Classification, General characteristics of microorganism groups, Microbial metabolism, Microbial reproduction, Control of microorganisms, sterilization	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 103/3	BASIC CHEMISTRY	Winter	asic concepts; Matter, Properties and Classification of Matter, Element, Compound, Mixture and Other Chemical Concepts, Structure of Atom, Atomic and Molecular Weight, atom-gr, Introduction to Periodic Table; Electron Structure of Atom, Electron Array Number and Orbit, Symbols and Valens of Elements. Ion and Molecule Structure, Compound Creation, Writing of Compound Formulas and Nomenclature, Chemical Equations, Composition by Weight,% Composition, Composition by Volume, Simple and Molecular Formula Determination, Mol Concept and Number of Avagadro, Use of Mol Concept in Calculations, Chemical Compounds and Chemical Equations, Stoichiometry, Aqueous Solution Reactions, Molarity, Stoichiometry of Solution Reactions, Theoretical Yield, Experimental Yield,% Yield, Gases, Gas Laws and Gas Pressure Measurement,	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 114/3	INSTRUMENTAL ANALYSIS	Spring	Introduction to instrumental analysis, Analysis techniques, modern spectroscopic techniques, matter beam interaction, absorption and desorption techniques, Atomic absorption spectroscopy, Atomic emission spectroscopy, UV-visible spectroscopy, Infrared spectroscopy, NMR spectroscopy. Being able to comprehend the usage and structure of mass spectrometry, high pressure liquid chromatography.	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 205/2.5	THE ANALYSIS OF PLANTS	Winter	Plant root and root systems, distribution of organic compounds in plants, physiology and biochemical events in plants and their relations with growth,	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program

Dr. Öğr. Üye. Gülben TORĞUT

			development and yield, The general purpose of plant analysis, the benefits of making, taking samples of the plant, preparation for analysis and analysis of the samples, the age, dry burning and the analysis of various minerals in plant samples. organic matter analysis in plant, inorganic matter analysis in plant, hormone analysis in plant, pigment analysis in plant		
LTP 214/2.5	ANALYSIS OF FOODS	Spring	Sampling, preparation of samples for analysis, general analysis methods used in food enterprises; determination of moisture (water) and total dry matter, determination of water soluble and insoluble dry matter, determination of ash, determination of pH and, titratable acidity, determination of carbohydrates (sugar determination), fat, protein, and ascorbic acid; determination of some principles of analysis and applications	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
AİT 101/2	ATATURK PRINCIPLES AND REVOLUTION HISTORY	Winter	Basic Concepts * Causes of the Collapse of the Ottoman Empire * Turkish Modernization Movement * The First World War * Turkish National Struggle	Lecturer Adem KIZKAPAN akizkapan@munzur.edu.tr +905367897257	Chemistry and Chemical Processes/ Laboratory Technology Program
YBD 101/2	ENGLISH	Winter	Students will be able to follow professional English courses in the following years, post-graduate and in their professional field English grammar, vocabulary, reading comprehension, oral expression and writing skills	Lecturer Duygu YIKMIŞ MERKİT dyikmis@munzur.edu.tr +905313497858	Chemistry and Chemical Processes/ Laboratory Technology Program
MAT 101/2	MATHEMATICS	Winter	Numbers, Numbers Steps, Division, Divisibility Rules, Prime Numbers, Relatively Numbers, Factorial, Rational Numbers, Decimal Numbers, Exponents and Roots	Lecturer Muhlis ÇETİN muhliscetin@munzur.edu.tr +905376910343	Chemistry and Chemical Processes/ Laboratory Technology Program
TRD 101/2	TURKISH LANGUAGE	Winter	Definition of language. Language and communication, language-thought-religion-literature-culture relationship. Types of language Languages on earth. The place of Turkish among world languages.	Lecturer: Cem TOPAL cemtopal@munzur.edu.tr +905074994546	Chemistry and Chemical Processes/ Laboratory Technology Program Chemistry and Chemical Processes/ Laboratory Technology Program

