

DESCRIPTION AND CONSTRUCTION SCHEME OF THE LSMU ODONTOLOGY INTEGRATED STUDIES PROGRAMME

The purpose of the seminar

The seminar is a discussion and evaluation of students' independent work under the guidance of a lecturer. The session is student centred. Students have already listened to the lectures of the subject, but the aim of the seminar is to further deepen and consolidate the knowledge they already have or have newly acquired. Thus, students are encouraged to think and analyse and critically evaluate the subject material. Certain innovations, requirements, technologies in the field of dentistry are discussed, experience is shared, various problems are raised, and solutions are sought.

Preparation for the seminar and its course

The seminars are held in suitable premises, which must have video and audio broadcasting equipment, a computer with Internet access to the LSMU library and information centre, or in a virtual learning environment.

The topic of the seminar is indicated in the subject description. During the first session or the previous seminar, the lecturer indicates the accents of the future seminar. The purpose of the seminar, the competencies to be acquired, the study and assessment methodologies, and the information indicating what students need to prepare in addition for self-study are indicated in the virtual learning environment (VLE).

When preparing a seminar, the lecturer must, depending on the material taught, anticipate and select the most appropriate methodology for the individual structural components of the seminar, such as what the training material will be, its presentation and analysis methods, teaching and assessment methods.

Acquired competencies

The competency-based study model seeks to develop four key areas of competence that a student must acquire upon completion of odontology studies: professionalism, safe and effective clinical

practice, patient-centred treatment, and odontology in society. These competencies, in turn, are divided into several categories of competencies established in the description of odontology studies.

Taking into account the study results (competencies) required to acquire, the following principles are applied to the organisation and lecturing at the seminar (Figure 1):

1. professionalism;
2. patient centred;
3. holistic approach;
4. clear definition of study results;
5. links with public health and prevention.

