

J.J. College of Arts and Science (Autonomous), Pudukkottai

Department of Biochemistry

Course Outcomes – 2023 - 2024

B.Sc. Biochemistry – USBC

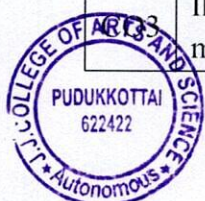
Course Name – பொதுத்தமிழ்- I		Course Code - U1R3TL1	Knowledge Level
After completion of this course, students would be able to			
இப்படத்தை கற்பதால் பின்வரும் பயன்களை மாணவர் அடைவர்			
CO1	பாரதியார் காலந்தொட்டு தர்காலப் புதுக்கவிதைகள் வரை கவிதை இலக்கியம் அறிமுகப்படுத்தப்படுவதால் படைப்பாரற்றல் திறன் பெறுதல்.		K1,K2
CO2	புதுக்கவிதை வரலாற்றினை அறிந்து கொள்வர்		K2
CO3	இக்கால இலக்கியம் வகையினைக் கற்பதன் மூலம் படைப்பாக்கத் திறனை பெறுவர்		K4
CO4	மொழியறிவோடு சிந்தனைத்திறன் அதிகரித்தல்		K3
CO5	தமிழ்மொழியைப் பிழைன்றி எழுதவும், புதிய கலைச்சொற்களை உருவாக்கவும் அறிந்து கொள்ளுதல்.		K4
Course Name - PAPER II –GENERAL ENGLISH		Course Code - U1R3EL1	Knowledge Level
After completion of this course, students would be able to			
CO1	Develop and integrate the use of the four language skills i.e. Reading, Listening, Speaking and Writing		K1
CO2	Understand the total content and underlying meaning in the context.		K1, K2
CO3	Form the habit of reading for pleasure and for information		K4 ,K6
CO4	Comprehend material other than the prescribed text		K4, K5, K4
CO5	Develop the linguistic competence that enables them, in the future, to present the culture and civilization of their nation.		K3,K5
Course Name - NUTRITIONAL BIOCHEMISTRY		Course Code - U1R3BCCC1	Knowledge Level
After completion of this course, students would be able to			
CO1	Cognizance of basic food groups viz. Carbohydrates, proteins and lipids and their nutritional aspects as well as calorific value		K3
CO2	Identify and explain nutrients in foods and the specific functions in maintaining health.		K1
CO3	Classify the food groups and its significance		K2
CO4	Understand the effect of food additives		K2
CO5	Describe the importance of nutraceuticals and pigments		K5



Course Name - : MAJOR PRACTICAL - I		Course Code – U1R3BCCC2P	Knowledge Level
After completion of this course, students would be able to			
CO1	Estimate the important biochemical constituents in the food samples.		K2
CO2	Prepare the macronutrients from the rich sources.		K3
CO3	Determine the ash and moisture content of the food samples		K2
CO4	Extract oil from its sources		K3
CO1	Estimate the important biochemical constituents in the food samples.		K4
Course Name - Allied Chemistry – I		Course Code – U1R3CHAC1	Knowledge Level
After completion of this course, students would be able to			
CO1	State the Theories of Chemical bonding, Nuclear reactions and its applications.		K2
CO2	Evaluate the efficiencies and uses of various fuels and fertilizers.		K3
CO3	Explain the type of hybridization electronic effect and mechanism involved in the organic reactions.		K4
CO4	Demonstrate the Structure and uses of antibiotics, anaesthetics, antipyretics and artificial sugars.		K5
CO5	Analyse various methods to identify an appropriate method for the separation of chemical components.		K2
Course Name - Allied Chemistry – Practical I		Course Code – U1R3CHAC2P	Knowledge Level
After completion of this course, students would be able to			
CO1	Gain an understanding of the use of standard flask and volumetric pipettes, burette.		K4
CO2	Design, Carry out, Record and Interpret the results of volumetric titration.		K3
CO3	Apply their skill in the analysis of water/harness.		K1
CO4	Analyse the chemical constituents in allied chemical products.		K2
Course Name - Foundation Course (Bridge Course)		Course Code – U1R3BCFC	Knowledge Level
After completion of this course, students would be able to			
CO1	Understand the basic concepts in chemistry		K2
CO2	Understand the fundamental concepts in organic chemistry		K3
CO3	Explain the theories of origin of life on earth		K3
CO4	Illustrate the structure, composition and functions of cell and its organelles		K4
CO5	Familiarize with genetics		K1



