
 <b>NAVSARI AGRICULTURAL UNIVERSITY</b>	<b>HORTICULTURE POLYTECHNIC</b> <b>ACHF, NAU, NAVSARI</b>	 <b>ACHF NAU</b> <small>Let's Bloom Human Fruition</small>
<b>ACTIVITIES AND ACHIEVEMENTS</b>		

### Semester-Wise List of Courses Offer for Horticulture Polytechnic

\*(Effective from June-2014)

Sr. No.	Sem. wise Sr. No	Subject code	Subject	Total Credit
<b>First Semester</b>				
1.	1	VEG 1.1	Fundamentals of Vegetable production	3(2+1)
2.	2	FLR 1.1	Introductory Floriculture	2(1+1)
3.	3	NRM 1.1	Introductory Agronomy	2(1+1)
4.	4	PPT 1.1	Introductory Entomology	2(1+1)
5.	5	PPT 1.2	Fundamentals of Plant Pathology	2(1+1)
6.	6	BOT 1.1	Introductory Botany	3(2+1)
7.	7	FRT 1.1	Fundamentals of Horticulture	3(2+1)
8.	8	NRM 1.2	Fundamentals of Soil Science	2(1+1)
<b>Total</b>				<b>19 (11+8)</b>
<b>Second Semester</b>				
9.	1	FRT 2.2	Plant Propagation and Nursery Management	2(1+1)
10.	2	VEG 2.2	Tropical and Subtropical Vegetables	3(2+1)
11.	3	FLR 2.2	Ornamental Horticulture	3(2+1)
12.	4	PHT 2.1	Fundamentals of Post-harvest Technology of Horticultural crops	2(1+1)
13.	5	NRM 2.3	Manures and Fertilizers	2(1+1)
14.	6	BSC 2.1	Introductory Economics	2(2+0)
15.	7	OTH 2.1	Structural Grammar and Spoken English	2(1+1)
16.	8	OTH 2.2	Introductory Extension Education	2(1+1)
<b>Total</b>				<b>18 (11+7)</b>
<b>Third Semester</b>				
17.	1	FRT 3.3	Tropical and Subtropical Fruits	3(2+1)
18.	2	FRT 3.4	Growth and Development of Horticultural Crops	2(1+1)

19.	3	FLR 3.3	Cultivation of Commercial Flowers	2(1+1)
20.	4	FLR 3.4	Medicinal and Aromatic Plants	2(1+1)
21.	5	PHT 3.2	Preservation and Value Addition of Horticultural Crops	3(2+1)
22.	6	BSC 3.2	Computer Application	2(1+1)
23.	7	AEN 3.1	Farm Power and Machinery, Soil Survey and Conservation	3(2+1)
<b>Total</b>				<b>17(10+7)</b>
<b>Forth Semester</b>				
24.	1	FRT 4.5	Soil Fertility and Nutrient Management	2(1+1)
25.	2	FRT 4.6	Plantation Crops, Spices and Condiments	2(1+1)
26.	3	FLR 4.5	Protected Cultivation of Horticultural Crops	3(2+1)
27.	4	PHT 4.3	Fundamentals of Food Technology	2(1+1)
28.	5	NRM 4.4	Water Management in Horticultural Crops	2(1+1)
29.	6	BOT 4.2	Introductory Crop Physiology	2(1+1)
<b>Total</b>				<b>13(7+6)</b>
<b>Fifth Semester</b>				
30.	1	FRT 5.7	Watershed Management and Dry Land Horticulture	2(1+1)
31.	2	VEG 5.3	Vegetable Seed Production and Certification	2(1+1)
32.	3	BSC 5.3	Elementary Statistics	3(2+1)
33.	4	BSC 5.4	Environmental Science	3(2+1)
34.	5	OTH 5.3	Social and Farm Forestry	2(1+1)
35.	6	OTH 5.4	Agri. Business Management	2(1+1)
36.	7	BSC 5.5	Introductory Microbiology	2(1+1)
<b>Total</b>				<b>16(9+7)</b>
<b>Sixth Semester</b>				
37.	1	HPWE 6.1	Protected Cultivation of Horticultural Crops	4 (0+4)
38.	2	HPWE 6.2	Nursery Production, Management of Horticultural Crops and Micro-propagation	4 (0+4)
39.	3	HPWE 6.3	Value Addition of Fruits and Vegetables	4 (0+4)
40.	4	HPWE 6.4	Floriculture and Landscape Gardening and Value Addition of Flowers	4 (0+4)