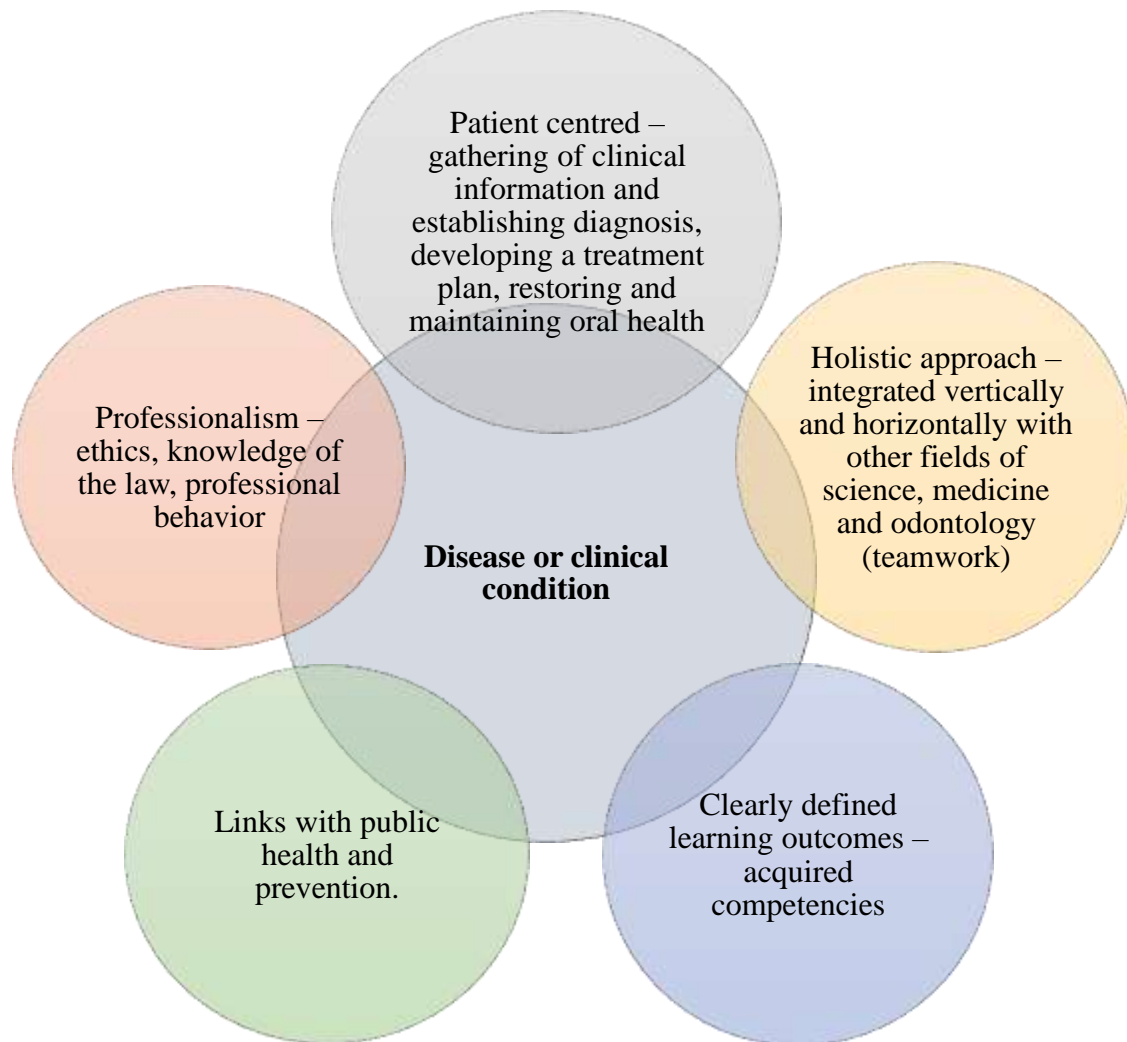


Fig.1 Principles of organising the activity, taking into account the competencies to be acquired

Methods of lecturing and studying

After assessing the students' level of knowledge and experience, the lecturer chooses the most appropriate teaching method and length of time for the seminar. The seminar should be interactive; a variety of teaching methods can be used – surveys, case studies, discussions, debates, reports, theoretical or practical demonstration of the method, group work, role-plays and more. An example of the construction scheme of the seminar is given in Table 1.

Table 1. Example of a seminar construction scheme

Seminar no.	Seminar XXV No.12.1	
The topic of the seminar	Methods for the evaluation of oral solid tissues in primary and permanent occlusion.	
Preparation for the seminar	I. Collection and documentation of patient health history. II. Peculiarities of primary, mixed, permanent bite. III. Principles of oral solid tissue assessment methodologies.	
Purpose	To know the principles of oral solid tissue assessment methodologies, to be able to assess the condition of oral solid tissues using different assessment methodologies.	
Tasks learned during the seminar (to learn, be able to)	I. Learn to evaluate and document the dental condition according to WHO criteria.	
	II. To learn to evaluate and document the condition of teeth according to Nyvad criteria (Nyvad, Maciulskiene, Baelum, 1999).	
	III. Learn to evaluate and document the condition of teeth using the International System for the Detection and Evaluation of Tooth Decay ICDAS II.	
	IV. To be able to determine and evaluate the prevalence and intensity of tooth decay.	
	V. To learn to evaluate non-carious dental lesions.	
	VI. To be able to perform differential diagnosis of oral solid tissue diseases.	
Acquired knowledge / skills after the seminar (knows, understands, is able to)	Theoretical (knows, understands)	Practical (is able to)
	I. Knows the principles of oral solid tissue assessment methodologies.	I. Is able to collect and document the patient's health and dental history. II. Is able to identify the localisation, spread, activity of tooth decay. III. Is able to identify non-carious dental lesions. IV. Is able to perform differential diagnosis of dental diseases.
	I. Is able to collect and document the patient's health history.	

