

Course title: Intensive Vegetable Growing Technologies

Subject requirements are normally based on attendance in person, but it is partially can be accomplished in form of distance learning until the coronavirus-related measures are in force. When the restrictive government measures are cancelled the original methods of education (contact classes) are enacted.

Course leader: Attila Ombódi

Semester: 2021/2 (spring)

Credits: 4

Weekly workload: 2 hrs lecture and 2 hrs practice

Place of lectures: Seminar room No. 106./ <https://elearning.szie.hu/course/view.php?id=11094> (Thursdays, 08:15 - 09:45 and at three occasions 10:00 – 11:30).

Place of lectures: Seminar room No. 106./ <https://elearning.szie.hu/course/view.php?id=11094> (Thursdays, 10:00 - 11:30) and Horticultural research field in Szárítópuszta (three occasions of 4 hours, Thursdays, 08.15 – 11:30).

Date	Subject outlines for lectures
02.11.	Main elements of intensive vegetable production
02.18.	The vegetable industry
02.25.	Ecological requirements of vegetables
03.04.	Modern greenhouse technology
03.11.	Plant factories, LED lighting; Test No. 1.,
03.18.	Production technologies of processing vegetables
03.25.	Production technologies of root vegetables
04.01.	Production technologies of leafy vegetables and cole crops
04.01.	Production technologies of Alliums
04.15.	Production technologies of solanaceous vegetables
04.15.	Production technology of cucurbitaceous and some other vegetables
05.13.	Test No. 2.
05.13.	Speciality vegetables

Date	Subject outlines for practices
02.11.	Definition and classification of vegetables
02.18.	Propagation of vegetable crops
02.25.	Grafting of vegetables
03.04.	Irrigation, mulching, training systems in vegetable production
03.11.	Fertigation of vegetable crops
03.18.	Soilless production systems
03.25.	Harvest and post-harvest technologies of vegetable crops
04.22.	<i>Field practice</i> connected to propagation of vegetables crops
04.22.	<i>Field practice</i> connected to greenhouse technology
04.29.	<i>Field practice</i> connected to fertigation
04.29.	<i>Field practice</i> connected to soilless production
05.06.	<i>Field practice</i> connected to irrigation and mulching of vegetable crops
05.06.	<i>Field practice</i> connected to harvest and post-harvest of vegetable crops

Readings:

Extended ppt materials connected to the topics of lectures and practices will be uploaded to the following internet site: <http://ujkert.szie.hu/oktatas/letoltheto-oktatasi-segedanyagok/intensive-vegetable-production-technologies>.

Recommended literatures:

Welbaum, G.E. (2015): Vegetable production and practices. CAB International, p. 476.

Rubatzky, V.E., M. Yamaguchi (1997): World vegetables. Chapman & Hall, p. 755.

Stanghellini, C., B. van 't Ooster, E. Heuvelink (2019): Greenhouse horticulture – Technology for optimal crop production. Wageningen Academic Publishers, p. 315.

Assessments:

- Maximum one absence from class room practices and one absence from field practices are allowed.
- The assessment has two main parts, and a five-graded 100 scores evaluation system. Students will have to write two tests during the semester. The first one will be written on the 11th of March about the basic characteristics of the most important vegetable crops. The second one will be written on the 13th of May from the topics covered during the semester. Maximum 15 scores will be given for each test. The first test can be repeated at one occasion on the 18th of March at 15:00. The second test can not be repeated.
- The students who have a combined score equal or better than 26 or 23 can get an excellent (5) or good (4) grade, respectively, without taking an exam.
- There will be an oral exam during the exam period (70 scores).
- The five grades are 1, 2, 3, 4, 5 according to the scored points of the total 100, listed below in the table:

5 (excellent)	86-100 scores
4 (good)	76-85 scores
3 (satisfactory)	61-75 scores
2 (pass)	51-60 scores
1 (fail)	50 scores and below

Gödöllő, 11th February, 2021

Attila Ombódi
course leader

in the name of the students