



FIRST-YEAR OF BACHELOR OF VOCATIONAL MAJOR SUSTAINABLE AGRICULTURE REVISED SYLLABUS ACCORDING TO CBCS NEP2020

COURSE TITLE: FUNDAMENTALS OF AGRONOMY II
SEMESTER-II, W.E.F. 2024-2025

Recommended by the Board of Studies in BVOC (SA)
And

Approved by the Academic Council
DevrukhShikshanPrasarakMandal's

Nya. TatyasahebAthalye Arts, Ved. S. R. Sapre Commerce, and Vid. DadasahebPitre
Science College (Autonomous), Devrukh. Tal.Sangmeshwar, Dist. Ratnagiri-415804,
Maharashtra, India

Academic Council Item No: _____

Name of the Implementing Institute	:	Nya. TatyasahebAthalye Arts, Ved. S. R. Sapre Commerce, and Vid. DadasahebPitre Science College (Autonomous), Devrukh. Tal.Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Vocation (Sustainable Agriculture)
Name of the Department	:	Science
Name of the Class	:	First Year
Semester	:	First
No. of Credits	:	02
Title of the Course	:	Fundamentals of Agronomy II
Course Code	:	B106SAT
Name of the Vertical in adherence to NEP 2020	:	Major and Minor
Eligibility for Admission	:	Any 12 th Pass and/or Diploma in agriculture seeking Admission to Degree Programme in adherence to Rules and Regulations of the University of Mumbai and Government of Maharashtra
Passing Marks	:	40%
Mode of Assessment	:	Formative and Summative
Level	:	UG
Pattern of Marks Distribution for TE and CIA	:	60:40
Status	:	NEP-CBCS
To be implemented from Academic Year	:	2024-2025
Ordinances/Regulations(if any)	:	

Nya. TatyasahebAthalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College, Devrukh (An Autonomous College Affiliated with University of Mumbai)

Syllabus for First Year of Bachelor of Vocation in Sustainable Agriculture

(With effect from the academic year 2024-2025)

SEMESTER-II

Paper No.–

Course Title: Fundamentals of Agronomy II

No. of Credits - 02

Type of Vertical: Major and Minor

COURSE CODE: B106SAT

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to...

Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Recall the basics of principles and practices of agronomy.
CLO-02	Understand	Acknowledge the procedures in nutrient management practices for better soil health and soil fertility
CLO-03	Apply	Apply knowledge to minimize environmental impact, conserve natural resources and promote long-term agricultural productivity
CLO-04	Analyze	Illustrate the working of various farming techniques
CLO-05	Evaluate	Summarize the Role of agronomy in development of Indian Agriculture
CLO-06	Create	Compose ability to educate farmers, agricultural professionals, and general public about principles and practical of crop production

Syllabus for First Year of Bachelor of Vocation in Sustainable agriculture

(With effect from the academic year 2024-2025)

SEMESTER-II

Paper No.–

Course Title: Fundamentals of Agronomy II

No. of Credits - 02

Type of Vertical: Major and Minor

COURSE CODE: B106SAT

COURSE CONTENT			
Module No.	Content	Credits	No. of Lectures
1	High yielding varieties of Rice, Hybrid rice, Aromatic Rice , Aerobic Rice, Boro Rice etc. State farmers right under PPV and FRA act 2001 (9 rights) Rainfed and Irrigated Agriculture, Harvesting – Methods of Harvesting, Signs of Maturity in paddy crop, Post-Harvest management, Methods of Threshing, Cleaning, drying and storage of paddy crops.	01	15
2	Planting materials for gardening. Role of gardener cum nursery raiser and progression pathway Maintenance of nursery and garden- Tools for pruning, Training, Trimming and development of healthy gardens. Developing entrepreneurship skills. Carry out daily nursery and garden courses and its maintenance – Potting, Repotting soil bed preparation, planting, transplanting, Irrigation, weed management , pest and disease management and nutrient management etc.	01	15
	Total	02	30

Required Previous Knowledge

No previous Knowledge is required.

Access to the Course

The course is available for all the students admitted for Bachelor of Vocation (SA) as a Major or a minor. The students seeking admission in other disciplines may select the course as a minor considering the terms and conditions laid down by the University of Mumbai, the Government of Maharashtra, and the college, from time to time.

Forms of Assessment

The assessment of the course will be of Formative and Summative type. At the beginning of the course diagnostic assessment will be carried out. The formative assessment will be used for the Continuous Internal Evaluation whereas the summative assessment will be conducted at the end of the term. The weightage for formative and summative assessment will be 50:50. The detailed pattern is as given below.

Term End Evaluation (30 Marks)

Question Paper Pattern

Time: 1.5 hours

Question No.	Unit/s	Question Pattern	Marks
Q.1	All	Fill in the Blanks	6
Q.4	All	Attempt any three question from the following five questions (Applied Questions)	24
Total			30

Internal evaluation (20 Marks)

Sr. No.	Description	Marks
1	Mid Term Examination	10
2	Active Participation in teaching learning Process	5
3	Subject related activities as assigned by the teacher	5
Total		20

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

References For Module 1 :

Module 1

1. Intellectual Property Rights in Agriculture" by Anil K. Gupta

Publisher: UNEP-WIPO Farmers' Rights under PPV and FRA Act - Chapter 5

2. Agricultural Irrigation Engineering" by N. N. Basak Publisher: McGraw-Hill Education (India) Pvt Limited, 1999 Rainfed and Irrigated Agriculture - Chapter 7
3. Post-Harvest Technology of Cereals, Pulses, and Oilseeds" by G. N. Dar Publisher : Oxford & IBH Publishing Company, 2019 Harvesting and Post-Harvest Management of Paddy - Chapter 3

References for Module 2 :

1. The Gardener's Guide to Propagation: Step-by-step Instructions for Creating Plants for Free, from Propagating Seeds and Cuttings to Dividing, Layering and Grafting" by Richard Rosenfeld Publisher: lorenz books Choosing the Right Planting Materials - Chapter 2
- 2.The Complete Illustrated Guide to Gardening" by Reader's Digest Publisher: jg press Chapter no 1- 9 (everything related to Gardening)
3. The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses" by Eric Ries Publisher: crown currency Entrepreneurship Skills and Innovation - Chapter 3

Reference Books:

1. Balasubramanian, P and Palaniappan, S.P. 2001. Principles and Practices of Agronomy AgroBios(India)Ltd., Jodhpur.
2. Cox, G.W and Atkins, M.D. 1979. Agricultural Ecology : An Analysis of World Food Production Systems. W.H. Freeman and Company, San Francisco
3. De, G.C.1989.Fundamentals of Agronomy. Oxford & IBH Publishing Co., New Delhi.
4. Grigg, D.B. 1974. The Agricultural Systems of the World: An Evolutionary Approach. Cambridge University Press, Cambridge.
5. Harlan, J.R. 1992. Crops and Man. American Society of Agronomy& Crop Science Society of America, Madison, WI.