

<b>Subject name</b>	<b>Analytical Methods in Plant Physiology</b>	
<b>Subject code</b>	<b>E1z.AMP.SC.ECTIE.O (winter)</b> <b>E1l.AMP.SC.ECTIE.O (summer)</b>	
<b>Department</b>	<b>Unit of Botany and Plant Physiology, Institute of Plant Biology and Biotechnology</b>	
<b>Faculty</b>	<b>Faculty of Biotechnology and Horticulture</b>	
<b>Subject supervisor/Lecturer</b>	<b>Anna Kolton Ph.D., Krzysztof Tokarz Ph.D., Barbara Nowak Ph.D., Barbara Piwowarczyk Ph.D.</b>	
<b>General information</b>	<b>Teaching period</b>	<b>1 semester / winter or summer semester</b>
	<b>ECTS credit</b>	<b>6</b>
	<b>Lectures total</b>	<b>10h</b>
	<b>Lab classes</b>	<b>20 h</b>
<b>Objective and general description</b>	The main objective of the course is presentation and explanation of most common used methods in plant physiology research.	
<b>Lectures 5 x 2 hours</b>	<ol style="list-style-type: none"> <li>1. Spectrophotometric, conductometric, ionometric methods</li> <li>2. Methods to evaluate photosynthesis</li> <li>3. Fluorescence, electrophoresis</li> <li>4. Microscopy</li> <li>5. Elisa test</li> </ol>	
<b>Lab classes 10 x 2 hours</b>	<ol style="list-style-type: none"> <li>1. Determination of assimilation pigments - spectrophotometer</li> <li>2. Measurement of proteins - spectrophotometer</li> <li>3. Determination of nitrates - ionometer</li> <li>4. Determination of electrolyte leakage - conductometer</li> <li>5. Photosynthesis</li> <li>6. Fluorescence</li> <li>7. Electrophoresis</li> <li>8. Microscopy</li> <li>9. Microscopy</li> <li>10. Elisa test.</li> </ol>	
<b>References</b>	Suitable materials will be prepared for students	