Lecture 1
Basics of Horticulture
Basics of Horticulture

Instructors: László Kocsis
‘E’ Bldg
+36 83 545 058
kocsis-l@georgikon.hu

Gitta Molnár Kocsisné
‘E’ Bldg
+36 83 545 056
kmg@georgikon.hu

János Kovács
‘E’ Bldg
+36 83 545 069
j-kovacs@georgikon.hu
Requirements

Grades will consist of student lecture, written exam, term paper, and final exam. Final grade will be based on total points.

Points:

<table>
<thead>
<tr>
<th>Component</th>
<th>Points</th>
<th>Grade Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student lecture</td>
<td>100</td>
<td>441 – 500 = 5</td>
</tr>
<tr>
<td>Written exam</td>
<td>100</td>
<td>381 – 440 = 4</td>
</tr>
<tr>
<td>Term Paper</td>
<td>100</td>
<td>321 – 380 = 3</td>
</tr>
<tr>
<td>Final</td>
<td>200</td>
<td>261 – 320 = 2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>500</td>
<td>&lt; 260 = F</td>
</tr>
</tbody>
</table>
Course Outline

• Introduction of horticultural production in the World – 3 hours
• Plant organs of horticultural plants – 2 +1 hours
• Ecology of horticultural plants – Light and water – 2 hours
• Student lecture-introduction of the home country horticultural production – 1 hour.
• Ecology of horticultural plants – Temperature and land exposition –2 hours
• Student lecture-introduction of the home country horticultural production – 1hour.
• Soil cultivation and mineral nutrition in horticulture – 2 hours
• Excursion – 5 hours.
• Vegetative propagation of horticultural plants – 2 hours
• Generative propagation of horticultural plants – 2 hours
• Establishment a plantation – 2 + 1 hours
• Gardening in the greenhouse – 2 + 1 hours
• Shape and size – 2 hours
• Written exam – 1 hour
• Pruning – 2+1 hours
• Plant problems – Diseases, Pests, Weeds – 4+2 hours
• Harvest and postharvest handling – 2+1 hours
Objective of the Course

- The students have to learn about the speciality of world horticulture.
- Morphological, biological characteristics of horticultural plants are taught and ecological requirements needs to be understand.
- Basic cultural technics needs to be understand (soil cultivation, nutrition, establishment of the plantation, pruning, plant protection, harvest, postharvest treatment).
What is Horticulture?

• Horticulture is the culture of plants for food, comfort, and beautification purposes
  – In Latin, the term horticulture means “garden culture”
  – However, advancements in horticulture science and technology have helped the field of horticulture become more than just garden culture.
How Does Horticulture Relate to Science and Technology?

• The **horticulture industry** is the combination of scientific, technological, and production activities that insure the satisfaction of the consumer

• Science + Technology + Production = THE HORTICULTURE INDUSTRY
The Three + One Major Segments of the Horticulture Industry

• The growth and use of plants for their beauty is the area of horticulture known as *ornamental horticulture*
  – Ornamental horticulture involves the production and use of flowering and foliage plants used both indoors and out.
The Three + One Major Segments of the Horticulture Industry

- The area of horticulture that involves the production of vegetable food crops is *olericulture*
  - *Olericulture* includes the planting, harvesting, storing, processing, and marketing of vegetable crops
  - Sweet corn, tomatoes, and lettuce are examples of vegetable crops
Another food crop production area of horticulture is pomology. Pomology is the planting, harvesting, storing, processing, and marketing of fruit and nut crops. Examples of fruit and nut crops include peaches, strawberries, and walnuts.
The + One Major Segments of the Horticulture Industry

• Viticulture is usually not listed into the horticulture it is differentiated as an industry itself.
  – Viticulture is the planting, harvesting, storing, and marketing of grapes. Processing could be divided different industry deeply depends on the final product.
  – Examples of raisin, wines, juice or fresh fruit.