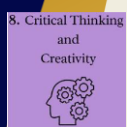
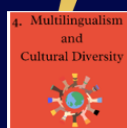




ST. ALOYSIUS' COLLEGE

AUTONOMOUS
JABALPUR- 482001
MADHYA PRADESH, INDIA



CRITERION-1

CURRICULAR ASPECTS

Key Indicator – 1.3

Curriculum Enrichment

Metric No.: 1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability, and other value frameworks enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Document Name

Mapping Cross-Cutting Issues to SDG and NEP
Environment and Sustainability




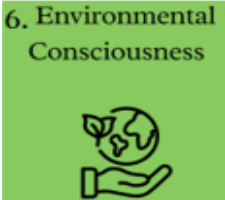

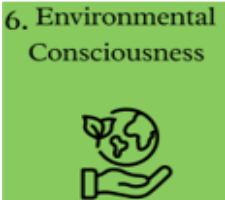


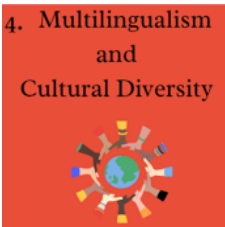
ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

Course Code	Course Title	Relevant description	SDG Goals Mapping	NEP values mapping
COMMERCE AND MANAGEMENT				
M.Com II Semester	Strategic Marketing	<ul style="list-style-type: none"> Green marketing strategy 	SDG-12 	NEP 6 6. Environmental Consciousness 
B.Com III Year	Business Ethics and Human Values	<ul style="list-style-type: none"> Environmental Issues in Business 	SDG-17 	NEP 6 6. Environmental Consciousness 
B.Com III Year	Environment & Sustainable Tourism	<ul style="list-style-type: none"> Advocating sustainable tourism Tourism activities and their linkages to ecology and environment Naturalist and its role Eco-tourism as a worldwide phenomenon Sustainability and destination branding Carbon management in tourism: Field visit to ecological parks and guest lecture on sustainable tourism 	SDG-17 	NEP 6 6. Environmental Consciousness 
ARTS				
B.A.I Year	Idea of Bharat	<ul style="list-style-type: none"> Views on Indian history 		NEP 4 4. Multilingualism and Cultural Diversity 
BA I Year	English Language &	<ul style="list-style-type: none"> "The Axe" by R. K. Narayana 	SDG-15	NEP 6





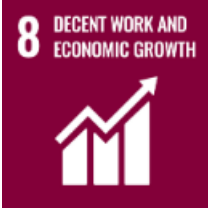


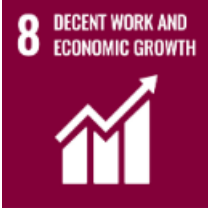



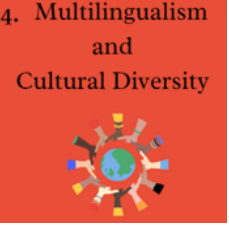
ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

	Indian Culture			6. Environmental Consciousness 
B.A. III Year	Indian Foreign Policy	<ul style="list-style-type: none"> India's Role in Environment protection 	SDG-8 	NEP 10 10. Global Citizenship  NEP 6 6. Environmental Consciousness 
BA III Year	Development and Environmental Economics	<ul style="list-style-type: none"> Environmental problems of the Economy Sustainable development Environmental damages Green Index Environment-Economy Linkage Population- Environment linkages Market failure for environmental goods The Common Problems Concept of sustainable development 	SDG-8  SDG-12 	NEP 6 6. Environmental Consciousness 
BA II Year	हिन्दी गद्य (प्रश्न पत्र 1) बी.ए. द्वितीय वर्ष	<ul style="list-style-type: none"> सौन्दर्य की नदी नर्मदा (अंश- ओकारेश्वर से खलघाट) अमृतलाल बेंगड़ 	SDG-14 	NEP 4 4. Multilingualism and Cultural Diversity 
BA III	Foundation	<ul style="list-style-type: none"> "The Cherry Tree" by 	SDG-15	NEP 6












ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

Year	Course- English Language	Ruskin Bond & "Tree" by Tina Morris		6. Environmental Consciousness 
BA/B.SC III Year	Economics of growth and development	<ul style="list-style-type: none"> The Sustainable Development Goals (SDGs) 2030 Agenda 	SDG-1 to SDG-17	NEP 6 6. Environmental Consciousness 
MA II Semester	Poetry	<ul style="list-style-type: none"> "A Poison Tree" by William Blake 	SDG-15 	NEP 6 6. Environmental Consciousness 
MA III Semester	Environmental Economics	<ul style="list-style-type: none"> Global warming Earth summit Environmental problems of economy Economics of pollution Environment impact analysis Global environmental problems Constitutional rights and duties regarding environment 	SDG-13 	NEP 6 6. Environmental Consciousness 
BA III Year	International Relations and Contemporary Issues	<ul style="list-style-type: none"> Environmental Issues: Climate Change 	SDG-13 	NEP 6 6. Environmental Consciousness 
MA III Semester	Agricultural Economics	<ul style="list-style-type: none"> Green revolution 	SDG-13	NEP 6








