

## FIBER TECHNOLOGY

### 1.1. Identification

University:	Kungliga Tekniska Högskolan (Stockholm)										
School:	School of Chemical Science and Technology										
Course:	Fiber Technology										
ECTS:	6										
Semester:	<i>Winter</i>					<i>Summer</i>				X	
Category	<i>Fundamental course</i>				X	<i>Specialisation course</i>					
Module	<i>MFI</i>		<i>MFII</i>	X	<i>MFIII</i>		<i>MSI</i>		<i>MSII</i>		<i>MSIII</i>
Teachers:	Lars Wågberg										
Language:	<i>English</i>	X	<i>Italian</i>		<i>Swedish</i>	X	<i>Spanish</i>				

### 1.2. Learning-outcomes

- knowledge about the fundamentals of fiber technology

### 1.3. Competencies

#### ▪ General

- to have critical understanding of technical and scientific tools
- to work and manage teams
- communication skills (both written and oral)
- to work in an international context

#### ▪ Specific

- to understand the chemical structure of fiber products, as well as their linking ways with other materials
- to know the bulk and surface chemistry of fibers and modification by physical-chemical methods.

### 1.4. Contents

Structure of wood based fibres and the properties of fibre products. Link between fibre properties and product properties. Unit operations effects over the fibre: chemistry, surface and morphology. Bulk and surface chemistry of wood fibres. Fibre modification by different chemical and physical methods. Use of English technical and scientific literature.

**1.5. Teaching Methodology**

- Lecture sessions
- Practical sessions: “cooperative work” for solving problems
- laboratory sessions

**1.6. Evaluation**

- written exams
- oral evaluation of the problems solved by “cooperative work”
- oral evaluation of laboratory work

**1.7. Bibliography**

- Krassig, H., Lenz, J., Mark, M., “ Fiber Technology from film to fiber” Dekker Publ.
- Menachem, L., Stephen, S. “Handbook of Fiber Science and Technology” Dekke Publ.