Zurich University of Applied Sciences

School of Engineering

t.KV - Kunststoffverarbeitung

Person responsible for the course:	Gregor Peikert, peik
Credits:	3
Valid for:	2010/2011
Last saved:	01.09.2010 11:19

Learning objectives:

The students
- know the rheological behaviour of plastics
- know processing of plastics
- know the relation between the structures of plastics and possible processing procedures
- know the influence of additives on processing and material properties
- know the influence of processing procedures and conditions on the materials properties
- gain an insight into the current research on plastics processing

Course content:

Rheology of plastics
Terms and classification of processing procedures
Compounding (mixing, granulating, milling, predrying, influence of additives, fillers and reinforcements)
Primary shaping
- Extrusion (incl. reactive extrusion, extrusion blow moulding, stretch blow moulding, calendaring, fibre spinning)
- Compression moulding
- Injection moulding (incl. special processes)
- Rapid Prototyping
- Fibre-reinforced materials (prepreg, fibre spraying, fibre winding, pultrusion, laminating by hand, RTM process)
- Casting
- Foaming

Forming
- Thermoforming

Previous knowledge:

PMA

Teaching method:

Type of lesson:	Number of lessons per week:
Lecture	10x3L
Tutorial/Practicum	4x3L
Group teaching	
Block instruction	
Seminar	

Assessment:

According to the table or as specified in writing by the lecture at the beginning of the semester!

Number	Type	Weighting
1	End of term exam	
	practicum report(s)	
	Further assessments	

Language of instruction:

Deutsch

Instruction material:

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Comments:

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