

<b>Subject name</b>	<b>Postharvest Technology of Fruit Crops</b>	
<b>Subject code</b>	<b>E.1.PTFC.SC.ECTIE.P</b>	
<b>Department</b>	<b>Department of Pomology and Apiculture</b>	
<b>Faculty</b>	<b>Faculty of Biotechnology and Horticulture</b>	
<b>Subject supervisor/Lecturer</b>	<b>Dr hab. Jan Skrzyński</b>	
<b>General information</b>	<b>Teaching period</b>	<b>Winter semester</b>
	<b>ECTS credit</b>	<b>4</b>
	<b>Lectures total</b>	<b>20</b>
	<b>Lab classes</b>	<b>10</b>
<b>Objective and general description</b>	<p>The main objective of the course is to develop basic understanding of postharvest biological, physiological and structural changes in fruit crops. Participants will learn how to avoid losses on a global and commodity scale using various storage systems. Several means of preserving fruit quality due to pre- and postharvest treatments will be demonstrated. Participants will also gain skills to recognize main physiological disorders and diseases.</p>	
<b>Lectures</b> <b>10 x 2 hours</b>	<ol style="list-style-type: none"> <li>1. Introduction – Postharvest biology and technology. Sources of losses in fruits.</li> <li>2. Fruit maturation and maturity indices.</li> <li>3. Technology of fruit harvesting.</li> <li>4. Technical systems during transportation, storage and handling.</li> <li>5. Pre- and postharvest treatments for quality maintenance.</li> <li>6. Fungal diseases of fruit and means of suppression.</li> <li>7. Physiological disorders and means of suppression.</li> <li>8. Fruit grading and sorting.</li> <li>9. Handling and transportation of fruit to distant markets.</li> <li>10. Fruit quality and standardization.</li> </ol>	
<b>Lab classes</b> <b>3 x 2 hours</b> <b>1x 4 hours field trip</b>	<ol style="list-style-type: none"> <li>1. Evaluation of stage of maturity of selected commodities.</li> <li>2. Parameters to control in fruit storage – temperature, humidity gas composition.</li> <li>3. Ripening of bananas.</li> <li>4. Field trip to fruit storage operators.</li> </ol>	
<b>References</b>	<p>Reid M.S., Serek M.: Guide to Food Transport – Controlled Atmosphere. Mercantila Publishers, Copenhagen, Denmark, 1999, ss. 162.</p> <p>Kader A.A., Kasmire R.F., Postharvest Technology of Horticultural Crops. Coop. Extension, University of California, USA, ss 192</p> <p>Journal – Postharvest Biology and Technology, Elsevier</p>	