

Re-Accredited 'B++' 2.86 CGPA by NAAC

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**

University Campus, Udhna-Magdalla Road, SURAT - 395 007, Gujarat, India.

**વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી**

યુનિવર્સિટી કેમ્પસ, ઉદ્દના-મગદલા રોડ, સુરત - ૩૯૫ ૦૦૭, ગુજરાત, ભારત.

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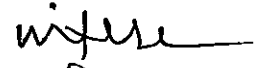
## **-: પરિપત્ર :-**

યુનિવર્સિટી સંલગ્ન વિજ્ઞાન વિદ્યાશાખા હેઠળની તમામ કોલેજોનાં આચાર્યશ્રીઓને જણાવવાનું કે, NEP-2020 અંતર્ગત પ્રથમ વર્ષ બાદ Exit થનાર વિદ્યાર્થીઓને સર્ટિફિકેટ એનાયત કરવા અને દ્વિતીય વર્ષ બાદ Exit થનાર વિદ્યાર્થીઓને ડિપ્લોમામાં એનાયત કરવા સંદર્ભે ૪ ક્રેડિટના વોકેશનલ Exit Course પ્રાણીશાસ્ત્ર વિષયની અભ્યાસ સમિતિના ચેરમેનશ્રીએ અભ્યાસ સમિતિવતી મંજૂર કરી વિજ્ઞાન વિદ્યાશાખાને કરેલ ભલામણ વિજ્ઞાન વિદ્યાશાખાની તા.૧૭/૦૭/૨૦૨૫ ની સભાના ઠરાવ ક્રમાંક:૧૭ થી મંજૂર કરી એકેડેમિક કાઉન્સિલને કરેલ ભલામણ એકેડેમિક કાઉન્સિલની તા.૨૪/૧૨/૨૦૨૪ની સભાના ઠરાવ ક્રમાંક:૩૫૩ અન્વયે માન.કુલપતિશ્રીને આપેલ સત્તા અંતર્ગત માનનીય કુલપતિશ્રી દ્વારા મંજૂર કરેલ છે. જેનો અમલ કરવા આથી જાણ કરવામાં આવે છે.

(બિડાણ: ઉપર મુજબ )

ક્રમાંક:ઓથોરીટીઝ/પરિપત્ર/૧૯૧૨૫/૨૦૨૫

તા.૨૧/૦૭/૨૦૨૫

  
કુલસચિવ વતી

પ્રતિ,

- ૧) યુનિવર્સિટી સંલગ્ન વિજ્ઞાન વિદ્યાશાખા હેઠળની તમામ કોલેજોનાં આચાર્યશ્રીઓ.  
..... આપશ્રીની કોલેજના સંબંધિત શિક્ષકોને જાણ કરી અમલ કરવા સારું.
- ૨) અધ્યક્ષશ્રી, વિજ્ઞાન વિદ્યાશાખા.
- ૩) પરીક્ષા નિયામકશ્રી, પરીક્ષા વિભાગ, વીર નર્મદ દ. ગુ. યુનિવર્સિટી, સુરત.  
.....તરફ જાણ તેમજ અમલ સારું.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY,  
SURAT**



**Undergraduate Programme  
In  
Zoology**

**[3 Years (Degree) & 4 Years (Honours/Honours with Research)]**

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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

Undergraduate Programme in Zoology

Vocational Course

Teaching & Evaluation Scheme

[Academic Year of Implementation 2025-2026]

After Exit Semester-2

Course Code	Course Title	Teaching Schedule Hours/Week	Exam Duration & Marks			Total Theory/Practical Marks	Credit
			Duration (Hours)	(CCE) Internal Marks	(SEE) External Marks		
ZO – VOC – 001	APICULTURE	4	2:00	50	50	100	4
			<b>Total</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>4</b>

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# VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

## Undergraduate Program in Zoology (B. Sc.)

(3 Years Degree; 4 Years Honours/Honours with Research)

