



## COURSE DATASHEET

<b>Semester:</b>	2014/15/2
<b>Course:</b>	Role of the silicates in evolution of civilization
<b>Code:</b>	VEMKSISV12A
<b>Responsible department:</b>	Institute of Materials Engineering
<b>Department code:</b>	MKSI
<b>Responsible instructor:</b>	dr. Tamás Korim

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### 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