

FAR WESTERN UNIVERSITY
Mahendranagar, Kanchanpur
Faculty of Science and Technology
Bachelor's Degree in Science (B. Sc.)

Semester Wise Subject Information Report



FAR WESTERN UNIVERSITY
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First Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	English Grammar and Composition	ENG 111	3	
2	Information Technology Fundamentals TH	COM 111	3	
3	Information Technology Fundamentals PR	COM 111	1	
4	Mechanics TH	PHY 111	3	
5	Mechanics PR	PHY 111	1	
6	Systematic and Animal Diversity: Lower non-chordate TH	ZOO 111	3	
7	Systematic and Animal Diversity: Lower non-chordate PR	ZOO 111	1	
8	Basic Chemistry I TH	CHM 111	3	
9	Basic Chemistry I PR	CHM 111	1	
10	Calculus	MTH 111	3	
11	Fundamentals Environmental Science TH	ENV 111	3	
12	Fundamentals Environmental Science PR	ENV 111	1	
13	General Microbiology, Microbial Structure, Physiology TH	MIB 111	3	
14	General Microbiology, Microbial Structure, Physiology PR	MIB 111	1	
15	Botany I TH	BOT111	3	
16	Botany I PR	BOT111	1	

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Second Semester

Second Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	English for Communication	ENG 121	3	
2	Computer Programming TH	COM 121	3	
3	Computer Programming PR	COM 121	1	
4	Thermodynamics TH	PHY 121	3	
5	Thermodynamics PR	PHY 121	1	
6	Animal Diversity: Higher non-chordata and Protochordata TH	ZOO 121	3	
7	Animal Diversity: Higher non-chordata and Protochordata PR	ZOO 121	1	
8	Basic Chemistry II TH	CHM 121	3	
9	Basic Chemistry II PR	CHM 121	1	
10	Calculus for Several Variables	MTH 121	3	
11	Environmental Aspects of Meteorology and Hydrology TH	ENV 121	3	
12	Environmental Aspects of Meteorology and Hydrology PR	ENV 121	1	
13	Biochemistry TH	MIB 121	3	
14	Biochemistry PR	MIB 121	1	

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Third Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Statistics and Probability	STT 231	3	
2	Chordata TH	ZOO 231	3	
3	Chordata PR	ZOO 231	1	
4	Waves and Optics TH	PHY 231	3	
5	Waves and Optics PR	PHY 231	1	
6	Basic Chemistry III TH	CHM 231	3	
7	Basic Chemistry III PR	CHM 231	1	
8	Real Analysis I	MTH 231	3	
9	Ordinary and Linear Algebra	MTH 232	3	
10	Environmental Earth Science and Applications TH	ENV 231	3	
11	Environmental Earth Science and Applications PR	ENV 231	1	
12	Molecular Biology TH	MIB 231	3	
13	Molecular Biology PR	MIB 231	1	
14	Natural Resource Management	NRM 231	3	

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Fourth Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Electronics TH	PHY 241	3	
2	Electronics PR	PHY 241	1	
3	Animal Physiology and Endocrinology TH	ZOO 241	3	
4	Animal Physiology and Endocrinology PR	ZOO 241	1	
5	Basic Chemistry IV TH	CHM 241	3	
6	Basic Chemistry IV PR	CHM 241	1	
7	Real Analysis II	MTH 241	3	
8	Modern Algebra	MTH 242	3	
9	Environmental Pollution and Control Technologies TH	ENV 241	3	
10	Environmental Pollution and Control Technologies PR	ENV 241	1	
11	Microbial Biotechnology TH	MIB 241	3	
12	Microbial Biotechnology PR	MIB 241	1	
13	Solid Waste Management	WMN 241	3	
14	Bio-Chemistry	BCM 241	3	

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Fifth Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Electricity and Magnetism TH	PHY 351	3	
2	Electricity and Magnetism PR	PHY 351	1	
3	Cell and Developmental Biology TH	ZOO 351	3	
4	Cell and Developmental Biology PR	ZOO 351	1	
5	Basic Chemistry V TH	CHM 351	3	
6	Basic Chemistry V PR	CHM 351	1	
7	Geometry	MTH 351	3	
8	Vector Analysis	MTH 352	3	
9	Environmental Microbiology TH	MIB 351	3	
10	Environmental Microbiology PR	MIB 351	1	
11	Urban Environment TH	ENV 351	3	
12	Urban Environment PR	ENV 351	1	
13	Sustainable Development	SSD 351	3	
14	Earth and Space Science	ESS 351	3	