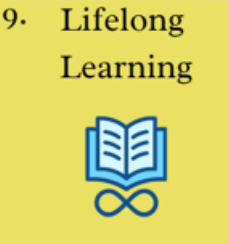
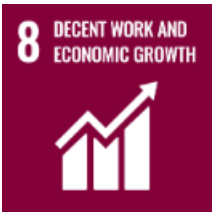


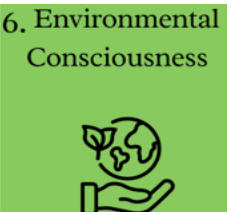
ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

				
MA III Semester	International Politics and contemporary political issues	<ul style="list-style-type: none"> Environmental Issues: Rio-Declaration 1992 and Rio-Bio Diversity Agreement. 	SDG-13 	NEP 6 
MA III Semester	Rural Development	<ul style="list-style-type: none"> Safe drinking water 	SDG-3 	NEP 9 
SCIENCE				
MSc IV Semester	Environment Chemistry	<ul style="list-style-type: none"> Water quality parameters –dissolved oxygen, biochemical oxygen demand, solids, metals, content of chloride, sulphate, phosphate, nitrate and microorganisms. Water quality standards. Analytical methods of measuring BOD, DO, COD, F, Oils, metals (As, Cd, Cr, Hg, Pb, Se etc.),residual chloride and chlorine demand. Purification and treatment of water. Aquatic chemistry and water pollution. Redox chemistry in natural waters. Dissolved oxygen, biological oxygen 	SDG-8  SDG-9  SDG-12 	NEP 6 



ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<p>demand, chemical oxygen demand, determination of DO, BOD and COD.</p> <ul style="list-style-type: none"> • Aerobic and anaerobic reactions of organic sulphur and nitrogen compounds in water acid-base chemistry of fresh water and seawater • Aluminum, nitrate and fluoride in water Petrification • Sources of water pollution. Treatment of waste and sewage. Purification of drinking water, techniques of purification and disinfection 	<p>SDG -14</p>	
M.Sc II Semester	Environment and Elementary Ecology	<ul style="list-style-type: none"> • Sustainable development and Natural Resources • Principles of conservation • Biodiversity and its conservation 	<p>SDG-15</p>	<p>NEP 6 6. Environmental Consciousness</p>
BA III year	Globalisation and Politics	<ul style="list-style-type: none"> • Ecological Issues: Historical overview of International environment • Agreements • Climate change • Global common debate • Human displacement • Human security 	<p>SDG-13</p> <p>SDG-15</p>	<p>NEP 6 6. Environmental Consciousness</p>
B.Sc III Year	Ecology and Applied Zoology	<ul style="list-style-type: none"> • Concepts of ecology and habitat ecology. • Inter-relationship between wildlife and the environment • Wild Life Protection Act, National parks and 	<p>SDG-13</p>	<p>NEP 6 6. Environmental Consciousness</p>



ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<p>sanctuaries of Madhya Pradesh</p> <ul style="list-style-type: none"> Rare, endangered & threatened (RET) species of India 	<p>SDG-15</p>	
M.Sc III Semester	Bioprocess engineering and Environmental Biotechnology	<ul style="list-style-type: none"> Environmental pollution Bioremediation of xenobiotic Detoxification 	<p>SDG-12</p> <p>SDG-13</p>	<p>NEP 6</p> <p>6. Environmental Consciousness</p>
MSc II Semester	Environment & Biodiversity Conservation	<ul style="list-style-type: none"> Environmental monitoring and impact assessment Environmental legislation Impact of global warming wsr acid rain and ozone depletion, green-house effect Biodiversity crisis 	<p>SDG-13</p>	<p>NEP 6</p> <p>6. Environmental Consciousness</p>
M.Sc IV Semester	Environment Chemistry	<ul style="list-style-type: none"> Water quality parameters –dissolved oxygen, biochemical oxygen demand, solids, metals, content of chloride, sulphate, phosphate, nitrate and microorganisms. Water quality standards. Analytical methods of measuring BOD, DO, COD, F, Oils, metals (As, Cd, Cr, Hg, Pb, Se etc.), residual chloride and 	<p>SDG-15</p> <p>SDG-14</p>	<p>NEP 6</p> <p>6. Environmental Consciousness</p>






ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<p>chlorine demand. Purification and treatment of water.</p> <ul style="list-style-type: none"> • Aquatic chemistry and water pollution. Redox chemistry in natural waters. Dissolved oxygen, biological oxygen demand, chemical oxygen demand, determination of DO, BOD and COD. • Aerobic and anaerobic reactions of organic sulphur and nitrogen compounds in water acid-base chemistry of fresh water and seawater • Aluminum, nitrate and fluoride in water Petrification • Sources of water pollution. Treatment of waste and sewage. Purification of drinking water, techniques of purification and disinfection 		
B.Sc III Year	Agriculture Biotechnology	<ul style="list-style-type: none"> • Organic farming: Biofertilizers and Biopesticides • Biological N₂ fixation, H₂ production, biofertilizers and biopesticides • Solid wastes; sources and management (composting, vermiculture, and methane production). Single-cell protein (Spirulina, yeast, mushroom) • National and International status of organic farming agencies and institutions related to organic agriculture • Organic and Indian National Standards for 	<p>SDG-13</p>  <p>SDG-15</p> 	<p>NEP 6</p> <p>6. Environmental Consciousness</p> 





ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<p>organic products</p> <ul style="list-style-type: none"> • Organic food quality and human health 		
B.Sc III Year	Environmental Biotechnology	<ul style="list-style-type: none"> • Environmental Pollution: definition, principles and scope of ecology types of pollution, oil pollution, methods for the measurement of pollution; methodology of environmental management - the problem-solving approach and its limitations • Solid and Water wastes: sources and management (composting, vermiculture and methane production) • Treatment of waste water, primary, secondary & Assessment of water quality • Global environmental problems: Ozone depletion, UV-B, greenhouse effect and acid rain. • Biogas H₂ Production • Degradation of xenobiotics in Environment. • Ecological considerations, decay behaviour & degradative plasmids; Hydrocarbons, substituted hydrocarbons, surfactants, pesticides, microbial leaching. Bioremediation of contaminated soils and waste land. • Techniques and Applications: methods of monitoring pollution; biological methods; detection methods for DO, 	<p>SDG-13</p> 	<p>NEP 6</p> <p>6. Environmental Consciousness</p> 





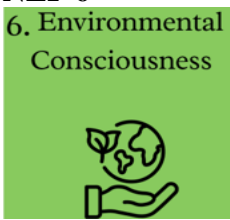




ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<p>BOD, pathogen monitoring by heterotrophic plate count; multiple tube method; membrane filtration methods; strategies for controlling pathogen transfer; chemical methods- detection methods for COD, pH, alkalinity, TSS, TDS, total organic carbon, oil, grease etc.; biosensors for pollution</p>		
B.Sc III Year	Ecology and Applied Zoology	<ul style="list-style-type: none"> • Concepts of ecology and habitat ecology. • Inter-relationship between wildlife and the environment • Wild Life Protection Act, National parks and sanctuaries of Madhya Pradesh • Rare, endangered & threatened (RET) species of India 	<p>SDG 14</p>  <p>SDG 15</p> 	<p>NEP 6</p> <p>6. Environmental Consciousness</p> 
M.Sc. III Semester	Environmental Microbiology	<ul style="list-style-type: none"> • Practical: Isolation of air borne microbes through air sampler. 	<p>SDG-15</p> 	<p>NEP 8</p> <p>8. Critical Thinking and Creativity</p> 
MSc II Semester	Analytical Chemistry	<ul style="list-style-type: none"> • Karl Fischer titration of water • Determination of DO, BOD and COD • Analytical methods of measuring BOD, DO, COD, F, Oils, metals (As, Cd, Cr, Hg, Pb, Se etc.), residual chloride and chlorine demand 	<p>SDG-6</p> 	<p>NEP 8</p> <p>8. Critical Thinking and Creativity</p> 




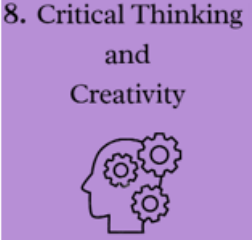


ST. ALOYSIUS' COLLEGE

(AUTONOMOUS), JABALPUR(M.P.)

Reaccredited 'A+' Grade by NAAC (CGPA 3.68/4.00)

College with Potential for Excellence (CPE) by UGC

DST-FIST Supported & Star College Scheme by DBT.

		<ul style="list-style-type: none"> • Purification and treatment of water 		
B.Sc III Year	Applied Aquaculture	<ul style="list-style-type: none"> • Estimation of biological oxygen demand in water • Estimation of chemical oxygen demand in water • Identification and study of aquatic weeds • Azolla, Pistia, Vallisneria Hydrilla , Chara 	SDG-14 	NEP 8 8. Critical Thinking and Creativity 
MSC II Semester	Environment and Biodiversity Conservation	<ul style="list-style-type: none"> • Water conservation wsr rain water harvesting and water shed management. 	SDG-12  SDG-6 	NEP 6 6. Environmental Consciousness 