

<b>Subject name</b>	<b>The Outline of Applied Silviculture in North America</b>	
<b>Subject code</b>	<b>E.2.OASA.SC.ECTIE.L</b>	
<b>Department</b>	<b>Silviculture</b>	
<b>Faculty</b>	<b>Forestry</b>	
<b>Subject supervisor/Lecturer</b>	<b>Dr hab. Maciej Pach</b>	
<b>General information</b>	<b>semester</b>	<b>summer</b>
	<b>ECTS credits</b>	<b>2.00</b>
	<b>Lectures total</b>	<b>15</b>
<b>Objective and general description</b>	<p>The main objective of the course is to familiarize participants with main forest biomes and silvics in North America, basic methods of natural and artificial regeneration of forests and reforestation using different silvicultural systems, main methods of intermediate treatment and application of various silvicultural prescriptions to accomplish land management objectives.</p> <p><b>Lectures:</b></p> <ol style="list-style-type: none"> <li>1. Basic forestry (silvicultural) terms. Basic silvics and biomes of North America.</li> <li>2. Silvicultural systems – Regeneration methods, high forest methods (even-aged stands, uneven-aged stands), coppice forest methods (coppice methods, coppice with standards).</li> <li>3. Artificial regeneration, site preparation (slash disposal, prescribe burning, fertilization, mechanical treatment (mounding, scalping, mixing, disc trenching, plowing), chemical treatment, use of hand tools), methods of planting, seeding.</li> <li>4. Stages of natural and managed stand development (tree size classification), intermediate treatments - release operation (weeding, cleaning, liberation), thinning (non-commercial, timber stand improvement, commercial).</li> <li>5. Intermediate treatments - improvement cutting (presalvage, salvage and sanitation cutting), wood quality operation (pruning), fertilization, prescribed burning.</li> <li>6. Fire management, environmental issues of applied silviculture, biodiversity.</li> </ol>	
<b>Assessment method</b>	The credits will be given on the basis of the attendance, presentations and final test.	
<b>References</b>	<ul style="list-style-type: none"> <li>• British Columbia. Ministry of Forests. Forest Practices Branch. 2003. Silvicultural Systems Handbook for British Columbia. For. Pract., BC. Min. For., Victoria, BC, Canada;</li> <li>• Nyland R. D. 2007. Silviculture. Concepts and Applications. Second edition, Waveland Pr. Inc., USA, 682 p.;</li> <li>• Puettmann K.J., Coates K.D., Messier C. 2009. A Critique of Silviculture. Managing for Complexity. Island Press, Washington, DC, 188 p.;</li> <li>• Silviculture and Forest Aesthetics Handbook, 2431.5. 2009. State of Wisconsin, Department of Natural Resources, USA, 551 p.;</li> <li>• Smith D.M., Larson B.C., Kelty M.J., Ashton P.M.S. 1997: The practice of silviculture: applied forest ecology. 9th ed. John Wiley &amp; Sons, Inc., New York, USA 537 p.;</li> <li>• Thomas P.A., McAlpine R. 2010. Fire in the Forest. Cambridge University Press, 225 p.;</li> <li>• Walker L.C. 1999. The North American Forests. Geography, Ecology, and Silviculture. CRC Press, 398p.</li> <li>• Woodland Owner Notes, Pruning Woodland Trees, North Carolina State University, Cooperative Extension Service</li> </ul>	