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Sixth Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Atomic, Nuclear and Particle Physics TH	PHY 361	3	
2	Atomic, Nuclear and Particle Physics PR	PHY 361	1	
3	Relativity	PHY 362	3	
4	Evolutionary Biology, Zoogeography and Ethology TH	ZOO 361	3	
5	Evolutionary Biology, Zoogeography and Ethology PR	ZOO 361	1	
6	Biochemistry and Immunology	ZOO 362	3	
7	Chemistry VI TH	CHM 361	3	
8	Chemistry VI PR	CHM 361	1	
9	Chemistry VII	CHM 362	3	
10	Differential Equations	MTH 361	4	
11	Mechanics	MTH 362	3	
12	Medical and Pharmaceutical Microbiology TH	MIB 361	3	
13	Medical and Pharmaceutical Microbiology PR	MIB 361	1	
14	Public Health Microbiology	MIB 362	3	
15	Environmental Engineering TH	ENV 361	3	
16	Environmental Engineering PR	ENV 361	1	
17	Energy and Environment	ENV 362	3	
18	Research Methodology I	RSM 361	3	

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Seventh Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Math Physics	PHY 471	4	
2	Classical Physics	PHY 472	4	
3	Physics Lab	PHY 473	2	
4	Astronomy	PHY 474	3	
5	Material Science	PHY 475	3	
6	Biophysics	PHY 476	3	
7	Chemistry VIII	CHM 471	4	
8	Chemistry IX	CHM 472	4	
9	Chemistry Lab	CHM 473	2	
10	Applied Chemistry	CHM 474	3	
11	Analytical Chemistry	CHM 475	3	
12	Natural Product Chemistry	CHM 476	3	
13	Mathematical Analysis I	MTH 471	4	
14	Advance Algebra I	MTH 472	3	
15	Advance Calculus	MTH 473	3	
16	Applied Mathematics	MTH 474	3	
17	Mathematics XII	MTH 475	3	
18	Mathematics XII	MTH 476	3	
19	Remote Sensing and Geographic Information System	ENV 471	4	
20	Environmental Modeling	ENV 472	4	
21	Field work based Case Studies	ENV 473.1	1	
22	Internship	ENV 473.2	1	
23	Biodiversity Conservation and Management	ENV 474	3	
24	Freshwater Environment	ENV 475	3	
25	Climate Change	ENV 476	3	
26	Genetics and Molecular Biology	ZOO 471	4	
27	Wild Life and Conservation	ZOO 472	4	
28	Zoology Lab	ZOO 473	2	
29	Animal Biotechnology	ZOO 474	3	
30	Toxicology	ZOO 475	3	
31	Ecosystem Services & Geoinformatics	ZOO 476	3	
32	Food Microbiology	MIB 471	4	
33	Agricultural Microbiology	MIB 472	4	
34	Microbiology LAB	MIB 473	2	
35	Herbal Technology	MIB 474	3	
36	Methods in Microbiology	MIB 475	3	
37	Wine Technology	MIB 476	3	
38	Research Methodology II	RSM 471	3	
39	Seminar/Term Paper	SEM 471	1	

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Eighth Semester Subject List

SN	Course Title	Course Code	Credits	Remarks
1	Quantum Mechanics	PHY 481	4	
2	Solid State Physics	PHY 482	4	
3	Physics Lab	PHY 483	2	
4	Econophysics	PHY 484	2	
5	Entrepreneurship	PHY 485	2	
6	Applied Physics	PHY 486	2	
7	Mathematical Analysis II	MTH 481	4	
8	Advance Algebra II	MTH 482	3	
9	Discrete Mathematics	MTH 483	3	
10	Linear Programming	MTH 484	2	
11	Numerical Analysis (Course Not Available)	MTH 485	2	
12	Teaching Methods (Course Not Available)	MTH 486	2	
13	Chemistry XII	CHM 481	4	
14	Chemistry XIII	CHM 482	4	
15	Chemistry Lab	CHM 483	2	
16	Nanoscience	CHM 484	2	
17	Polymer Science	CHM 485	2	
18	Instrumental Method of Analysis	CHM 486	2	
19	Environmental Assessment and Management System	ENV 481	4	
20	Environmental Economics	ENV 482	4	
21	Environmental Assessment and Management System (Practical)	ENV 483	2	
22	Ecosystem Services Management	ENV 484	2	
23	Integrated Water Resource Management	ENV 485	2	
24	Disaster Risk Management	ENV 486	3	
25	Entomology and Parasitology	ZOO 481	4	
26	Ecology and Fisheries Biology	ZOO 482	4	
27	Zoology Lab	ZOO 483	2	
28	Ethnobiology	ZOO 484	3	
29	Bioinformatics	ZOO 485	3	
30	Bio-instrumentation	ZOO 486	3	
31	Diagnostic Medical Microbiology	MIB 481	4	
32	Immunology	MIB 482	4	
33	Microbiology LAB	MIB 483	2	
34	Dairy Technology and Microbiology	MIB 485	3	
35	Emerging Infectious Diseases	MIB 484	3	
36	Clinical Biochemistry	MIB 486	3	
37	Project Work : Research/Presentation	PRW 481	3	