

2TL053 Oral Biomedicine 2 7.5hp

Moment 1 – Oral Development and Anatomy 6hp

Moment 2 – Oral Biochemistry 1.5hp

Course dates:

Monday 5th May to Thursday 5th June

Learning Outcomes:

Moment 1 - Oral Development and Anatomy

After the course, the student can:

- Account for normal development of the face and oral cavity, including tooth formation, and explain how developmental disorders in these structures occur.
- Describe in detail the normal features of the tissues that build up the oral cavity, salivary glands and facial skeleton, with the use of histological images.
- Account for the structure of the tooth, distinguish between and identify primary and permanent teeth, and describe their most common morphological characteristics.
- Describe normal occlusal development and a normal dentition with a correct nomenclature.
- Mold teeth according to their specific morphological characteristics.

Moment 2 - Oral Biochemistry

After the course, the student can:

- Explain concepts and definitions within oral biochemistry.
- Describe the organic and inorganic components of hard tissues and how they contribute to hard tissue formation.
- Describe the organic and inorganic components of saliva.
- Explain how the chemical composition and production of saliva influences saliva function.
- Describe the biochemical composition of gingival crevicular fluid, pellicle and plaque as well as reflect on how these affect the oral environment.
- Reflect on the importance of fluoride and overall oral biochemistry in preserving the healthy oral environment.

Content:

Oral Development and Anatomy module covers:

- Development of the face and mouth
- Normal histology of the oral cavity, salivary glands and facial skeleton
- Normal development and anatomy of the dentition and teeth
- Normal occlusion

Oral Biochemistry module covers:

- Hard tissue biochemistry
- Saliva biochemistry
- Gingival crevicular fluid biochemistry
- Pellicle and plaque biochemistry
- Fluoride biochemistry

Moment 1 Responsible:

Johanna Svedenlöf

Moment 2 Responsible:

Rachael Sugars

Examiner and Course Leader:

Rachael Sugars

Language:

The course will be held in both English and Swedish, and it is possible to respond to examination questions in either language.

Criteria for pass grade:

1. Attendance at mandatory sessions (denotated with * in schedule – these are lab associated sessions related to the hands-on anatomy modelling practical's)
2. Pass the moment examination
3. Reflection for moment 2

Examination dates:

Module 1 – Oral Development, histology and anatomy Monday 2nd June 8:15 – 11:15Module 2 – Oral Biochemistry Thursday 5th May 11:15 – 14:15

Course tutors:

Rachael Sugars	RS	rachael.sugars@ki.se
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Program:

Mandatory sessions / tasks are shown with *

Date	Time	Groups	Session	Learning activity	Session type	Tutor	Location
Mon 5th May	9:00 – 9:45	All		Welcome and Introduction to OBM 2	*	RS	4U
	10:00 – 11:00	All	Anat 1*	Introduktionsföreläsning momentupplägg/	Lecture *	JSV	4U
	12:00 – 17:00	All	Anat 1 study	1. Tandanatomi (primärbett, växelbett och permanent bett) 2. Inläsning TBL 1 seminarium			1. Online (recorded on Canvas) 2. Self-study
Tues 6th May	9:00 – 12:00	All	Anat 2	Föreläsning endorot anatomi, rotkanaler (M1)	Lecture Online	PN	Online (recorded on Canvas)

	13:00 – 17:00	All	Anat 1 study	Schemalagd inläsning TBL seminarium 1 tandanatomi (M1)	Online + questions		Self-study
Wed 7th May	9:00-12:00	All	DevH 1	Craniofacial Development (M1)	Lecture	MP	Zoom
	13:00 - 16:00	All	DevH 2	Tooth development and histology (M1)	Lecture	RS	Online (recorded or live on zoom)
Thurs 8th May	9:00 – 12:00	1 - 6	Anat 3*	TBL 1 Seminarium tandanatomi (M1)	Seminar*	JSV, GTC	S104 ANA 23
	8:00-12:00	7 - 12	Anat study	Schemalagd förberedelse praktisk tandanatomi (M1)	Online + course literature		Self-study
	13:00 – 16:00	7 - 12	Anat 3*	TBL 1 Seminarium tandanatomi (M1)	Seminar*	JSV, GTC	S104 ANA 23
	13:00 - 17:00	1 - 6	Anat study	Schemalagd förberedelse förberedelse praktisk tandanatomi (M1)	Online + course literature		Self-study
Fri 9th May	8:00 – 12:00	All	DevH 3	Bone and periodontium structure, development and histology (M1)	Lecture + seminar preparation	RLJ	Online (recorded on Canvas)
	13:00 - 16:00	All	DevH 1	Craniofacial Development (M1)	Self-study questions	ort/RS	Hand-in @16:00 with email feedback
Mon 12th May	8:00 - 12:00	All	Anat 5*	Praktisk tandanatomi 1 (M1)	Practical *	JSV	Online Submission @ 10:00 with

