

MAPPING OF THE COURSE TO EMPLOYABILITY/ ENTREPRENEURSHIP/ SKILL DEVELOPMENT.

Class	Course Name	Course Code	Topic focussing on employability/Entrepreneurship/Skill development	Employability/Entrepreneurship/ Skill development
F.Y.B.Sc Zoology		Course Code: RJSUZOO101		
			Unit II: Ecology-I Unit 2.2.1 Soil.	Critical thinking and reasoning Entrepreneurship: Soil analyst
			Unit III Biodiversity and its conservation:	Develops students interest in Ayurveda-Medicines, Industry,Agriculture, Research, Job opportunity, Environmental conservation
		Course Code: RJSUZOO102	Unit I- Biomolecules-I 1.2 Carbohydrates	Development of Analytical skills Employability in the field of Nutrition and dietics
			Unit II-Basic biotechnology .	Knowledge gained - Varied Applications of biotechnology, knowhow of different technique. Employability: In Biotech and Pharmaceutical companies
			UNIT III: Laboratory safety, Units and Measurement 3.1: Introduction to good laboratory practices.	Students understand the importance of accuracy, precision and reproducibility in experiments.Employability as lab technician
Practical I & II		Course Code: RJSUZOOP101 RJSUZOOP102		Development of memory skills, analytical ability and good laboratory practice
		Course Code: RJSUZOO201		
			Unit II Ecology -II 2.2 Population Ecology:	SKILL:Employability with Census data collection
			Unit III- Basics of Ethology Entire Unit	Development of critical thinking and reasoning. Employability in the field of Wildlife research and conservation

		Course Code: RJSUZOO202	Unit I: Biomolecules-II 1.3: Vitamins	Development of Analytical skills Employability in the field of Nutrition and dietics
			Unit II Health and Hygiene:.	Employability in the Health Industry
			Unit III- Instrumentation. Skills: SOP of Lab. Instruments.	Employability: Lab.Technicians, Instrument dealers or suppliers.
Practical I & II		Course Code: RJSUZOO201 RJSUZOO202		Development of memory skills, analytical ability and good laboratory practice

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S.Y.B.Sc Zoology		Course Code: RJSUZOO301		
			Unit I: Type study; Earthworm.	Skill: Scientific study, Understanding anatomy of various organ systems. Employability : In the field of research, vermiculturist
			Unit II- Life Processes I	Knowledge gained: Comparative Physiological process in animals Employability in the field of MLT and Paramedics
		Course Code: RJSUZOO302	Unit I Biochemistry I	Skill : Analytical Thinking
			Unit II Genetics,	Knowledge gained: Inheritance study and Problem solving based on genetics. Employability: Genetic counsellor, Genetic lawyer, Research in Genetics..
			Unit III- Molecular Biology	Development of critical thinking and reasoning abilities. Development of problem solving abilities. Employability in the field of research and life science industries.

		Course Code: RJSUZOO303	Unit I: Parasitology	Skill: Scientific study, Understanding parasitic diseases in animals & humans. Employability: Research on parasites, in field of Public health, Parasite evolution and taxonomy.
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			Unit II- Fishery Biology 2.1 Fishing communities of India 2.4 Methods of fish preservation 2.5 Nutritive value of fish and fish products	Development of entrepreneurship & industrial skills Employability in the field of community work & fisheries sector, Fish processing industries.
			Unit III: Economic Entomology 3.1 Honey bee 3.2 Lac insect 3.3 Silk moth: Skill 3.5 Methods of insect control	Skill processes involved apiculture, sericulture and control measures for crop pest. Employability: Entrepreneur as Apiculturist Sericulturist Job in pest control industry
Practical I , II & III		Course Code: RJSUZOOP301 RJSUZOOP302 RJSUZOOP303		Development of memory and problem solving skills. Entrepreneurship skills in the field of entomology and fisheries
		Course Code: RJSUZOO401	Unit I- Animal Type Cockroach	Knowledge gained- Anatomical structure and function of various organs system. Employability in the field of Taxonomy and Physiological research related to entomology
			Unit II- Life Processes II	Knowledge gained: Comparative Physiological process in animals Employability in the field of MLT and Paramedics
			Unit III Cell Biology:	Job in biochemistry, medicine, and biotechnology
		Course Code:	Unit I Biochemistry II	Skill : Analytical Thinking

		RJSUZOO402	Unit II Genetics	Knowledge gained: pedigree analysis and inheritance pattern for various diseases. Employability: Genetic counsellor, Research, Geneticist.
			Unit III- Evolution.	Development of reasoning & critical thinking abilities. Employability in the field of Palaeontology & Evolutionary biology

		Course Code: RJSUZOO403	Unit I: Parasitology	Skill: understanding of human, domesticated animal and wildlife animal diseases. Employability: Epidemiology, human health, community health related sectors and related research.
			Unit II Animal husbandry 2.2 Poultry 2.3 Cattle Farming	Knowledge gained: concept of types and methodology of animal farming with economic value. Employability in Poultry Dairy Industry and Entrepreneurship in the same field
			Unit III- Behavioural Ethology	Entire Unit Development of critical thinking and reasoning. Employability in the field of Wildlife research and conservation
Practical I, II & III		Course Code: RJSUZOOP401 RJSUZOOP402 RJSUZOOP403		Development of memory and problem solving skills. Gain of entrepreneurship skills in the field of poultry and dairy sciences
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T.Y.B.Sc		RJSUZOO501	Unit I Type Study Sepia	Skill: Understanding of organ systems Employability: Fisheries

