

## COURSE SYLLABUS

### Semmelweis University Faculty of Dentistry, Dentistry

**Name of the course:** Basic Restorative Digital Dentistry

**Credit value:** 1

**Lessons (in hours in the whole semester):** from this, lectures: 7 x 45 min practicals: 7 x 45 min seminars: 0

**Type of the course:** elective

**Semester in which it is announced according to the curriculum:** spring

**Frequency of announcement (per semester or year):** year

**The responsible educational and research organizational unit for teaching the subject:** Department of Prosthodontics

**Academic year:** 2024/2025 II. semester

**Subject (Neptun) code:** FOSVFPK214\_1M, FOSVFPK214\_1A, FOSVFPK214\_1N

**Lecturer of the course:**

Semmelweis University Faculty of Dentistry Clinic for Prosthodontics

Dr. Judit Borbély, Associate Professor, Clinic for Prosthodontics

**Contact:**

[borbely.judit@semmelweis.hu](mailto:borbely.judit@semmelweis.hu)

Opening hours of the Secretariat:

Monday: 8:00 – 12:00

Tuesday: 8:00 – 12:00

Wednesday: 8:00 – 12:00

Thursday: 8:00 – 12:00

Friday: Closed

Students are welcomed only in the office hours. Please be aware of it!

**The goals and place of the course in regards to the education of dental students:**

Special optional course for training and teaching Hungarian, English and German program students to have basic knowledge of restorative digital dentistry. Students can meet digital solutions in dentistry, can learn basic knowledge of chairside and lab CAD/CAM systems, CAD/CAM material, milling machine, stain and glaze method. All information from digital dental topics are essential in modern everyday dentistry and up to date modern university curriculum

**Location of the course (address of lecture hall, seminar room etc.):**

Room 604 os Dr. Schranz Dénes classroom (1088 Budapest, Szentkirályi street 47. 6th floor)

**Competences acquired by completion of the course:**

After the course student will possess basic knowledge of restorative digital dentistry which will be useful at domestic and international use.

**Pre-study requirements and prerequisites of course registration and completion, in case of a multi-semester subject, the standpoint of the educational-research unit on the concurrent subject registration and on the requirements of permission thereof :**

Completed first three academic years

Concurrent subject registration is not possible.

**Number of students required for announcement of course (min., max.), method of selection:**  
min. 5 and max. 20

**Method of course registration:**

Neptun system

**Detailed course/lecture description<sup>1</sup>: (to facilitate credit recognition in other institutions)**

**2025 Basic restorative digital dentistry Thursday, 16.00**

Lectures: Schranz lecture hall, 6th floor

1. March 6.

Introductory lecture to Basic Restorative Digital Dentistry elective course

45 minutes

Dr. Borbély J.- room 604, 6th floor

2.-3.-4. March 13.

Intraoral scanning theory and Moodle IOS videos

2X45 minutes + 45 minutes online

Dr. Vitai Viktória, Dr. Pál Adrienn

Basics of intraoral scanning, IOS systems, scan strategy

Introductory videos to intraoral scanning

5.-6.-7. March 20.

3D printing theory and Moodle 3DP videos

2X45 minutes +45 minutes online

Dr. Németh Anna, Dr. Kisgergely Mirjam

Basics of additive manufacturing, design and production

Introductory videos to 3D printing

**Practices:**

8.-9.-10. March 27. - 6th floor Schranz lecture hall

intraoral scanning 3X45 minutes hands-on course

Dr. Borbély Judit, Dr. Pál Adrienn, Dr. Vitai Viktória

Intraoral scanning hands-on course

11.-12.-13. April 3.- 5th floor digital laboratory

3D printing 3X45 minutes workshop

Dr. Németh Anna, Dr. Kisgergely Mirjam

Formlabs workshop

11.-12.-13. April 10. – additional 2nd time due to the large number of participants

3D printing 3X45 minutes workshop

Dr. Németh Anna, Dr. Kisgergely Mirjam

Formlabs workshop

14. April 10. /April 17.

Consultation: Dr. Vitai V.- 45 minutes, 6th floor, room 604

**Courses (compulsory and obligatory elective) which in part or entirely overlap the topics of above course:**

General Dental Materials

Odontotechnology and Prosthodontics Preclinical Course I – III.