### (After Exit Semester – 2) – First Year Course: ZO – VOC - 001 - Apiculture

Name of Program	Bachelor in Science
Objective of Program	The objective of an apiculture program is to promote the sustainable management of honeybee populations for honey production, pollination services, and the conservation of biodiversity. It aims to enhance beekeeper knowledge and skills while improving honeybee health and productivity. The program also focuses on creating economic opportunities through beekeeping and related products.
Program Outcome	<p><b>PO-01: <u>Scientific Knowledge &amp; Conceptual Understanding</u>:</b> Develop a strong foundation in scientific principles, theories and concepts across disciplines, fostering interdisciplinary learning, advance knowledge and problem-solving abilities.</p> <p><b>PO-02: <u>Analytical &amp; Critical Thinking</u>:</b> Apply critical thinking and analytical reasoning to evaluate scientific data, hypotheses and real-world problems, leading to evidence-based conclusions.</p> <p><b>PO-03: <u>Research &amp; Inquiry-based Learning</u>:</b> Develop investigative skills through experimentation, data analysis and scientific inquiry to contribute to research and innovation.</p> <p><b>PO-04: <u>Laboratory &amp; Technical Skills</u>:</b> Gain hands-on experience with laboratory techniques, instrumentation and computational tools relevant to scientific research and industry applications.</p> <p><b>PO-05: <u>Digital &amp; Computational Literacy</u>:</b> Utilize digital tools, computational techniques and emerging technologies such as AI, bioinformatics and statistical modelling to enhance scientific learning and problem-solving.</p> <p><b>PO-06: <u>Environmental &amp; Societal Responsibility</u>:</b> Understand the role of science in addressing environmental, health and societal challenges, promoting sustainability and ethical responsibility.</p> <p><b>PO-07: <u>Effective Communication &amp; Collaboration</u>:</b> Develop proficiency in scientific communication, both written and oral, for effective dissemination of knowledge while collaborating in multidisciplinary teams.</p> <p><b>PO-08: <u>Innovation &amp; Entrepreneurship</u>:</b> Foster an entrepreneurial mind-set by applying scientific knowledge for innovation, technology development, and industry-oriented applications. Develop sustainable solutions to address real-world challenges in research and environmental management.</p> <p><b>PO-09: <u>Lifelong Learning &amp; Professional Growth</u>:</b> Cultivate curiosity and adaptability for continuous learning, equipping students for higher education, research, and professional careers.</p> <p><b>PO-10: <u>Ethical Leadership &amp; Value-based Education</u>:</b> Develop leadership qualities, ethical values, and a sense of responsibility in applying science for societal progress, aligning with Indian knowledge systems and global perspectives.</p>

Program Specific Outcomes	<p><b>1. Remembering (Knowledge)</b>  <b>PSO1:</b> Recall the classification, morphology, and anatomy of different animal groups and Identify key concepts and terminology in zoology.</p> <p><b>2. Understanding (Comprehension)</b>  <b>PSO2:</b> Explain the structure and function of animal systems, such as nervous, circulatory, and digestive systems and Interpret zoological data and graphs related to animal populations and ecosystems.</p> <p><b>3. Applying (Application)</b>  <b>PSO3:</b> Apply zoological principles to understand animal behaviour, ecology, and evolution and Use zoological concepts to analyze real-world scenarios related to conservation, wildlife management, and animal welfare.</p> <p><b>4. Analyzing (Analysis)</b>  <b>PSO4:</b> Break down complex zoological concepts, such as animal development and physiology, into component parts and Evaluate zoological evidence to support a claim related to animal diversity, adaptation, and extinction.</p> <p><b>5. Evaluating (Synthesis)</b>  <b>PSO5:</b> Design experiments to investigate zoological questions and hypotheses related to animal behaviour, ecology, and evolution and Critique zoological research and methodologies related to animal conservation and management.</p> <p><b>6. Creating (Evaluation)</b>  <b>PSO6:</b> Develop innovative solutions to zoological problems related to animal conservation, welfare, and management and Communicate zoological findings effectively through various media, such as research papers, presentations, and popular articles.</p>
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Course code	ZO – VOC - 001
Course title	APICULTURE
Course level	100-199
Credit	04
Total engagement	4 Credits X 15 hrs. = 60 hrs
Teaching per week	04hrs.
Minimum weeks per semester	15 weeks
Effective from	2025-26
Purpose of course	The purpose of a course in apiculture is to provide individuals with the knowledge and skills necessary to effectively manage honeybee colonies for honey production, pollination, and other bee-related products. It aims to educate on bee health, beekeeping techniques, and environmental factors affecting bee populations. Additionally, the course seeks to promote sustainable practices and offer economic opportunities through beekeeping.
Course objective	The objectives of an apiculture course are to provide knowledge on bee biology, behavior, and hive management techniques. It aims to teach sustainable beekeeping practices and enhance honey production and pollination skills. Additionally, the course seeks to raise awareness of environmental challenges affecting bee populations.
Course outcomes	1. Students will gain hands-on experience in the management of beekeeping operations, including hive construction, colony management, and honey harvesting.