							feedback by Canvas over the day
	13:00 - 17:00	All	Anat study	Schemalagd förberedelse praktisk tandanatomi (M1)	Online + course literature		Self-study
Tues 13th May	8:00 – 12:00	4-12	DevH 4	Oral Mucosa structure and histology (M1)	Lecture	VT	Online (recorded on Canvas)
	8:00– 11:30	1-3	Anat 8*	Praktisk tandanatomi 4 (M1)	Lab *	MJ	4C
	13:00 – 17:00	1-3	DevH 4	Oral Mucosa structure and histology (M1)	Lecture	VT	Online (recorded on Canvas)
	12:30 - 16:00	7-9	Anat 6*	Praktisk tandanatomi 2 (M1)	Lab *	JSV, AWF	4C
	12:30 16:00	10-12	Anat 8*	Praktisk tandanatomi 4 (M1)	Lab *	MJ	4M
	13:00 – 17:00	4-6			Self-study		
Wed 14th May	8:00 – 12:00	1,3,5,7, 9,11	DevH 5	Salivary gland structure and histology, taste buds structure and histology (M1)	Lecture	VT	Online (recorded)
	9:00 – 12:00	2,4,6,8, 10,12	DevH 2	Tooth development and histology (M1)	Seminar	RS	S104 ANA 23
	13:00 – 17:00	2,4,6,8, 10,12	DevH 5	Salivary gland structure and histology, taste buds structure and histology (M1)	Lecture	VT	Online (recorded on Canvas)
	13:00 - 16:00	1,3,5,7, 9,11	DevH 2	Tooth development and histology (M1)	Seminar	RS	S104 ANA 23
Thurs 15th May -	9:00- 12:00	All	OraBio1	Hard tissue biochemistry (M2)	Lecture	RS	Online (recorded, and/or drop-in Q&A on Zoom)

OBM 2- ORAL BIOMEDICINE 2 2025							RACHAEL SUGARS
	13:00 - 16:00	All	OraBio2	Saliva biochemistry (M2)	Lecture	RS	Online (recorded, and/or drop-in Q&A on Zoom)
Fri 16th May	9:00-12:00	All	OraBio3	GCF, plaque pellicle and calculus, F (M2)	Lecture	RS	Online (recorded, and/or drop-in Q&A on Zoom)
	13:00 – 17:00	All				Self-study	
<i>2TL052 OSOF moment 2 rest 2</i>							
Mon 19th May	8:00-11:30	1-3	Anat 6*	Praktisk tandanatomi 2 (M1)	Lab *	JSV, AWF	4C
	8:00 - 11:30	4-6	Anat 8*	Praktisk tandanatomi 4 (M1)	Lab *	MJ	4M
	8:00 – 12:00	7-12			Self-study		
	13:00 - 17:00	1-6	Anat study	Schemalagd förberedelse praktisk tandanatomi (M1)	Online material		Self-study
	12:30 - 16:00	10-12	Anat 6*	Praktisk tandanatomi 2 (M1)	Lab *	JSV, AWF	4C
	12:30 - 16:00	7-9	Anat 8*	Praktisk tandanatomi 4 (M1)	Lab *	MJ	4M
Tues 20th May	9:00-12:00	2,4,6,8, 10,12	DevH 3	Bone and periodontium structure, development and histology (M1)	Seminar	RLJ	S114 ANA 23
	9:00–12:00	1,3,5,7, 9,11	DevH 4	Oral Mucosa, salivary glands, taste buds histology and structure (M1)	Seminar	VT/RS	S104 ANA 23
	13:00 - 16:00	1,3,5,7, 9,11	DevH 3	Bone and periodontium structure, development and histology (M1)	Seminar	RLJ	S104 ANA 23