Prosthodontics I – V.

Clinical Dentistry I – II.

Gnathology

**Special academic work required for completion of the course<sup>2</sup>:**

-

**Attendance on practices and lectures, replacement in case of missed sessions:**

Students must attend the lectures.

No more than 25% of the lecture sessions are allowed to be missed for any reason – not even with a doctor's note – otherwise the semester will not be accepted.

Students must arrive for the lectures on time, otherwise they will disturb the lecturer and the audience. Before the sessions the lecturers of the Clinic will check the attendance and the accurate arrival of the students. It is considered an ethical misdemeanor to fake one's identity or to certify someone else's presence and doing so will result in an immediate ethical and disciplinary proceeding.

The use of cell phones during the practices is forbidden. If the student uses his / her mobile phone despite the warning of his / her instructor, he / she will be not allowed to continue the practice and will have to leave the room immediately. This is considered as an absence, which is included in the number of absences allowed during the semester (maximum 3). During the practices, students can use tablets, notebooks, and small laptops to take notes.

**Method of checking acquired knowledge during the study period<sup>3</sup>:**

No monitoring during the semester.

**Requirements of an accepted semester (*signature of the lecturer*):**

Students must attend a minimum of 75% of the lectures.

**Type of the exam:**

semifinal

**Requirements of the exam<sup>3</sup>:**

Final test exam (1 semester): Requirement is the whole material of the semester. Compulsory written test is carried at the end of semester, satisfactory grades can be given in case of a result of 61% or above. Written test is carried out on last lecture of semester.

**Grading of courses<sup>4</sup>. The possibility and requirements of an offered grade:**

- 1: - 49%
- 2: 50% - 63%
- 3: 64% - 76%
- 4: 77% - 89%
- 5: 90% - 100%

In case of unsatisfactory final grade (1), the semester will not be accepted.

No offered grade.

**Exam registration:**

Neptun system

**Rules of repeating exams:**

Case of no show is judged according to current rules and guidelines of the Educational and Examinational Rules of Semmelweis University.

**List of textbooks, lecture notes and recommended textbooks, online material:****Lecture notes****Recommended textbooks:**

DDS, MS, PhD Radi Masri, DMD Carl F. Driscoll (szerk.): Clinical Applications of Digital Dental Technology (2015 John Wiley & Sons Inc, Print ISBN:9781118655795 |Online ISBN:9781119045564)

Alessandro Agnini, Andrea Agnini, Christian Coachman (szerk.): Digital Dental Revolution – The Learning Curve (Quintessence Publishing, Italy, 2015, ISBN 978-88-7492-017-4)

**Other study aids:**

Moodle

On the website of Department of Prosthodontics: <a href="https://semmelweis.hu/fogpotlastan/en/">https://semmelweis.hu/fogpotlastan/en/</a> topic of the lectures	
<b>Signature of course lecturer:</b>	<i>Dr. János Zelen</i>
<b>Signature of head of department:</b>	<i>[Signature]</i>
<b>Date of submission:</b> February 3, 2025	
<b>Opinion of OKB:</b>	
<b>Notes from the Dean's Office:</b>	
<b>Signature of Dean:</b>	



<sup>1</sup> Detailed and numbered for each week of theoretical and practical lessons one by one. In an annex, cannot be attached appendix!

<sup>2</sup> Eg. homework, report, midterm exam etc. Topics, dates, method of retake and replacement

<sup>3</sup> List of topics in case of theoretical exam, thematic and method in case of practical exam

<sup>4</sup> Method of inclusion of theoretical and practical exams. Method of inclusion of midterm assessments.