	<p>2. Learners will develop a deep understanding of bee biology, behavior, and the ecological significance of pollination in agricultural systems.</p> <p>3. Graduates will be equipped with the skills necessary to identify and manage common diseases and pests that affect bee populations.</p> <p>4. The course will prepare students to pursue careers in beekeeping, honey production, and the broader field of sustainable agriculture and environmental conservation</p>																																			
Mapping between COs with PSOs	<table border="1"> <thead> <tr> <th></th> <th>PSO1</th> <th>PSO2</th> <th>PSO3</th> <th>PSO4</th> <th>PSO5</th> <th>PSO6</th> </tr> </thead> <tbody> <tr> <td>CO1</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>CO2</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>CO3</td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>CO4</td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>		PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	CO1	✓	✓	✓	✓			CO2	✓	✓	✓	✓	✓	✓	CO3			✓	✓	✓	✓	CO4			✓	✓	✓	✓
	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6																														
CO1	✓	✓	✓	✓																																
CO2	✓	✓	✓	✓	✓	✓																														
CO3			✓	✓	✓	✓																														
CO4			✓	✓	✓	✓																														
Pre-requisite	Biology																																			
Course content	<p><b>Unit 1: Introduction to Beekeeping</b></p> <ul style="list-style-type: none"> <li>• Introduction to Apiculture: History</li> <li>• Different species of Honeybee</li> <li>• Types of Bees <ul style="list-style-type: none"> <li>◦ Honeybees and their roles.</li> </ul> </li> <li>• Beekeeping Tools <ul style="list-style-type: none"> <li>◦ Basic equipment like the hive, smoker, and protective gear.</li> </ul> </li> </ul> <p><b>Unit 2: Managing Bee Colonies</b></p> <ul style="list-style-type: none"> <li>• Bee Colony Basics <ul style="list-style-type: none"> <li>◦ The queen, worker, and drone bees.</li> <li>◦ How a bee colony works.</li> </ul> </li> <li>• Taking Care of Bees <ul style="list-style-type: none"> <li>◦ How to set up and manage a hive.</li> <li>◦ Checking for bee health and preventing problems.</li> </ul> </li> <li>• Importance of Apiculture</li> <li>• Byproducts of Apiculture</li> </ul>																																			
Reference books	<ul style="list-style-type: none"> <li>• Non Chordate Zoology E.L Jordan &amp; P. S. Verma. S.Chand</li> <li>• Modern Text Book of Zoology Prof. R. L. Kotpal Invertebrates Rastogi publication, 11<sup>th</sup> edition 2019-2020A</li> <li>• "Economic Zoology"; Author: Shukla &amp; Upadhyay; Publisher: Rastogi Publications</li> <li>• "A Textbook of Economic Zoology"; Author: Vasantika Kashyap; Publisher: Dominant Publishers</li> <li>• "Economic Zoology"; Author: H.S. Bhamrah &amp; Kavita Juneja; Publisher: Anmol Publications</li> <li>• Applied Zoology"; Author: P. K. Gupta; Publisher: Rastogi Publications</li> </ul>																																			

e-learning resources	Sawyam Portal <a href="https://nios.ac.in/media/documents/nsqf/beekeeping%20theory.pdf">https://nios.ac.in/media/documents/nsqf/beekeeping%20theory.pdf</a>
Teaching methodology	Class work, Discussion, Self Study, Projects, Seminars or / and Assignment

