

<b>Name of subject:</b> <b>Cellulose and Pulp Fiber Chemistry</b>	<b>NEPTUN-code:</b> <b>RMTEFCACVNC</b>
<b>Number of hours:</b> full time: 2 lectures <b>Credit: 2</b> <b>Requirement:</b> semester grade	<b>Pre-requisite:</b> none
<b>Responsible professor:</b> <b>László Koltai Ph.D.</b>	<b>Name of faculty and institute:</b> Rejtő Sándor Faculty of Light Industry and Environmental Engineering Media Technology and Light Industry
<b>Evaluation and assessment procedures:</b>	
It is compulsory to attend the lectures. The rules of education and exam directory (TVSZ) are the guidelines	
<b>Subject content:</b>	
<p>The aim of the course is to introduce students to the principles of cellulose and pulp fiber chemistry and technology. An important part of this knowledge includes the principles of organic chemistry. This course contains only selected topics on cellulose chemistry and aims to help students to learn the molecular logic of plant fibers. Cellulose is the structural component of the primary cell wall of green plants. It is the major constituent of paper, paperboard, and card stock and of textiles made from cotton, linen, and other plant fibers. In the process of cellulose fibre production, the type of cooking, chemical penetration, the type of chemical reaction, and the technological method used to separate lignin from plant fibres alter the surface characteristics of the pulp. At the same time, the success of these technologies depends on the properties of the fibre surface.</p> <p>In order to produce high quality paper products, it is very important to alter the chemical construct of the fibre and its surface because the properties of the products of the paper industry depend on the raw and auxiliary materials' surface quality. The mechanical parameters of paper, (flexibility, permeability) are influenced by the content and the method by which the pulp is produced.</p>	