



Course name	Conservation Chemistry
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	Core course, compulsory course.
Year of study/semester; Type of studies	Year III, semester 5 and 6; full time master's degree studies.
ECTS credits	1
Academic tutor	D.Sc. Zbigniew Burski
Aim of the course	The aim of the course is to acquaint the student with the synthetic materials (polymers) applied in conservation and restoration of ceramics and glass.
Prerequisites	The II year of the study passed.
Learning outcomes:	
– <i>knowledge</i>	Having completed the course, the student should demonstrate knowledge in the area of proper selection of polymer material for conservation and restoration of the historical objects made of ceramics or glass. They know the properties of the polymeric materials discussed during classes. They know how to work with synthetic resins. They know toxicological hazards associated with the synthetic resins.
– <i>skills</i>	The students should be able to select proper polymer material for conservation and restoration of the object made of ceramics or glass. They can match an optimal application technology for the material selected. They can protect themselves against harmful effects of the synthetic resins.
– <i>personal and social competence</i>	The student understands the need for extending their knowledge. They can independently recognize the risk associated with the use of harmful substances. They are self confident in communicating with others and present their arguments in an approachable form.
Course content	Presentation of synthetic materials (polymers) with all the aspects of their physical and chemical properties, including explanation of their destruction (aging) causes and instruction how to counteract these processes. Explanation of the terminology and application methods of the following resins: acrylic, epoxy, silicone, polyester, polyurethane and polymers, such as polycarbonates, polyamides, and others.
Course form and number of course hours	Lecture 30 hours./sem.
Assessment methods and criteria	Semester 5: 100% active participation in classes Semester 6: 25% active participation in classes, 75% written exam
Assessment type	Semester 5: pass. Semestr 6: exam.
Literature	J. Pielichowski, A. Puszyński, „Chemia polimerów“, / <i>Chemistry of polymers</i> /, Kraków 2004. J. Ciabach . „Właściwości żywic sztucznych stosowanych w konserwacji zabytków“, / <i>Properties of synthetic resins applied in the conservation of monuments</i> /, Toruń 2001. T. Broniewski, J. Kapko, W. Płaczek, J. Tomalla, „Metody badań i ocena właściwości tworzyw sztucznych“, / <i>Testing methods and assessment of the properties of synthetic materials</i> /, Warszawa 2000.
Teaching aids	
Language of instruction	Polish