Document from Dr D R Singh

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सेवा में,
कुल सचिव,
वैर बहादुर सिंह पूर्व सचिव विश्वविद्यालय
जीतपुर, उत्तर प्रदेश।

महोदय,
कस्त दिनांक 20/5/2021 को हाउटकर्चर विषय के बी.आई.यस के तदनुसार समस्याओं को अपने स्वयंवाय विषयों के बाद नई विकल्प नीति के लिए राज्य सरकार द्वारा प्राप्त पत्रकारण में अभियंता संसूचना करते हुए उसके क्रेडिट और तथा तेलेफोन नंबर क्रम संख्या में बदलाव करते हुए आपके पास अवश्य बताता कराएँ।

आप: अपने अनुरोध है कि इसे स्वीकार करने का कदम करें।

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है. श्री. अरं.सिंह
संयोजक बी.आई.यस हाउटकर्चर
पी.बी.अलेज,
भारतपुर (233001)
21/05/2021
Proposed Course and Credit Hours in B.Sc. (Hons.) Ag.

DEPARTMENT OF HORTICULTURE

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Code</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>I&lt;sup&gt;st&lt;/sup&gt;</td>
<td>Fundamentals of Horticulture (NEW)</td>
<td>AG-104</td>
<td>3(2+1)</td>
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<tr>
<td>II&lt;sup&gt;nd&lt;/sup&gt;</td>
<td>Production Technology for Fruit and Plantation Crops</td>
<td>AG-207</td>
<td>2(1+1)</td>
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<td>III&lt;sup&gt;rd&lt;/sup&gt;</td>
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<tr>
<td>IV&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Production Technology for Vegetable and Spices</td>
<td>AG-407</td>
<td>2(1+1)</td>
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<td>V&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Production Technology for Ornamental Crops, MAPs and Landscaping</td>
<td>AG-507</td>
<td>2(1+1)</td>
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<tr>
<td>VI&lt;sup&gt;th&lt;/sup&gt;</td>
<td>Post-harvest Management and Value Addition of Fruits and Vegetables</td>
<td>AG-606</td>
<td>2(1+1)</td>
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<td><strong>Total</strong></td>
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<td><strong>11</strong></td>
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3. Production Technology for Vegetable and Spices 2 (1+1)

**Theory**
Importance of vegetables & spices in human nutrition and national economy, vegetable gardening. Brief about origin, area, climate, soil, improved varieties and cultivation practices such as time of sowing, transplanting techniques, planting distance, fertilizer requirements, irrigation, weed management, harvesting and yield, physiological disorders of important vegetables and spices (Tomato, Brinjal, Chilli, Capsicum, Cucumber, Melons, Gourds, Pumpkin); Cole crops such as Cabbage, Cauliflower; Bulb crops such as Onion, Garlic; Root crops such as Carrot, Radish; Okra; Leafy vegetables such as Amaranth, Palak; Spices such as Black pepper, Fenugreek, Fennel & Cumin.
HORTICULTURE

1. Fundamentals of Horticulture (NEW) 2(1+1) AG-104

Theory
Horticulture- Its definition and branches, importance and scope; horticultural and botanical classification; climate and soil for horticultural crops; Plant propagation-methods and propagating structures; principles of orchard establishment; Principles and methods of training and pruning, juvenility and flower bud differentiation; unfruitfulness; pollination, pollinizers and pollinators; fertilization and parthenocarpy; use of plant bioregulators in horticulture, irrigation and fertilizers applications-method and quality.

Practical

2. Production Technology for Fruit and Plantation Crops 2(1+1) AG-507

Theory
Importance and scope of fruit and plantation crop industry in India; High density planting; Use of rootstocks; Production technologies for the cultivation of major fruits-mango, banana, citrus, grape, guava, Litchi, papaya, apple, pear, peach and; minor fruits-pineapple, pomegranate, jackfruit, strawberry. nut crops; plantation crops-coconut, arecanut, cashew, tea, coffee & rubber.

Practical

3. Production Technology for Vegetable and Spices 2(1+1) AG-207

Theory
Importance of vegetables & spices in human nutrition and national economy, types of vegetable gardening brief about origin, area, production improved varieties and cultivation practices such as time of sowing, transplanting techniques, planting distance, fertilizer

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requirements, irrigation, weed management, harvesting storage, physiological disorders, disease and seed production of important vegetable (potato, tomato, cauliflower, onion, okra, bottle guard and bitter guard) and spices i.e. condiments. Ginger, turmeric, coriander, cumin, funnel, black pepper, ilaiachi.

**Practical**


4. **Production Technology for Ornamental Crops, MAPS and Landscaping**

AG-407

**Theory**

Importance and scope of ornamental crops. Medicinal and aromatic plants and landscaping. Principles of landscaping. Landscape uses of trees, shrubs and climbers. Style of gardening and lawn making and maintenance. Production technology of important cut flowers like rose, Gerbera, carnation, lily and orchids under protected conditions and gladiolus, tuberose, chrysanthemum under open conditions. Package of practices for loose flowers like marigold and jasmine under open conditions. Production technology of important medicinal plants like - Isabgol, Ashwagandha, Asparagus, Aloe and aromatic plants like mint, lemongrass, citronella, palmarosa, oicium, geranium, vetiver. Processing and value edition in ornamental crop and MAPs produce.

**Practical**


5. **Post-harvest Management and Value Addition of Fruits and Vegetables 2(1+1) AG-606**

**Theory**

Importance of post harvest technology of fruits, vegetables and ornamental crops. Extent and possible causes of post harvest losses; Pre- harvest factors affecting postharvest quality, maturity and self life of fruits, vegetables and ornamental crops. Ripening and changes occurring during ripening; Respiration and factors affecting respiration rate; role of ethylene;
post harvest disease and disorders; heat, chilling and freezing injury; harvesting and field handling; Storage (ZECC, cold storage, CA. MA, and hypobaric); Value addition concept; Principles and methods of preservation; Intermediate moisture food- Jam, jelly, marmalade, preserve, candy - Concepts and Standards; Fermented and non-fermented beverages. Tomato products- Concepts and Standards; Drying/ Dehydration of fruits and vegetables - Concept and methods, osmotic drying. Canning - Concepts and Standards, packaging of products.

**Practical**