Assessment criteria (is able to, knows)	I. Is able to evaluate and document the dental condition according to WHO criteria.
	II. Is able to evaluate and document the condition of teeth according to Nyvad criteria (Nyvad, Maciulskiene, Baelum, 1999).
	III. Is able to evaluate and document the condition of teeth using the International System for the Detection and Evaluation of Tooth Decay ICDAS II.
	IV. Is able to determine and evaluate the prevalence and intensity of tooth decay.
	V. Is able to evaluate non-cariou dental lesions.
	VI. Is able to perform differential diagnosis of oral solid tissue diseases.
Methods of assessment	Clinical situation.
Equipment	Dental device, dental mirror, probe, outpatient card, methodological material.
References	1.

Association for Dental Education in Europe recommends tools such as critical reflection, threshold concept, feedback teaching, telling, and others (Table 2). All teaching strategies need to be tailored to needs, but the main goal is to focus on the intended learning outcomes through critical thinking.

Students, in turn, have to study the specified materials independently. After the lecturer has indicated in advance what to prepare in addition and after assigning the tasks, the preparation of presentations, review of the latest literature, presentation of the report, projects and other things are performed.

Table 2. The teaching methods recommended by ADEE, the most suitable (X) for the acquisition of individual areas of competence

Lecturing method	Professionalism	Safe and effective clinical practice	Patient centred treatment	Odontology in society
Productive failure training	-	X	-	-
Threshold concept	X	X	-	-
Feedback training	X	X	X	X
Implied	X	X	X	-

training				
Critical reflection	X	X	-	X
Performance of roles	X	X	X	X
Student exchange programmes	X	X	-	X
Block chain	X	X	-	-
Social communication tools	X	-	X	X
Threshold concept and personal research-based learning	X	-	X	-
Telling	X	-	X	-
Concentric wheel method	X	-	X	X

Evaluation

Assessment is formative (i.e. informal, where student activities are assessed by comment or orally, reflecting on each activity, supplementing and correcting answers and work done, and formal, when written comments are written according to opportunities and needs, indicating successes and failures, opportunities for aiming for better results) and summative (i.e. informal when evaluating essays, portfolios and term papers and formal, such as tests, exams).

The lecturer evaluates the knowledge and skills shown by the students. The most appropriate assessment method is chosen and the assessment itself must be based on clear criteria and standards, taking into account the nature of the task, the level of competence and other criteria. Using the Miller Pyramid principle, it is possible to assess students' knowledge at different levels of preparation. This conceptual model identifies the components required for clinical competence in a hierarchical order - from basic knowledge and its application (know and know how) to practical application of knowledge when working with a model (show how) and demonstrating how a specialist applies knowledge in clinical practice (Figure 2). The implementation of the model requires that the evaluation be periodic and progressive, accumulating reflective diaries / portfolios.