41.	5	HPWE 6.5	Educational Tour	4 (0+4)
<b>Total</b>				20(0+20)
<b>Grand Total (Theory + Practical)</b>				<b>48+55=103</b>
<b>NSS/Physical Education</b>				<b>(0+1)(NC)</b>

### Revised Semester-Wise List of Courses Offer for Horticulture Polytechnic

\*(Effective from July-2017)

Course No.	Course Title	Credit
<b>First semester</b>		
<b>VEG 1.1</b>	Fundamentals of Vegetable Production	<b>3(2+1)</b>
<b>FLA 1.1</b>	Introductory Floriculture	<b>2(1+1)</b>
<b>NRM 1.1</b>	Introductory Agronomy	<b>2(1+1)</b>
<b>PPT 1.1</b>	Introductory Entomology	<b>2(1+1)</b>
<b>SSC 1.1</b>	Communication Skills and Personality Development	<b>2(1+1)</b>
<b>BSC 1.1</b>	Introductory Botany	<b>2(1+1)</b>
<b>FRT 1.1</b>	Fundamentals of Horticulture	<b>3(2+1)</b>
<b>FRT 1.2</b>	Plant Propagation and Nursery Management	<b>2(1+1)</b>
<b>PE/NSS 1.1</b>	NSS	<b>1 (0+1) (NC)</b>
<b>Total</b>		<b>18 (10+8)</b>
<b>Second semester</b>		
<b>FRT 2.3</b>	Growth and Development of Horticultural Crops	<b>2(1+1)</b>
<b>NRM 2.2</b>	Fundamentals of Soil Science	<b>3(2+1)</b>
<b>VEG 2.2</b>	Tropical and Subtropical Vegetables	<b>3(2+1)</b>
<b>FLA 2.2</b>	Ornamental Horticulture	<b>2(1+1)</b>
<b>PHT 2.1</b>	Fundamentals of Post-harvest Technology of Horticultural Crops	<b>2(1+1)</b>
<b>NRM 2.3</b>	Manures and Fertilizers	<b>2(1+1)</b>
<b>PPT 2.2</b>	Fundamentals of Plant Pathology	<b>2(1+1)</b>
<b>SSC 2.2</b>	Information and Communication Technology	<b>2(1+1)</b>
<b>PE/NSS 2.2</b>	NSS	<b>1 (0+1) (NC)</b>
<b>Total</b>		<b>18 (10+8)</b>
<b>Third semester</b>		
<b>FRT 3.4</b>	Tropical and Subtropical Fruits	<b>3(2+1)</b>
<b>VEG 3.3</b>	Cool Season Vegetable Crops	<b>2 (1+1)</b>
<b>FLA 3.3</b>	Cultivation of Commercial Flowers	<b>2(1+1)</b>
<b>SSC 3.3</b>	Introductory Extension Education	<b>2(1+1)</b>