Course code	ZOP – VOC - 001
Course title	APICULTURE PRACTICAL
Course level	100-199
Credit	02
Total engagement	2 Credits X 30 hrs. = 60 hrs
Teaching per week	04 hrs.
Minimum weeks per semester	15 weeks
Effective from	2025-26
Student Learning Outcomes	<ol style="list-style-type: none"> <li>1. To study history and importance of Apiculture.</li> <li>2. To study different species of honey bees</li> <li>3. To study morphology and anatomy of honey bee</li> <li>4. To study different colony organization of honey bee.</li> <li>5. To study life cycle of honey bee.</li> <li>6. To study Social behavior of honey bees</li> <li>7. To study different beekeeping equipment like bee hive, smokers and other protective gears.</li> <li>8. To discuss different byproducts obtained from apiculture.</li> <li>9. To study handling of bee colony and maintenance of apiary Record.</li> </ol>
References	<ul style="list-style-type: none"> <li>• Non Chordate Zoology E.L Jordan &amp; P. S. Verma. S.Chand</li> <li>• Modern Text Book of Zoology Prof. R. L. Kotpal Invertebrates Rastogi publication, 11<sup>th</sup> edition 2019-2020A</li> <li>• "Economic Zoology"; Author: Shukla &amp; Upadhyay; Publisher: Rastogi Publications</li> <li>• "A Textbook of Economic Zoology"; Author: Vasantika Kashyap; Publisher: Dominant Publishers</li> <li>• "Economic Zoology"; Author: H.S. Bhamrah &amp; Kavita Juneja; Publisher: Anmol Publications</li> <li>• Applied Zoology"; Author: P. K. Gupta; Publisher: Rastogi Publications</li> </ul>

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**VEER NARMAD SOUTH GUJARAT UNIVERSITY,  
SURAT**



**Undergraduate Programme  
In  
Zoology**

**[3 Years (Degree) & 4 Years (Honours/Honours with Research)]**

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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

Undergraduate Programme in Zoology

Vocational Course

Teaching & Evaluation Scheme

[Academic Year of Implementation 2025-2026]

After Exit Semester - 4

Course Code	Course Title	Teaching Schedule Hours/Week	Exam Duration & Marks			Total Theory/Practical Marks	Credit
			Duration (Hours)	(CCE) Internal Marks	(SEE) External Marks		
ZO - VOC - 002	SERCULTURE	02	1.30	25	25	50	2
ZOP - VOC- 002	SERICULTURE PRACTICAL	04	4.00	25	25	50	2
			<b>Total</b>	<b>50</b>	<b>50</b>	<b>100</b>	<b>4</b>

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT****Undergraduate Program in Zoology (B. Sc.)**

(3 Years Degree; 4 Years Honours/Honours with Research)

**(After Exit Semester – 4) – Second Year Course: ZO – VOC - 004 - Sericulture**

Name of Program	Bachelor in Science
Objective of Program	The purpose of a Sericulture course is to provide students with the skills and knowledge for silkworm rearing and silk production. It aims to promote sustainable practices in the sericulture industry. The course also prepares students to pursue careers or businesses, in silk production and related fields.
Program Outcome	<p><b>PO-01: <u>Scientific Knowledge &amp; Conceptual Understanding</u>:</b> Develop a strong foundation in scientific principles, theories and concepts across disciplines, fostering interdisciplinary learning, advance knowledge and problem-solving abilities.</p> <p><b>PO-02: <u>Analytical &amp; Critical Thinking</u>:</b> Apply critical thinking and analytical reasoning to evaluate scientific data, hypotheses and real-world problems, leading to evidence-based conclusions.</p> <p><b>PO-03: <u>Research &amp; Inquiry-based Learning</u>:</b> Develop investigative skills through experimentation, data analysis and scientific inquiry to contribute to research and innovation.</p> <p><b>PO-04: <u>Laboratory &amp; Technical Skills</u>:</b> Gain hands-on experience with laboratory techniques, instrumentation and computational tools relevant to scientific research and industry applications.</p> <p><b>PO-05: <u>Digital &amp; Computational Literacy</u>:</b> Utilize digital tools, computational techniques and emerging technologies such as AI, bioinformatics and statistical modelling to enhance scientific learning and problem-solving.</p> <p><b>PO-06: <u>Environmental &amp; Societal Responsibility</u>:</b> Understand the role of science in addressing environmental, health and societal challenges, promoting sustainability and ethical responsibility.</p> <p><b>PO-07: <u>Effective Communication &amp; Collaboration</u>:</b> Develop proficiency in scientific communication, both written and oral, for effective dissemination of knowledge while collaborating in multidisciplinary teams.</p> <p><b>PO-08: <u>Innovation &amp; Entrepreneurship</u>:</b> Foster an entrepreneurial mind-set by applying scientific knowledge for innovation, technology development, and industry-oriented applications. Develop sustainable solutions to address real-world challenges in research and environmental management.</p> <p><b>PO-09: <u>Lifelong Learning &amp; Professional Growth</u>:</b> Cultivate curiosity and adaptability for continuous learning, equipping students for higher education, research, and professional careers.</p> <p><b>PO-10: <u>Ethical Leadership &amp; Value-based Education</u>:</b> Develop leadership qualities, ethical values, and a sense of responsibility in applying science for societal progress, aligning with Indian knowledge systems and global perspectives.</p>
Program Specific	<b>1. Remembering (Knowledge)</b>