Dr. Öğr. Üye. Gülben Torğut

			Historical development of Turkish written language. The current status of Turkish is not spreading.		
LTP 111/3	BIOCHEMİSTRY	Winter	Fundamentals of Biochemistry, Water, Amino Acids, Peptides, Proteins, Three-Dimensional Structure of Proteins, Protein Function, Enzymes, Carbohydrate, Nucleotides and Nucleic Acid, Lipids, Vitamins	Asst. Prof. Hakan ŞAHAL hakansahal@munzur.edu.tr +905069137672	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 107/2	BASIC INFORMATION TECHNOLOGY	Winter	Computer Basic Concepts, Operating System (Windows 7) Usage, Internet and Network Usage, Office MS Word 2016, MS Excel 2016, MS Powerpoint 2016 Application Programs.	Lecturer: Yücel BURHAN yucelburhan@munzur.edu.tr +905449466350	Chemistry and Chemical Processes/ Laboratory Technology Program
TRD 102/2	TURKISH LANGUAGE 2	Spring	Expression concept. Ways of improving thought. Expression forms. General features of reading, listening, speaking and writing. Oral expression and oral expression types. Written expression and written expression types.	Lecturer: Cem TOPAL cemtopal@munzur.edu.tr +905074994546	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 112/3	ANALYTICAL CHEMISTRY 1	Spring	Errors in chemical analysis, random error in analysis, application of statistics in data analysis and application, gravimetric analysis methods, titrimetric analysis methods.	Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
YBD 102/2	ENGLISH 2	Spring	English grammar, vocabulary, reading comprehension, oral expression and writing skills	Lecturer Duygu YIKMIŞ MERKİT dyikmis@munzur.edu.tr +905313497858	Chemistry and Chemical Processes/ Laboratory Technology Program
AİT 102/2	ATATURK PRINCIPLES AND REVOLUTION HISTORY	Spring	Atatürk's reforms * Turkish Foreign Policy * Atatürk's period * Atatürk's principles * Political developments in Turkey and the world after 1924.	Lecturer Adem KIZKAPAN akizkapan@munzur.edu.tr +905367897257	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 201/3	ANALYTICAL CHEMISTRY 2	Winter	additional acid-base titrations, complex formation titrations	Asst. Prof. Berna KOÇAK bernakocak@munzur.edu.tr +905309241152	Chemistry and Chemical Processes/ Laboratory Technology Program
STJ 111/0	STAJ	Spring		Asst. Prof. Gülben TORĞUT gtorgut@munzur.edu.tr +905434594123	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 109/3	THE SAFETY	Winter	Laboratory working with chemicals and	Lecturer Nedim Gürler nedimgurler@munzur.edu.tr	Chemistry and Chemical Processes/ Laboratory

Dr. Öğr. Üye. Gülben TORĞUT

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LTP 101/2	BASIC BIOLOGY	Winter	Definition biology, ce biological biological structure, ce cytoplasm nucleus, cel production, photosynth chromosom	significance of important s and certain cepts, cellular for membrane, organelles, cell energy ular respiration, event, and nucleic acids.	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 110/3	THE USE AND CARE OF LABORAT ORY EQUIPMEN TS	Spring	Glass mate equipment with labora Transfer of liquids thro materials, a addition precision laboratory of pH with	with laboratory ic materials equipment, e volume of glass and plastic ue discussion of cales and Maintenance of state, Calibration meter.	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 102/1	THE LABORAT ORY OF BASIC CHEMISTR Y	Spring	Physical an properties Distribution Titrations, M	chemical eter, usion in gases, Solutions	Lecturer Nedim Gürler nedimgurler@munzur.edu.t r +905377354824	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 108/1	THE LABORAT ORY OF ANALYCA L CHEMISTR Y 1	Spring	Grouping a separation and tested ability to e the anions	and cations, e static anions e mixtures and tively determine ations.	Lecturer Nedim Gürler nedimgurler@munzur.edu.t r +905377354824	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 213/2.5	THE ANALYSIS OF SOIL	Spring	Soil, organic salinity, el phenomena	atter, pH, ic, potassium, ne	Lecturer Nedim Gürler nedimgurler@munzur.edu.t r +905377354824	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 211/1	THE APPLICATI ON OF PROJECT	Winter	Project de tasks, qu management in terms of cost, project communication management allocation distribution project e resource management	on, main in project project planning ity, time and ganization, in project resource project execution, project tasks, on in terms of re, labor, nization and	Asst. Prof. Hakan ŞAHAL hakansahal@munzur.edu.tr +905069137672	Chemistry and Chemical Processes/ Laboratory Technology Program