			Unit II- Comparative anatomy of vertebrates—I Skin, Digestive system and circulatory system	Skill: Understanding of organ systems Employability: Fisheries
			Unit IV: Endocrine glands and their regulation	Skill: Critical Thinking Employability: Pathology lab
		RJSUZOO502	Unit I Basic Haematology	Skill: Technical Employability: Pathology lab
			Unit II Basic immunology	Skill: Technical lab, Employability: Pathology Research lab

			Unit III- Applied haematology & immunology	Skill: Technical Employability: Pathology lab, Research lab Entrepreneurship: Diagnostic kits.
			Unit IV: Homeostasis Feedback mechanism, thermoregulation & ionic regulation	Skill: Critical thinking, Analytical ability, problem solving Employability: field biology Entrepreneurship: trade of exotic animals
		RJSUZOO503	Unit I: Molecular biology	Skill: Critical thinking, Analytical ability, problem solving Employability: Research lab, pathology lab
			Unit II: Genetic engineering	Skill: Critical thinking, Analytical ability, problem solving Employability: Research lab, pathology lab
			Unit III: Toxicology	Skill: Analytical ability, problem solving Employability: R & D sector, Environmental agencies, Animal Ethics

			Unit IV: Biostatistics	Skill: Analytical ability, problem solving Employability: Data analyst
		RJSUZOO503	Unit I: Human osteology	Skill: Analytical ability, Employability: Paramedics, gym trainers Entrepreneurship: development of artificial models for study
			Unit II: Ethology	Skill: Analytical ability Employability: Field biology Entrepreneurship: Consultant for animal training
			Unit III: Epidemiology-I	Skill: Critical Thinking Employability: Public health sector Entrepreneurship: development of study tools
			Unit IV: National parks and sanctuaries	Skill: Technical, Social Employability: Field biology Entrepreneurship: Ecotourism

Practical I, II & III		RJSUZOOP501 RJSUZOOP502 RJSUZOOP503 RJSUZOOP504		Skill: Technical, Social, GLP Employability: Field biology, R&D sector, Public sector Entrepreneurship: Ecotourism, Development of models
		RJSUZOO601	Unit I: Type study Shark	Skill: Understanding of organ systems Employability: Fisheries
			Unit II: Comparative anatomy of vertebrates II- respiratory system, urinogenital system and nervous system	Skill: Understanding of organ systems Employability: Fisheries
			Unit III: Developmental biology of chick	Skill: Technical skill, domain knowledge Employability: R&D sector Entrepreneurship: Preparation of permanent slides for educational purposes.

			Unit IV: Mammalian Histology	Skill: Critical Thinking Employability: Pathology lab
		RJSUZOO602	Unit I: Enzymology	
			Unit II: Chemical messengers and Cardiac physiology	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, technical assistant in hospital Entrepreneurship: development of artificial models for study
			Unit III: Aspects of human reproduction	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, technical assistant in hospital
			Unit IV: General pathology	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, Pathology lab
		RJSUZOO603	Unit I: Cancer biology	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, Pathology lab, Research lab
			Unit II: Animal tissue culture	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, Pathology lab, Research lab
			Unit III: Human genetics	Skill: Analytical ability, Problem solving, Critical thinking Employability: Paramedics, Genetics lab, Research lab Entrepreneurship: Genetic counselling
			Unit IV: Bioinformatics	Skill: Analytical ability, Problem solving, Critical thinking Employability: field of computational biology

			Unit I Zoogeography	Skill: Technical, Social Employability: Field biology Entrepreneurship: Ecotourism, Wildlife photographer
		RJSUZOO604	Unit II: Bioprospecting and Zoopharmacognosy	Skill: Technical, Social Employability: Field biology, R&D sector,
			Unit III: Epidemiology-II	Skill: Critical Thinking Employability: Public health sector Entrepreneurship: development of study tools
			Unit IV: Wildlife management	Skill: Technical, Social Employability: Field biology, R&D sector, Wildlife conservation Entrepreneurship: Ecotourism, Environmental audit,
Practical I, II, III & IV		RJSUZOOP601 RJSUZOOP602 RJSUZOOP603 RJSUZOOP604		Skill: Technical, Social, Critical thinking, GLP Employability: Field biology, R&D sector, Wildlife conservation, Genetics lab, pathology lab Entrepreneurship: Ecotourism, Environmental audit, Development of artificial model, permanent slides for education

ENVIRONMENTAL SCIENCE(APPLIED COMPONENT)
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T.Y.B.Sc Zoology & Botany		Course Code: RJSUEVS505		
			Unit I: - Ecological issues of India	Critical thinking and logical reasoning. Awareness about India's ecological problems and their possible solutions. Employability in the field of Demography & Conservation biology.
			Unit II: Environmental Pollution	Skill: Analytical thinking Employability: Field of Disaster management
			Unit III: Alternate Energy Resources	Skill: Critical thinking & analytical skill Employability: Environmental audit
			Unit IV: Green Chemistry	Skills: Critical thinking and Analytical skills. Employability: in the field of environmental research and environmental consultancy
Practical		Course Code: RJSUEVSP505		
		Course Code: RJSUEVS605	Unit I: Ecological restoration	Skill: Scientific study, Understanding effluent treatment and bioremediation Employability: Research in environmental sector, public health and hygiene
			Unit II: Biodiversity conservation and ecotourism	Development of analytical skills. Employability: Field biology, conservation and community work, wildlife photography and documentation.
			Unit III: Climate change	Development of critical thinking. Employability: Research in environmental sector, policy making.
			Unit IV: Disaster management	Skill: Disaster preparedness skill

				Employability: Governmental and Non-governmental organizations for disaster management.
Practical		Course Code: RJSUEVSP60 5		Development of memory and analytical skills for laboratory work. Gain of communication skills and leadership qualities