OBM 2- ORAL BIOMEDICINE 2 2025						RACHAEL SUGARS	
	13:00 - 16:00	2,4,6,8, 10,12	DevH 4	Oral Mucosa, salivary glands, taste buds histology and structure (M1)	Seminar	VT /RS	S114 ANA 23
Wed 21st May	9:00- 12:00	1-6		Development and Histology	Digital microscopy	RS	S114 ANA 23
	8:00- 11:30	7-9	Anat 7*	Praktisk tandanatomi 3 (M1)	Lab*	GTC/ MJ/JS V	4M
	8:00- 12:00	10-12			Self-study		
	13:00 - 16:00	7-12		Development and Histology	Digital microscopy	RS	S114 ANA 23
	13:00 - 17:00	1-6			Self-study		
Thurs 22nd May	8:00- 12:00	1-3			Self-study		
	8:00- 11:30	4-6	Anat 6*	Praktisk tandanatomi 2 (M1)	Lab *	AM, JSV /GTC?	4M
	8:00- 12:00	7-12	Anat study	Schemalagd förberedelse praktisk tandanatomi (M1)	Online material		Self-study
	13:00 - 17:00	1-9			Self-study		
	12:30 - 16:00	10-12	Anat 7*	Praktisk tandanatomi 3 (M1)	Lab *	AM, JSV /GTC?	4C
Fri 23rd May	9:00- 12:00	1-6	OraBio1	Hard tissue biochemistry (M2)	Seminar	RS	S114 ANA 23
	8:00- 12:00	7-12			Self-study		
	13:00 - 16:00	7-12	OraBio1	Hard tissue biochemistry (M2)	Seminar	RS	S114 ANA 23

	13:00 - 16:00	1-6			Self-study		
Mon 26th May	8:00-11:30	4-6	Anat 7*	Praktisk tandanatomi 3 (M1)	Lab*	JSV, AWF	4C
	8:00-12:00	1-3, 7-12	Anat study	Schemalagd förberedelse TBL 2 seminarium bettförhållanden (M1)	Online material		Self-study
	12:30 - 16:00	1-3	Anat 7*	Praktisk tandanatomi 3 (M1)	Lab*	JSV, AWF	4C
	13:00 - 17:00	4-6	Anat study	Schemalagd förberedelse TBL 2 seminarium bettförhållanden (M1)	Online material		Self-study
	13:00 - 16:00	7-12			Self-study		

2TL052 OSOF moment 2 rest 2 practical

Tues 27th May	9:00-12:00	7-12	OraBio 2 & 3	Saliva, GCF, pellicle, plaque biochemistry, F (M2)	Seminar	RS	S104 ANA 23
	8:00-12:00	1-6			Self-study		
	12:30 - 16:00	All (if you need to attend, you can swap your seminar session)	Anat 6 & 7*	Praktisk tandanatomi 2-3 (M1)	Reserv pass Lab (mandatory if not completed above)	AWF	4C MUST register
	13:00 - 16:00	1-6	OraBio 2 & 3	Saliva, GCF, pellicle, plaque biochemistry, F (M2)	Seminar	RS	S104 ANA 23
	13:00 - 17:00	7-12			Self-study		

Wed 28 th May	9:00-12:00	1-6	Anat 9*	TBL 2 seminarium 1 (M1)	*	JSV, GTC	S114 ANA 23
	9:00-12:00	7-12	Anat 10*	TBL 2 seminarium 2 (M1)	*	MP (?)	S104 ANA 23
	13:00 - 16:00	7-12	Anat 9*	TBL 2 seminarium 1 (M1)	*	JSV, GTC	S104 ANA 23
	13:00 - 16:00	1-6	Anat 10*	TBL 2 seminarium 2 (M1)	*	MP	S114 ANA 23
Thurs 29 th May	Red Day						
Fri 30 th May		All				Self-study	
Mon 2 nd June	8:15 - 11:15	All		Moment 1 examination	*	JSV, RS	Bengt Windbladsalen Neo Inspera
	13:00 – 17:00	All				Self-study	
Tues 3 rd June	9:00-12:00	All	OraBio4 *	Reflection task	*		Submission @12:00
	13:00 – 17:00	All				Self-study	

Wed 4th June		All		Self-study			
Thurs 5th June	11:15 – 14:15	All	Moment 2 examination	*	RS	Bengt Windbladsalen Neo Inspira	

Rest examinations – refer to the Dental Medicine Exam Schedule on the Program web.