Outcomes	<p><b>PSO1:</b> Recall the classification, morphology, and anatomy of different animal groups and Identify key concepts and terminology in zoology.</p> <p><b>2. Understanding (Comprehension)</b></p> <p><b>PSO2:</b> Explain the structure and function of animal systems, such as nervous, circulatory, and digestive systems and Interpret zoological data and graphs related to animal populations and ecosystems.</p> <p><b>3. Applying (Application)</b></p> <p><b>PSO3:</b> Apply zoological principles to understand animal behaviour, ecology, and evolution and Use zoological concepts to analyze real-world scenarios related to conservation, wildlife management, and animal welfare.</p> <p><b>4. Analyzing (Analysis)</b></p> <p><b>PSO4:</b> Break down complex zoological concepts, such as animal development and physiology, into component parts and Evaluate zoological evidence to support a claim related to animal diversity, adaptation, and extinction.</p> <p><b>5. Evaluating (Synthesis)</b></p> <p><b>PSO5:</b> Design experiments to investigate zoological questions and hypotheses related to animal behaviour, ecology, and evolution and Critique zoological research and methodologies related to animal conservation and management.</p> <p><b>6. Creating (Evaluation)</b></p> <p><b>PSO6:</b> Develop innovative solutions to zoological problems related to animal conservation, welfare, and management and Communicate zoological findings effectively through various media, such as research papers, presentations, and popular articles.</p>
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Course code	ZO – VOC - 002
Course title	SERICULTURE
Course level	200-299
Credit	04
Total engagement	4 Credits X 15 hrs. = 60 hrs
Teaching per week	04hrs.
Minimum weeks per semester	15 weeks
Effective from	2025-26
Purpose of course	The purpose of a Sericulture course is to equip students with the knowledge and skills for silkworm rearing and silk production. It aims to promote sustainable practices in the sericulture industry. The course also focuses on the economic potential of sericulture for rural development and entrepreneurship.
Course objective	The objectives of a Sericulture course are to teach students the principles of silkworm rearing and silk production. It aims to provide practical skills in managing sericulture farms and ensuring high-quality silk. The course also emphasizes sustainable practices and the economic aspects of the sericulture industry.
Course outcomes	<ol style="list-style-type: none"> <li>1. Students will learn the techniques of silkworm rearing and cocoon production.</li> <li>2. Learners will gain knowledge in the management of sericulture farms and operations.</li> <li>3. The course will teach sustainable practices in silk production and pest</li> </ol>

