



**SANDIP**  
UNIVERSITY

School of Science  
Department of Biological Sciences  
NEP 2020- Course Structure

**Programme Name: Master of Science (Life Science)**  
**Semester – I** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPLS101	Genetics	4	0	0	4	50	-	50	-	100
2	PC	NPLS102	Cell and Molecular Biology	4	0	0	4	50	-	50	-	100
3	PC	NPLS111	Genetics Laboratory	0	0	4	2	-	50	-	50	100
4	PC	NPLS112	Cell and Molecular Biology Laboratory	0	0	4	2	-	50	-	50	100
5	PE	NPLSE02	Animal Systematics	4	0	0	4	50	-	50	-	100
6	UC	NRDP101	Research Methodology	4	0	0	4	50	-	50	-	100
TOTAL				16	0	8	20	200	100	200	100	600

Course Code	Course Name
NPLSE01	Plant Systematics
NPLSE02	Animal Systematics
NPLSE03	Microbial Systematics

		Formative Assessment		
<b>CIA:</b> Continuous Internal Assessment <b>L:</b> Theory Lecture <b>T:</b> Tutorial <b>P:</b> Practical <b>ESE:</b> End Semester Exam	<b>#:</b> Internship for 15 days. <b>∗:</b> Oral Examination <b>UC:</b> University Core <b>PC:</b> Programme Core <b>PE:</b> Programme Elective <b>OE:</b> Open Elective <b>VAC:</b> Value Added Courses	<b>CIA</b>	<b>Weightage</b>	<b>Description</b>
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

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**Programme Name: Master of Science (Life Science)**  
**Semester – II** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPLS201	Ecology	4	0	0	4	50	-	50	-	100
2	PC	NPLS202	Instrumentation	4	0	0	4	50	-	50	-	100
3	PC	NPLS211	Ecology Laboratory	0	0	4	2	-	50	-	50	100
4	PC	NPLS212	InstrumentationLaboratory	0	0	4	2	-	50	-	50	100
5	PC	NPLS203	Biochemistry	4	0	0	4	50	-	50	-	100
6	PC	NPLS213	Biochemistry Laboratory	0	0	4	2	-	50	-	50	100
7	PE	NPLSE05	Animal Systematics	4	0	0	4	50	-	50	-	100
TOTAL				16	0	12	22	200	150	200	150	700

Course Code	Course Name
NPLSE04	Plant Physiology
NPLSE05	Animal Physiology
NPLSE06	Microbial Physiology

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

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NEP 2020- Course Structure

**Programme Name: Master of Science (Life Science)**  
**Semester – III** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPLS301	Recombinant DNA Technology	4	0	0	4	50	-	50	-	100
2	PC	NPLS302	Immunology	4	0	0	4	50	-	50	-	100
3	PE	NPLSE...	Programme Elective III	4	0	0	4	50	-	50	-	100
4	PE	NPLSE...	Programme Elective IV	4	0	0	4	50	-	50	-	100
5	PC	NPLS303	Large Scale Manufacturing Process	4	0	0	4	50	-	50	-	100
6	PC	NPLS311	Recombinant DNA Technology Laboratory	0	0	4	2	-	50	-	50	100
7	PC	NPLS312	Immunology Laboratory	0	0	4	2	-	50	-	50	100
TOTAL				20	0	8	24	250	100	250	100	700

Course Code	Course Name
NPLSE07	Plant Development
NPLSE08	Animal Development
NPLSE09	Genetically Modified Organisms

Course Code	Course Name
NPLSE10	Nutraceuticals
NPLSE11	Intellectual Property Rights
NPLSE12	Biostatistics and Bioinformatics

		Formative Assessment		
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		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

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**Programme Name: Master of Science (Life Science)**  
**Semester – IV** **For the Batch : AY 23-24 onwards**

Sr. No.	Core	Course Code	Course Name	Teaching Scheme (Hrs./Week)				Examination Scheme				Total Marks
				L	T	P	C	Formative Assessment CIA		Summative Assessment ESE		
								Course	Lab	Course	Lab	
1	PC	NPLS411	Research Project	0	0	36	20	-	300	-	300	600
TOTAL				0	0	36	20	-	300	-	300	600

		Formative Assessment		
CIA: Continuous Internal Assessment L: Theory Lecture T: Tutorial P: Practical ESE: End Semester Exam	#: Internship for 15 days. *: Oral Examination UC: University Core PC: Programme Core PE: Programme Elective OE: Open Elective VAC: Value Added Courses	CIA	Weightage	Description
		CIA 1	10%	Home Assignment
		CIA 2	20%	Written Exam
		CIA 3	10%	Seminar Presentation
		CIA 4	10%	Activity/Project & Research Based Activity
		<b>TOTAL</b>	<b>50%</b>	

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