



Course name	Methodology of making ceramic masses and glazes
Entity running the course	Faculty of Ceramics and Glass/Department of Conservation and Restoration of Ceramics and Glass
Entity for which the course has been prepared	
Course type	Specialty course, compulsory course .
Year of study/semester; Type of studies	Year III, semestr 5 and 6; full time master's degree studies
ECTS credits	Sem. 5: 2 ECTS credits, sem. 6: 1 ECTS credits
Academic tutor	D.Sc. Henryk Stoksik, professor of the Academy of Art and Design
Aim of the course	The aim of the course is to acquaint the student with plastic and non-plastic raw materials used for production of faience.
Prerequisites	The II year of the study passed.
Learning outcomes:	
- <i>knowledge</i>	The student should demonstrate their knowledge in the area of production of faience masses and glazes. They should know the methods for colour measurement and ways of synthesizing ceramic pigments.
- <i>skills</i>	The student should be able to prepare a faience mass and moderately fusible glaze. They are expected to be able to use the colour range of staining oxides for colouring moderately fusible glazes and to carry out synthesis of a pigment.
- <i>social and personal competence</i>	The student is a good team member. They understand the need for developing their knowledge. They have the ability to analyze knowledge and use it in practice. They present the obtained results in a comprehensible and approachable manner. They independently analyze and interpret information and manifest the attempts of its critical assessment.
Course content	Calculating the mineralogical composition of faience masses. Methods for moulding faience. Conditions of firing faience. Methods for calculating moderately fusible ceramic glazes. Methods of colour measurement for determining the color of a pigment, paints and ceramic glazes. Impact of chemical composition of glaze on the colour of a pigment. Dispersity of pigments and methods for its evaluation. The impact of temperature and type of pigments synthesis atmosphere on their colour in glazes. Methods for the preparation of ceramic pigments.
Course form and number of course hours	Lecture – 30 hours/sem.
Assessment methods and criteria	Semester 5: 100% active participation in classes Semestr 6: 25% active participation in classes, 75% written exam.
Assessment type	Pass at the end of semester 5. Written graded exam at the end of semester 6.
Literature	Warszaw J., Ceramika, / <i>Ceramics</i> /, Arkady, Warszawa 2007. Wyszomirski P., Galos K., Surowce mineralne i chemiczne przemysłu ceramicznego, / <i>Mineral and chemical raw materials of ceramic industry</i> /, Wydawnictwo Naukowe AGH, / <i>Scientific Publishers AGH</i> /, Kraków 2007. Mattison S., Podręcznik ceramika, / <i>Handbook Ceramics</i> /, Arkady, Warszawa 2006. Bolewski A., Budkiewicz M., Wyszomirski P., Surowce ceramiczne, / <i>Ceramic raw materials</i> /, Wydawnictwo Geologiczne, / <i>Geological Publisher</i> /, Warszawa 1991. Awgustinik A.J., Ceramika, / <i>Ceramics</i> /, Arkady, Warszawa 1980. Stoksik H., Synteza barwnych połączeń niestechiometrycznych dla zastosowań w ceramice, / <i>Synthesis of colorful non- stoichiometric connections in ceramics</i> /, Praca doktorska, / <i>PhD dissertation</i> /, Wrocław 1986. Magazines: Szkło i ceramika, / <i>Glass and ceramics</i> /.
Teaching aids	A projector.

Language of instruction	Polish
-------------------------	--------