	control. 4. Graduates will be able to establish and manage a successful sericulture business.																																			
Mapping between COs with PSOs	<table border="1"> <thead> <tr> <th></th> <th>PSO1</th> <th>PSO2</th> <th>PSO3</th> <th>PSO4</th> <th>PSO5</th> <th>PSO6</th> </tr> </thead> <tbody> <tr> <td>CO1</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>CO2</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>CO3</td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> <tr> <td>CO4</td> <td></td> <td></td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> </tr> </tbody> </table>		PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	CO1	✓	✓	✓	✓			CO2	✓	✓	✓	✓	✓	✓	CO3			✓	✓	✓	✓	CO4			✓	✓	✓	✓
		PSO1	PSO2	PSO3	PSO4	PSO5	PSO6																													
	CO1	✓	✓	✓	✓																															
	CO2	✓	✓	✓	✓	✓	✓																													
	CO3			✓	✓	✓	✓																													
CO4			✓	✓	✓	✓																														
Pre-requisite	Biology <sup>7</sup>																																			
Course content	<b>Unit 1: Introduction to Sericulture</b> <ul style="list-style-type: none"> <li>• What is Sericulture? <ul style="list-style-type: none"> <li>• Definition and importance of silk production.</li> <li>• Different species of Silkworms</li> </ul> </li> <li>• Silk-producing Insects <ul style="list-style-type: none"> <li>• The life cycle of silkworms (<i>Bombyx mori</i>).</li> </ul> </li> <li>• Sericulture History <ul style="list-style-type: none"> <li>• Origins and development of silk farming.</li> </ul> </li> </ul> <b>Unit 2: Silkworm Rearing</b> <ul style="list-style-type: none"> <li>• Silkworm Eggs and Hatching <ul style="list-style-type: none"> <li>• How to obtain and hatch silkworm eggs.</li> </ul> </li> <li>• Feeding and Care <ul style="list-style-type: none"> <li>• What and how to feed silkworms (mulberry leaves).</li> <li>• Maintaining proper environment for silkworms (temperature, humidity).</li> </ul> </li> <li>• Rearing Process <ul style="list-style-type: none"> <li>• Stages of growth: larvae, cocoon formation, and harvesting.</li> </ul> </li> <li>• Different types of silk obtained through sericulture</li> <li>• The role of sericulture in rural development and its economic value.</li> </ul>																																			
Reference books	<ul style="list-style-type: none"> <li>• Non Chordate Zoology E.L Jordan &amp; P. S. Verma. S.Chand</li> <li>• Modern Text Book of Zoology Prof. R. L. Kotpal Invertebrates Rastogi publication, 11<sup>th</sup> edition 2019-2020A "Economic Zoology"; Author: Shukla &amp; Upadhyay; Publisher: Rastogi Publications</li> <li>• "A Textbook of Economic Zoology"; Author: Vasantika Kashyap; Publisher: Dominant Publishers</li> <li>• "Economic Zoology"; Author: H.S. Bhamrah &amp; Kavita Juneja; Publisher: Anmol Publications</li> <li>• Applied Zoology"; Author: P. K. Gupta; Publisher: Rastogi Publications</li> </ul>																																			
e-learning resources	Sawyam Portal																																			
Teaching methodology.	Class work, Discussion, Self Study, Projects, Seminars or / and Assignment																																			

[Subject code-2514000102010003]

Course code	ZOP – VOC - 002
Course title	SERICULTURE PRACTICAL
Course level	200-299
Credit	02
Total engagement	02 Credits X 30 hrs. = 60 hrs
Teaching per week	04 hrs.
Minimum weeks per semester	15 weeks
Effective from	2025-26
Student Learning Outcomes	<ol style="list-style-type: none"><li>1. To study the history of sericulture.</li><li>2. To study different species of silkworms</li><li>3. To study different types of silk.</li><li>4. To discuss difference between mulberry and non-mulberry silk.</li><li>5. To study life cycle of silkworm.</li><li>6. To study different plant species used in sericulture as food materials</li><li>7. To study the rearing process in sericulture.</li></ol>
References	<ul style="list-style-type: none"><li>• Non Chordate Zoology E.L Jordan &amp; P. S. Verma. S.Chand</li><li>• Modern Text Book of Zoology Prof. R. L. Kotpal Invertebrates Rastogi publication, 11<sup>th</sup> edition 2019-2020A "Economic Zoology"; Author: Shukla &amp; Upadhyay; Publisher: Rastogi Publications</li><li>• "A. Textbook of Economic Zoology"; Author: Vasantika Kashyap; Publisher: Dominant Publishers</li><li>• "Economic Zoology"; Author: H.S. Bhamrah &amp; Kavita Juneja; Publisher: Anmol Publications</li><li>• Applied Zoology"; Author: P. K. Gupta; Publisher: Rastogi Publications</li></ul>

