Master of Science in Dental Materials Science

Learning Outcomes

Upon successful completion of this course, the students will be able to:

1. Utilize the appropriate biomaterials knowing their ideal properties.
2. Identify and describe specific clinical and dental laboratory applications of the commonly used dental biomaterials.
3. Be familiar with the fabrication, use, and manipulation of the commonly used dental materials in dental laboratories.
4. Acquire the knowledge of evaluating, contrasting and comparing and selecting the various dental materials in the labs and clinics.
5. Be familiar with literature search methods, identifying problems in dental materials science and executing scientific research and reporting. To be familiar with the reading of the biomaterials' science literature and to write critically and scientifically.
6. Have interdisciplinary communication and team work skills.

As transferable gained skills, the students will be able to:

1. Understand the properties and potential of dental biomaterials.
2. Be familiar and aware of the indications/contraindications and applications of dental materials.
3. Being competent in investigating the different properties of dental biomaterials by using the appropriate biomechanical and other tests in the laboratory.

Curriculum: _____

1. **Mapping of Programme Learning Outcomes (PLOs) against University Educational Aims (UEAs)**

UEAs		PLOs		
	Indirect Evidence		**Centrality**	
			Core	**Auxiliary**
Critical intellectual enquiry and acquiring up-to-date knowledge and research skills in a discipline / profession	SLEQ	Utilize the appropriate biomaterials knowing their ideal properties.	X	
Application of knowledge and research skills to practice or theoretical exploration, demonstrating originality and creativity	SLEQ	Identify and describe specific clinical and dental laboratory applications of the commonly used dental biomaterials.	X	
Tacking novel situations and ill-defined problems	SLEQ	Acquire the knowledge of evaluating, contrasting and comparing and selecting the various dental materials in the labs and clinics.	X	
Collaboration and communication of disciplinary knowledge to specialists and the general public	SLEQ	Be familiar with literature search methods, identifying problems in dental materials science and executing scientific research and reporting. To be familiar with the reading of the biomaterials' science literature and to write critically and scientifically	X	
Awareness of leadership to personal and professional ethics	SLEQ	Be familiar with the fabrication, use, and manipulation of the commonly used dental materials in dental laboratories.	X	

Enhancement of leadership and advocacy skills in a profession	SLEQ	Have interdisciplinary communication and team work skills.	X	

Core: PLOs considered central to the discipline or profession, and assessed
Auxiliary: PLOs considered to be important but not assessed