Course Name – Soft Skill –I (INTRODUCTION TO STUDY SKILLS)		Course Name - U1R3AECC1	Course Name - Foundation Course
After completion of this course, students would be able to			
CO1	Use Language with appropriacy and acceptability		K1
CO2	Develop skills in using dictionaries and sources available in the web and other internet applications.		K3
CO3	Acquire expertise in the art of documentation .		K4, K5
CO4	Use statistical tools and test hypotheses.		K3, K4, K5
CO5	Evaluate and understand the Structure and conventions of discourse.		K4, K5
Course Name - பொதுத்தமிழ்- II		Course Code - U2R3TL2	Knowledge Level
After completion of this course, students would be able to			
இப்படத்தை கற்பதால் பின்வரும் பயன்களை மாணவர் அடைவர்			
CO1	பக்தி இலக்கியங்களைக் கற்பதன் மூலம் பக்தி நெறியினை, சமய நல்லிணக்கத்தையும் தெரிந்து பின்பற்றுவர்.		K1, K2
CO2	சிறுநிலக்கியங்களின்வழி இலக்கியச் சுவையினையும் பண்பாட்டு அறிவினையும் அறிவர்.		K2
CO3	பட்டப் படிப்பினைப் படிக்கும் போதே பெரும்பான்மையான தமிழ் இலக்கியங்கள் குறித்த அறிவினைப் பெறுவர்		K4
CO4	தமிழ்ச் சமூகப் பண்பாட்டு வரலாற்றினை இலக்கியங்கள் வாயிலாக அறிவர்		K3
CO5	போட்டித் தேர்வுகளில் வெற்றி பெறுவதற்குத் தமிழ் பாடத்தினைப் பயன்கொள்ளும் வகையில் ஏற்ற பயற்சி பெறுவர்.		K4
Course Name PAPER II –GENERAL ENGLISH		Course Code – U2R3EL2	Knowledge Level
After completion of this course, students would be able to			
CO1	Learn to introduce themselves and talk about everyday activities confidently		K1
CO2	Be able to write short paragraphs on people, places and events		K3
CO3	Identify the purpose of using various tenses and effectively employ them in speaking and writing		K5
CO4	Gain knowledge to write subjective and objective descriptions		K6
CO5	Identify and use their skills effectively in formal contexts.		K6
Course Name – Cell Biology		Course Code - U2R3BCCC3	Knowledge Level
After completion of this course, students would be able to			
CO1	Explain the structure and functions of basic components of prokaryotic and eukaryotic cells, especially the organelles.		K1
CO2	Familiarize the cytoskeleton and chromatin		K3
CO3	Illustrate the structure, composition and functions of cell membrane related to membrane transport		K3



CO4	Elaborate the phases of cell cycle and cell division-mitosis and meiosis and characteristics of cancer cells.	K3
CO5	Relate the structure and biological role of extra cellular matrix in cellular interactions	K3
Course Name - MAJOR PRACTICAL II		Course Code – U2R3BCCC4P
Knowledge Level		
After completion of this course, students would be able to		
CO1	Identify the parts of microscope.	K2
CO2	Preparation of Slides	K2
CO3	Identify the stages of mitosis & meiosis	K3
CO4	Visualize nucleus and mitochondria by staining methods	K3
CO5	Identify the spotters of cells, organelles and stages of cell division	K3
Course Name - Allied Chemistry - II		Course Code – U2R3CHAC3
Knowledge Level		
After completion of this course, students would be able to		
CO1	Write the IUPAC Name for complex, Different theories to explain the bonding in coordination compounds and water technology.	K2
CO2	Explain the preparation and property of carbohydrate.	K3
CO3	Enlighten the biological role of transition metals, Amino acids and nucleic acids.	K4
CO4	Apply / Demonstrate the Electrochemistry principles in corrosion, electroplating and fuel cells.	K5
CO5	Outline the Various type of Phytochemicals process.	K2
Course Name - Allied Chemistry – Practical II		Course Code – U2R3CHAC4P
Knowledge Level		
After completion of this course, students would be able to		
CO1	Gain an understanding of the use of standard flask and volumetric pipettes, burette.	K4
CO2	Design, Carry out, Record and Interpret the results of volumetric titration.	K3
CO3	Apply their skill in the analysis of water/harness.	K1
CO4	Analyse the chemical constituents in allied chemical products.	K2
Course Name – Microbial Techniques		Course Code – U2R3BCSEC3
Knowledge Level		
After completion of this course, students would be able to		
CO1	Understand the growth of bacteria and to perform cell count	K3
CO2	Acquire knowledge of microscope and its uses	K3
CO3	Identify the microbes by staining methods	K3, K5
CO4	Culture microbes by various methods	K4, k5
CO5	Preserve foods at high and low temperature	K2, K5



Course Name – Soft Skill – II (LIFE SKILLS)		Course Code – U2R3AECC2	Knowledge Level
After completion of this course, students would be able to			
CO1	Practice the right type of attitudes and approaches to life		K3
CO2	Become successful professionals and team leaders		K2
CO3	Achieve a proper self image and develop into complete men		K2
CO4	Cope with stress and conflict		K1
CO5	Acquire self awareness and live as responsible citizens		K3

HEAD OF THE DEPARTMENT

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