

## BS 04 Years & Associate Degree in Botany

Course Title	Course Code	Course Type	Credit Hour
<b>Semester 1</b>			
Functional English	GENG-101	General	3
Civics and Community Engagement	GCCE-101	General	2
Islamic Studies / Ethics (for Non-Muslims)	GISL-101 / GETH-101	General	2
Diversity of Plants (Theory)	BOT-112	Major	2
Cell Biology (Theory)	BOT-110	Major	2
Fehm-e-Quran	HQ-001N	Compulsory	0
General Zoology (NS)	NB-107	General	3
Cell Biology (Lab)	BOT-110L	Major	1
Diversity of Plants (Lab)	BOT-112L	Major	1
			<b>Total Credit Hours 16</b>
<b>Semester 2</b>			
Basic Arabic Language (AH)	AARB-122	General	2
Quantitative Reasoning (I)	GQR-101	General	3
Entrepreneurship	GENT-101	General	2
Ideology and Constitution of Pakistan	GICP-101	General	2
Fundamentals of Genetics and Evolution (Theory)	BOT-118	Major	2
Fundamentals of Plant Taxonomy (Theory)	BOT-114	Major	2
Fehm-e-Quran	HQ-002N	Compulsory	1
Fundamentals of Genetics and Evolution (Lab)	BOT-118L	Major	1
Fundamentals of Plant Taxonomy (Lab)	BOT-114L	Major	1
Biodiversity and Conservation (Theory)	BOT-116	Major	2
Biodiversity and Conservation (Lab)	BOT-116L	Major	1
			<b>Total Credit Hours 19</b>
<b>Semester 3</b>			
Applications of Information and Communication Technologies	GICT-201	General	3
Expository Writing	GENG-201	General	3
Tarjuma-e-Quran	HQ-003	Compulsory	0
Pakistan Studies.	GPST-201	General	2
Phycology & Bryology (Theory)	BOT-201	Major	3
Phycology & Bryology (Lab)	BOT-201L	Major	1
Mycology (Theory)	BOT-203	Major	2
Mycology (Lab)	BOT-203L	Major	1
Plant Anatomy and Embryology (Theory)	BOT-205	Major	2
Plant Anatomy and Embryology (Lab)	BOT-205L	Major	1
			<b>Total Credit Hours 18</b>
<b>Semester 4</b>			
<u>GEN(SS)</u>		General	2
Phytogeography (Theory)	BOT-207	Major	2
Phytogeography (Lab)	BOT-207L	Major	1
Principles of Plant Ecology (Theory)	BOT-209	Major	2
Principles of Plant Ecology (Lab)	BOT-209L	Major	1
Principles of Plant Biochemistry (Theory)	BOT-211	Major	2
Principles of Plant Biochemistry (Lab)	BOT-211L	Major	1
Principles of Plant Physiology (Theory)	BOT-213	Major	2
Principles of Plant Physiology (Lab)	BOT-213L	Major	1
Quantitative Reasoning II	GQR-201	General	3
Tarjuma-e-Quran	HQ-004	Compulsory	1
			<b>Total Credit Hours 18</b>
<b>Semester 5</b>			
Advanced Plant Ecology (Theory)	BOT-301	Major	2
Advanced Plant Ecology (Lab)	BOT-301L	Major	1
Advanced Plant Biochemistry (Theory)	BOT-303	Major	2
Advanced Plant Biochemistry (Lab)	BOT-303L	Major	1
Advanced Plant Physiology (Theory)	BOT-305	Major	2
Advanced Plant Physiology (Lab)	BOT-305L	Major	1
Plant Microbe Interactions (Theory)	BOT-307	Major	2
Plant Microbe Interactions (Lab)	BOT-307L	Major	1
Pteridophytes and Gymnosperms (Theory)	BOT-309	Major	2
Pteridophytes and Gymnosperms (Lab)	BOT-309L	Major	1
Biostatistics (Theory)	BOT-311	Major	2
Biostatistics (Lab)	BOT-311L	Major	1
Tarjuma-e-Quran	HQ-005	Compulsory	0
			<b>Total Credit Hours 18</b>
<b>Semester 6</b>			
Systematics of Angiosperms (Theory)	BOT-313	Major	2
Systematics of Angiosperms (Lab)	BOT-313L	Major	1
Plant Pathology (Theory)	BOT-315	Major	2
Plant Pathology (Lab)	BOT-315L	Major	1
Molecular Genetics (Theory)	BOT-317	Major	2
Molecular Genetics (Lab)	BOT-317L	Major	1
Sustainable Development Goals	BOT-319	Major	3
Artificial Intelligence in Botany	BOT-320	Major	3
Tarjuma-e-Quran	HQ-006	Compulsory	1
			<b>Total Credit Hours 16</b>
<b>Semester 7</b>			

Analytical Techniques in Botany (Theory)	BOT-401	Major	<u>2</u>
Analytical Techniques in Botany (Lab)	BOT-401L	Major	<u>1</u>
major	BOT-403	Major	<u>2</u>
major	BOT-403L	Major	<u>1</u>
Forensic Botany (Theory)	BOT-405	Major	<u>2</u>
Forensic Botany (Lab)	BOT-405L	Major	<u>1</u>
Scientific Inquiry and Research Methods (Theory)	BOT-407	Major	<u>2</u>
Scientific Inquiry and Research Methods (Lab)	BOT-407L	Major	<u>1</u>
Tarjuma-e-Quran	HQ-007	Compulsory	<u>0</u>
			<b>Total Credit Hours 12</b>
<b>Semester 8</b>			
Plant Biotechnology (Theory)	BOT-409	Major	<u>2</u>
Plant Biotechnology (Lab)	BOT-409L	Major	<u>1</u>
Economic And Industrial Botany	BOT-411	Major	<u>3</u>
Evolutionary Trends in Plants (Theory)	BOT-413	Major	<u>2</u>
Evolutionary Trends in Plants (Lab)	BOT-413L	Major	<u>1</u>
Capstone Project	BOT-415	Major	<u>3</u>
Comprehensive Viva-Voce	BOT-417	Major	<u>1</u>
Comprehensive Viva-Voce	BOT-419	Major	<u>1</u>
Tarjuma-e-Quran	HQ-008	Compulsory	<u>1</u>
			<b>Total Credit Hours 15</b>
			Signature