<b>SSC 3.4</b>	Social and Farm Forestry	<b>2(1+1)</b>
<b>BSC 3.2</b>	Introductory Microbiology	<b>2(1+1)</b>
<b>BSC 3.3</b>	Principles of Plant Breeding	<b>2(1+1)</b>
<b>NRM 3.4</b>	Water Management in Horticultural Crops	<b>2(1+1)</b>
<b>PE/NSS 3.3</b>	NSS	<b>1 (0+1) (NC)</b>
<b>Total</b>		<b>17 (9+8)</b>
<b>Fourth semester</b>		
<b>NRM 4.5</b>	Soil Fertility and Nutrient Management	<b>2(1+1)</b>
<b>FRT 4.5</b>	Plantation Crops, Spices and Condiments	<b>2(1+1)</b>
<b>BSC 4.4</b>	Principles of Genetics and Cytogenetics	<b>3(2+1)</b>
<b>PHT 4.2</b>	Fundamentals of Food and Nutrition	<b>2(1+1)</b>
<b>NRM 4.6</b>	Agro-meteorology and Climate Change	<b>2(1+1)</b>
<b>BSC 4.5</b>	Introductory Crop Physiology	<b>2(1+1)</b>
<b>FLA 4.4</b>	Medicinal and Aromatic Plants	<b>2(1+1)</b>
<b>FRT 4.6</b>	Watershed Management and Dry Land Horticulture	<b>2(1+1)</b>
<b>PPT 4.3</b>	Pest and Disease Management of Horticultural Crops	<b>2 (1+1)</b>
<b>PE/NSS 4.4</b>	NSS	<b>1 (0+1) (NC)</b>
<b>Total</b>		<b>19 (10+9)</b>
<b>Fifth Semester</b>		
<b>BSC 5.6</b>	Environmental Science	<b>2(1+1)</b>
<b>VEG 5.4</b>	Vegetable Seed Production and Certification	<b>2(1+1)</b>
<b>PHT 5.3</b>	Preservation and Value Addition of Horticultural Crops	<b>3(2+1)</b>
<b>FLA 5.5</b>	Protected Cultivation of Horticultural Crops	<b>3(2+1)</b>
<b>SSC 5.5</b>	Elementary Statistics and Computer Application	<b>3(2+1)</b>
<b>BSC 5.7</b>	Elementary Plant Biochemistry	<b>2(1+1)</b>
<b>SSC 5.6</b>	Economics and Marketing	<b>2(1+1)</b>
<b>NRM 5.7</b>	Farm Power and Machinery, Soil Survey and Conservation	<b>2(1+1)</b>
<b>Total</b>		<b>19(11+8)</b>
<b>Sixth semester</b>		
<b>HWE 6.1</b>	Cultivation of Hi-valued Horticultural Crops	<b>4 (0+4)</b>
<b>HWE 6.2</b>	Nursery Production, Management of Horticultural Crops and Micro-propagation	<b>4 (0+4)</b>
<b>HWE 6.3</b>	Value Addition of Fruits and Vegetables	<b>4 (0+4)</b>
<b>HWE 6.4</b>	Floriculture and Landscape Gardening and Value Addition of Flowers	<b>4 (0+4)</b>

<b>HWE 6.5</b>	Educational Tour	<b>4 (0+4)</b>
<b>Total</b>		<b>20(0+20)</b>
<b>Grand Total (Theory + Practical)</b>		<b>50+61=111</b>
<b>NSS</b>		<b>(0+4) (NC)*</b>

### **System of Evaluation**

**The mode of evaluation through the different types of examination and weightage for each course shall be as follows:**

<b>A</b>	<b>Courses having theory and practical:</b>		
	<b>I</b>	Internal Examination	
		Two tests each of one hour duration and 10 marks conducted during zero hours	20
	<b>II</b>	Semester-end Examination	
		Theory examination	40
		Practical examination	40
<b>B</b>	<b>Courses having theory only</b>		
	<b>I</b>	Internal Examination	
		Two tests each of one hour duration and 25 marks conducted during zero hours	50
	<b>II</b>	Semester-end Examination	
		Theory examination	50
<b>C</b>	<b>Courses having practical only</b>		
	<b>I</b>	Internal Examination	50
		Semester-end practical examination	50

**The sequence of internal and semester-end examination shall be as follows:**

<b>(A)</b>	<b>Courses having theory and practical</b>	
	The sequence of the examinations of the courses having theory and practical shall be as under:	
	<b>(1)</b>	First theory test (one hour)

	(2)	Second theory test (one hour)
	(3)	Semester-end practical examination (three hours duration) and
	(4)	Semester-end theory examination (two hours)
<b>(B)</b> Courses having theory only		
The sequence of the examinations of the courses having theory only shall be as under :		
	(1)	First theory test (one hour)
	(2)	Second theory test (one hour), and
	(3)	Semester-end theory examination (two hours)
<b>(c)</b> Courses having practical only		
The sequence of the examinations of the courses having practical only shall be as under		
	(1)	Internal practical examination (three hours' duration), and
	(2)	Semester-end practical examination (three hours' duration)
<b>Note: Duration of the practical examination may vary depending on nature of practical.</b>		