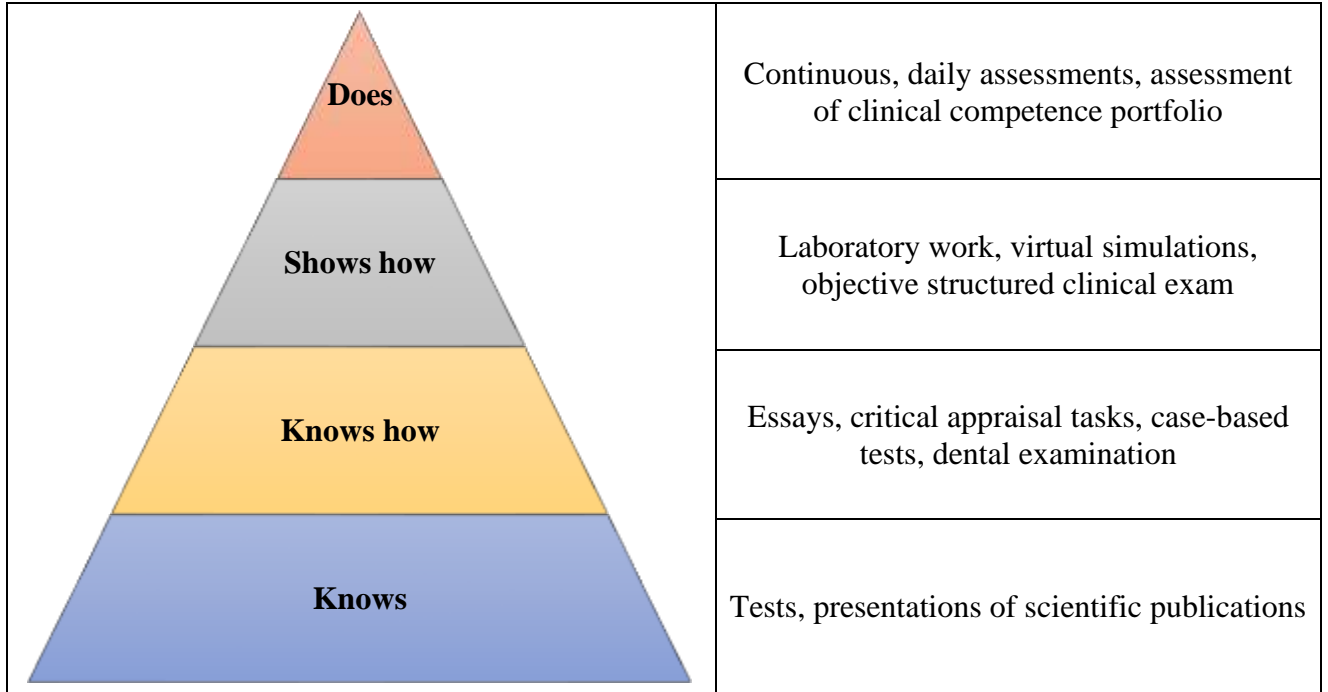


Fig. 2 Miller pyramid, demonstrating a model for developing and assessing competencies

However, it is equally important to apply assessment methods not only according to the level of competence, but also according to the areas of competence recommended by the Association for Dental Education in Europe in the Guidelines for Undergraduate Studies in Dentistry. An assessment method can be chosen depending on the competence acquired (Table 3). All assessment methods are suitable, except exams.

Table 3. Evaluation of competency-based clinical practice in profile clinics

Composition of clinical practice (acquired competencies)	Description of categories	Maximum grade	Part of the assessment grade.	
1. Professionalism	1. proper use of allocated time; 2. appropriate professional conduct in communication with colleagues and support staff;	10	10	50

	3. neat clothes, punctuality.		
2. Patient centred treatment	1. ability to communicate with the patient, meaning, collection of medical history, provision of information to the patient about the condition of the mouth / teeth, explanation and coordination of planned diagnostic and treatment procedures; 2. examination of the patient (selection of appropriate diagnostic methods) and preparation of the treatment plan, filling in the documentation.	10	10
3. Safe and effective clinical practice	1. compliance with infection control rules; 2. analgesia (performed independently, correct methodology, successful result).	10	10
4. Odontology in society	1. knowledge and promotion of prevention measures.	10	10
5. Treatment procedure	1. the clinical procedure under evaluation is recorded.	10	50
Overall assessment	the average of 1, 2, 3, 4 competencies and 5 competence assessment is derived in equal proportion ((average of 1, 2, 3, 4 competencies assessment + 5 competence assessment): 2).	10	100

Reflection

At the end of the seminar, students evaluate and discuss the learning stage, including the teaching / learning process and the results achieved.

Key questions:

- What went well?
- What were the difficulties?
- How can they be avoided in the future?
- What actions were helpful?
- Which group has made progress and why?

Questions for the summary:

- Did we achieve what we set out ourselves?

- What did we learn about the content of the task?
- How can we work better together next time?
- Are the acquired knowledge / understanding, skills sufficient, is the practical task understood and mastered?