



COURSE DATASHEET

Semester:	2016/17/1
Course:	Role of the silicates in evolution of civilization
Code:	VEMKSISV12A
Responsible department:	Institute of Materials Engineering
Department code:	MKSI
Responsible instructor:	dr. Tamás Korim

Course objectives:

Demonstration of the role of silicates in the cultural, technical development of civilization from early history to nowadays. Teaching the history, development and production of ceramic-, glass- and cementitious materials.

Course content:

The formation and spreading of Si in the universe; Classification of silicates; Connection between the development of humankind and silicates; The role of the clay in the human culture, history of ceramics; Forming methods of ceramics; Modern structural materials; Determination of glassy state; Development of glassy products, Shaping of glass products; The history and importance of binding materials in the development of humankind; Classification of binding materials; Cementitious materials, their manufacture and applications; Concretes

Requirements, evaluation and grading:

Attendance of lectures

Required and recommended readings:

Tamás F.: Szilikátipari kézikönyv, MK, Bp. Riesz Lajos: Cement- és mészgyártási Kézikönyv, ÉTK, Bp. H.F.W. Taylor: Cement Chemistry. Academic Press, London F.V. Tooley: Handbook of Glass Manufacture Ashlee Publ. New York W.D. Kingery: Introduction to Ceramics. Wiley, New York