Dr. Öğr. Üye. Altan TÖRER

			control, design in project	ter applications ement.		
LTP 202/2	BIOMEDICAL EQUIPMENTS	Spring	Biomedical equipment of use, the responsibility of equipment classification, biomedical equipment safety signs in the equipment safety and in biomedical effects of the human	Equipment, fields and of biomedical technicians, biomedical safety in equipment, operational safety signs in equipment, electrical current tests in biomedical equipment, electrical current on	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 212/3	INDUSTRIAL ANALYSIS TECHNIQUES	Spring	Fuel analysis, Analysis of water, Presence of contaminants, Analysis of free fatty acid amount of matter analysis, analysis,	Chemical analysis, parameters in liquid, Analysis of oil, Analysis of volatile matter in oil, Volatile and analysis	Lecturer Nedim Gürler nedimgurler@munzur.edu.tr +905377354824	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 210/2.5	CLINICAL BIOCHEMISTRY AND ANALYSIS	Spring	Organization of clinical biochemistry laboratory, classification of clinical biochemistry, factors that affect laboratory test results, quality control in clinical biochemistry, procedure of biochemical process of laboratory and clinical	Organization of clinical biochemistry laboratory, factors that affect laboratory test results in clinical biochemistry, procedure of biochemical process of laboratory and kidney	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 206/2	THE COMMUNICATION	Spring	Basic concepts of communication, communication types, communication and perception, communication models, self-communication, communication and ending and line, communication of conflicts, communication technologies, mass media communication and society, personal communication	Basic concepts of communication, communication types, communication and perception, communication models, self-communication, communication and ending and line, communication of conflicts, communication technologies, mass media communication and society, personal communication	Lecturer Selçuk NERKİS selcuknerkis@munzur.edu.tr +905308532358	Chemistry and Chemical Processes/ Laboratory Technology Program
LAT 204/2	RESEARCH METHODOLOGY AND PRESENTATION	Spring	Science research methods, Presentation and Reporting Techniques	Concepts, process and techniques of research, Report Writing.	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program

Dr. Öğr. Üye. Gülben TORER

			Investigation and planning of research type, Research process and techniques, Scientific Research Method. Research Techniques and Report Writing. Scientific research, Methods and its importance. Problem definition, Including method research, Information about universe and sample, Presentation of findings in research, Including quotation and Examination		
LTP 203/2.5	WATER ANALYSIS	Winter	Structure and properties of water, characteristics of water, quality in water, water sampling techniques, water analysis, water sampling methods, water samples, water analysis	Asst. Prof. Aygün KILIÇ aygunkilic@munzur.edu.tr +905072365753	Chemistry and Chemical Processes/ Laboratory Technology Program
LTP 207/1	THE LABORATORY OF ANALYTICAL CHEMISTRY 2	Winter	Volometric and gravimetric methods, titration methods, weighing, etc. to make analysis by titration about the subject	Asst. Prof. Berna KOÇAK bernakocak@munzur.edu.tr +905309241152	Chemistry and Chemical Processes/ Laboratory Technology Program
LTN 205/2	NANO TECHNOLOGY AND ITS APPLICATIONS	Winter	What is Nanotechnology? The importance of nanotechnology, nanotechnology in the field of environment and energy, nanotechnology in the field of medicine, nanotechnology in the field of agriculture, nanotechnology in the field of food, nanotechnology in the field of life	Asst. Prof. Hakan ŞAHAL hakansahal@munzur.edu.tr +905069137672	Chemistry and Chemical Processes/ Laboratory Technology Program

Bölüm Başkanı
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