### Credits and Grade Point system

The award of classes will be based on the O.G.P.A. (Overall grade point average) obtained by the candidates and will be governed by the following criteria :

OGPA	Class
Less than 4.5	Fail
4.5 – 5.99	Pass Class
6.0 – 6.49	Second Class
6.5 – 7.49	First Class
7.5 and above	First Class with Distinction

### Details of Diploma students enrolled (Number)

Academic Year	Diploma in Horticulture		
	Boys	Girls	Total
<b>2015-2016</b>	24	12	36
<b>2016-2017</b>	25	10	35
<b>2017-2018</b>	19	11	30

#### 4.6 Details of Diploma students passed out (Number)

Academic Year	Diploma in Horticulture		
	Boys	Girls	Total
2017-18	19	12	31

#### Academics performance of passed out students

Class	Academic Year 2017-18	
	Nos.	(%)
Fail	0	00
Pass Class	01	3.22
Second Class	01	3.22
First Class	09	29.03
First Class with Distinction	20	64.53
Total Nos. of Student	31	

#### Details of Diploma to Degree admitted students (Number)

Academic Year	Diploma to Degree		
	Boy's	Girl's	Total
2017-2018	5	6	11

Sr. No.	Title of experiment
On Going Experiment	
1	Effect of tip pruning and foliar application of KNO <sub>3</sub> on early flowering and yield of mango cv. Kesar
2	Screening of mango varieties against Shoot borer, <i>Clumatia transversa</i>
3	Effect of land configuration and nutrient management on growth and yield of brinjal

cv. Gujarat Navsari Round Brinjal -1

- 4 Effect of organics on yield and quality of organically grown mango cv. Kesar
- 5 To standardize process for preparation of IMF (Intermediate Moisture Food) from jackfruit (*Artocarpus heterophyllus* Lam.).
- 6 Standardization of method extraction of jackfruit (*Artocarpus heterophyllus* Lam.) juice.

#### Recommendation :

**Title: Effect of spacing and fertilizer management practices on *rabi* pigeonpea under conserved moisture condition.**

The farmer of *Bara track* of South Gujarat region growing pigeonpea cv. GT 102 during *rabi* season under conserved moisture are recommended to sow the crop at 60 x 30 cm spacing and apply recommended dose of fertilizers (20:40:00 kg N:P<sub>2</sub>O<sub>5</sub>:K<sub>2</sub>O/ ha) along with 1 tone vermi compost/ha + seed treatment with *Rhizobium* and PSB @ 10 ml/kg seed for getting higher yield and net income

#### Research paper/articles published by faculty

Sr. No.	Name (s) of Authors	Title of paper	Journal, Year Vol. No. and Issue No.
1.	Zinzala, M. J, Patel, T. U., Patel, H. H., <b>Patel, H.M.</b> , and Italiya, A.P.	Summer Okra as influenced by weed management.	AGRES. An International e-journal, 6(1): 120-123
2	Priyanka Pannu, <b>H.M.Patel</b> , P.V.Mehta and Akhila, K.	Effect of Ni and N sources (Urea and Alluminium Sulphate) on growth and urease enzyme activities in maize plant.	Trends in Biosciences, 10(27): 5703-5710
3	Priyanka Pannu, <b>H.M.Patel</b> , P.V.Mehta and Akhila, K.	Ni and N sources (Urea and Alluminium Sulphate) affecting growth, yield and quality in maize plant. ( <i>Zea mays</i> )	The Pharma Innovation Journal. 7(3): 80-84
4	<b>Patel, K.B.</b> and Saxena, S.P.	Sequence of occurrence on important insect- pests of mango.	<i>Bioinfolet</i> , (2017), 10 (4A):14(3): 243-246.



