Course unit title	MANUFACTURING TECHNOLOGY OF CERAMIC DENTAL PROTHESES
Course unit code	DT(SK)/5-2
Type of course unit	Compulsory
Level of course unit	First cycle
Year of study (if applicable)	Third year
Semester/	Fall semester
Number of ECTS credits allocated	3 ECTS
Learning outcomes of the course unit	**Upon completion of the course unit, students will be able to:** LO1. Plan a high-quality fixed dental prosthesis that matches the patient's tooth colour characteristics. LO2. Prepare an impression of prosthetic supporting tissues and fabricate a removable working model. LO3. Model wax patterns of fixed dental prostheses. LO4. Construct a high-quality fixed dental prosthesis corresponding to the patient's aesthetic and colour characteristics. LO5. Evaluate the quality of ceramic restorations from technological and aesthetic perspectives.
Mode of delivery	Blended learning
Prerequisites and co-requisites	Students must have completed Dental Functional Anatomy, Aesthetics and Modelling, Dental Technological Materials, Fundamentals of Fixed Dental Prostheses, Manufacturing Technologies of Fixed Dental Prostheses, and Ceramic Dental Prosthesis Fabrication Techniques and Digital Technologies.
Course contents	Types, composition, properties, indications and working principles of ceramics used for indirect aesthetic restorations. Dental veneers. Manufacturing technology of metal-free pressed ceramic veneers. Light transmission of all-ceramic systems and shade selection. Fabrication of removable working models using the Carrot technique, model articulation, wax pattern modelling, investing, ceramic pressing, divesting, acid etching, removal of sprues, fitting, individual shade characterisation and glazing. Analysis of clinical and laboratory stages of veneer fabrication, ceramic materials, their chemical, physical and mechanical properties, indications, contraindications, advantages, limitations and possible clinical and technical errors.
Planned learning activities and teaching methods	Comparison methods, analysis of advanced practice, evaluation discussion, work with literature, experiential guidance, individual work, experiential exercises, presentation of viewpoints, demonstration, practical laboratory work and independent study.
Assessment	Examination. The final assessment is cumulative: examination – 50%, feedback assessment – 10%, average of interim assessments – 40%. Interim assessments consist of case analysis – 40%, testing – 20%, and practical work – 40%.
Language of instruction.	English
Work placement(s)	Utenos kolegija Higher Education Institution Faculty of Medicine Dental Laboratory