5	<b>Ahir, M.P.</b> and Alka Singh	Effect of different levels of saline irrigation water on growth and yield of gladiolus Cv. American Beauty	<i>Trends in Bioscience</i> (2017), 10 (43): 9010-9013
6	<b>Ahir, M.P.</b> , Alka Singh and Patil, S.J.	Response of different salinity levels on growth and yield of tuberose Cv. Prajwal	<i>International Journal of Chemical Studies</i> , (2017), 5 (6): 2150-2152.
7	<b>Ahir, M.P.</b> and Alka Singh	Effect of different levels of saline irrigation water on growth and yield of spider lily Cv. Local	<i>International Journal of Chemical Studies</i> , (2017), 6 (1): 907-909.
8	Devdhara, U., <b>Bhatt, S.T.</b> , Bhatt, Dipal., Vasava, H.V. and Dodiya, T.	Effect of different inter-cropping systems on growth and yield of rose ( <i>Rosa indica</i> L.)	<i>Trends in Bioscience</i> (2017), 10 (40): 8492-8496
9	Patel, K.J., <b>Bhatt, S.T.</b> , Patel, G. D., Bhatt. D.S. and U.R.Devdhara	Effect of different IBA concentrations and rooting media on cutting of Hibiscus rosa sinensis L.	<i>Trends in Bioscience</i> (2017), 10 (48): 9571-9576
10	<b>Bhatt, S. T.</b> , Patel, K.B. and <b>Ahir, M.P.</b>	Indoor Plants- <i>Those purify the air around you</i>	<i>Udhyan Sarthak-College magazine</i> , (2018).

#### Publication of Book/ Magazine/ Folder/ Booklet

Sr.No.	Name	Author
1	Observation methodology of recording pests, natural enemies and diseases in mango	Dr. S.P. Saxena Dr.H.V. Pandya Dr. P. R. Patel Dr.Snehal M. Patel <b>Dr. K. B. Patel</b> Dr. B.N. Patel
2	<i>Udyan Sarthak</i> -Vol.1 (College Magazine-2018)	Prof. Swati A. Ganvit Dr. Niketa B. Patel Prof. Priyanka N. Patel

<b>3</b>	Annual Progress Report of Horticulture Polytechnic-2017	Dr. H. M. Patel Dr. S. T. Bhatt Dr. Niketa B. Patel Dr. K. B. Patel Prof. M. P. Ahir Prof. Swati A. Ganvit Prof. Priyanka N. Patel
<b>4</b>	Insect pests of fruit, Plantation, Medicinal and aromatic Crops (Practical Manual)	Dr. Snehal H. Patel Dr. H. V. Pandya Dr. S.P. Saxena Dr. K. B. Patel
<b>5</b>	Placement Cell- Brochure (Horticulture Polytechnic-2018)	Dr. S. T. Bhatt Dr. K. B. Patel

#### Participation in Workshop/Seminar/Symposium

Departments	Workshop/Seminar/Symposium
<b>1. Fruit Science and PSMA</b>	0
<b>2. Vegetable Science</b>	1
<b>3. Floriculture and Landscape Architecture</b>	2
<b>4. Post Harvest Technology</b>	3
<b>5. Entomology</b>	1
<b>6. Agricultural Chemistry and Soil Science</b>	2

#### Participation of faculty members in Winter/Summer School/Orientation course/Short course

Sr. No.	Faculty member	Training title	Duration	Place
<b>1</b>	<b>Dr. K. B. Patel</b>	Pest Risk Analysis- "A tool in selection of quality planting material and pest forecast".	1/11/2017 to 21/11/2017	ASPEE College of Horticulture and Forestry, NAU, Navsari

## Extension Activities

### Lectures delivered as resource person at various training programmes

Sr. No.	Faculty member	Year	NOs.
1	Dr. H.M. Patel	2017-18	3
2	Dr. Niketa B. Patel	2017-18	8
3	Dr. S.T. Bhatt	2017-18	1
4	Dr. K. B. Patel	2017-18	17
5	Prof. M. P. Ahir	2017-18	2

### Coaching Classes

Year	Coaching Classes	Period	Faculty Member
2017-18	<b>Diploma to Degree competitive examination (Horticulture)</b>	29/06/17 to 8/07/17	Dr. H.M. Patel, Dr. S.T. Bhatt, Dr. K.B. Patel, Dr. Niketa B. Patel, Dr. M.P. Ahir, Prof. Swati A. Ganvit and Prof. Priyanka N. Patel

### NSS activities

Name of the Activity	No. of Students Participated - 2017
<b>Thalassemia Camp</b>	33
<b>Orientation Programme</b>	33
<b>Cleanliness Camp</b>	88
<b>NSS Special Camp</b>	33
<b>Vanmahotsav Celebration</b>	71