

COURSE UNIT DESCRIPTION

Course unit title	Code
Human anatomy	ZANB2115

Lecturer(s)	Department(s)
Coordinating: Doc. A. Barkus Others: Doc. Eglė Marija Jakimavičienė, Doc. Žydrūnė Miliauskienė	Anatomy, Histology and Anthropology

Cycle	Level of the course unit	Type of the course unit
Integrated studies		Compulsory

Mode of delivery	Period of delivery	Language of instruction
Face-to-face	Year 1, 1st semester	Lithuanian, English

Prerequisites and corequisites	
Prerequisites: -	Corequisites (if any): -

Number of ECTS credits allocated to the course unit	Total student's workload	Contact hours	Self-study hours
5	134	67	67

Purpose of the course unit Programme competences to be developed		
<p>The aim of the course is to provide odontology students with basic principles as well as profound theoretical knowledge of structure of the body. By the end of the course students should have a deep understanding of the material so that they can analyse, systemise and apply the knowledge of anatomy in further clinical studies. Macroscopical structure of the human body is studied according to systems. Students must learn size, topography, external and internal structure of body organs, understand their individual, age and gender-related differences, relations of systems to function, links between systems; master adequate anatomical terminology; to apply their knowledge in practice – to recognize and describe anatomical models and specimens. Students must be able to relate obtained knowledge, with new one and to summarize it by regional principals. Students are provided with information about applied anatomy of head and neck region, especially oral cavity.</p>		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
General competencies		
During the course students are required:		
<ul style="list-style-type: none"> To act fairly and according to ethical obligations, be empathic; to think critically and self-critically; be creative take the initiative, to communicate with others. 	Lectures, practicals, seminars	Continuous assessment during practicals and seminars, colloquiums.
<ul style="list-style-type: none"> To make an assessment within the scope of one's competence and, if necessary, ask for help, to act in new situations and adapt to them, to act independently, to solve problems, to make judgements, to work with specialists of other fields, to organise and plan. 	Lectures, practicals, seminars, self-study	Continuous assessment during practicals and seminars, colloquiums.
<ul style="list-style-type: none"> To analyse and synthesize, to apply theoretical knowledge in practice. 	Practicals, seminars, self-study	Continuous assessment during practicals and seminars, colloquiums.
Special competencies		
During the first semester students are required:		
<ul style="list-style-type: none"> To group, name in both Lithuanian and Latin, describe and recognize human bones and their details; 	Theoretical material during the lectures, study of anatomical models and bones' specimens during practicals and self-study; drawing and studying of anatomical schemes.	Continuous assessment during practicals and seminars, colloquium, exam at the end of the course.
<ul style="list-style-type: none"> To group, name in both Lithuanian and Latin, describe junctures of the bones, 	Theoretical material during the lectures, study of anatomical models	Continuous assessment during practicals and

understand biomechanics of joints;	of joints during practicals and self-study; drawing and studying of anatomical schemes; discussions and analysis during seminar	seminars, colloquium, exam at the end of the course.
<ul style="list-style-type: none"> To group, name in both Lithuanian and Latin, describe and recognize human muscles; 	Theoretical material during the lectures, study of anatomical models and muscles' specimens during practicals and self-study; drawing and studying of anatomical schemes.	Continuous assessment during practicals and seminars, colloquium, exam at the end of the course.
<ul style="list-style-type: none"> To group, name in both Lithuanian and Latin, describe and recognize human visceral organs, understand topography, functions, external and internal structure. 	Theoretical material during the lectures, study of anatomical models and specimens of viscera during practicals and self-study; drawing and studying of anatomical schemes.	Continuous assessment during practicals and seminars, colloquiums, exam at the end of the course.

Topics	Time and tasks of self-study							Tasks
	Lectures	Seminars	Practice	Laboratory work	Practical training	Total contact hours	Self-study	
The object of anatomy, methods of investigation, history. Nomina anatomica. General anatomical terminology.	2					2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>General osteology</u> : structure and development, classification of bones. General osteological terminology. Sex and age related differences of human skeleton.	2					2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special osteology</u> : bones of the trunk. Vertebra: generalities and differences. The structure of the vertebral column. Bones of the thorax: ribs and sternum.		1	1			2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special osteology</u> : bones of neurocranium and viscerocranium. Skull: internal and external surface of the base, calvaria, facial part and its cavities. Development and growth of the head and face.	4	3	1			8	8	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special osteology</u> : bones of the extremities. Skeleton of the upper extremity: pectoral girdle, arm, forearm and hand. Skeleton of the lower extremity: pelvic girdle, thigh, calf, and foot.		2	1			3	3	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>General arthrology</u> : classification of articulations. Fibrous, cartilaginous and osseous articulations, their structure, biomechanics, ontogenesis, age-related changes.	2					2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special arthrology</u> : articulations of the trunk.		1	1			2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special arthrology</u> : articulations of the upper and lower limbs and their biomechanics.			1			1	1	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special arthrology</u> : articulations of the skull. Temporomandibular joint:	2					2	2	Study of named literature, terminology, specimens and models, preparation to

structure, biomechanics, phylogenesis and ontogenesis.								practicals, seminars and colloquiums.
<u>General myology:</u> classification and biomechanics of muscles as well as muscle supporting structures. Ontogenesis of muscles. Development of muscles of mastication and facial expression	2					2	2	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special myology:</u> muscles of trunk, their structure and functions.	2	1	2			5	5	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special myology:</u> muscles of upper and lower limbs, their structure and functions.	2	1	2			5	5	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
<u>Special myology:</u> muscles of head, neck, their structure and functions.	2	1	2			5	5	Study of named literature, terminology, specimens and models, preparation to practicals, seminars and colloquiums.
Splanchnology. Definition of viscera. Structure of the wall of hollow and parenchymatous organs. Holotopy, skeletotopy, syntopy, of internal organs, projection on thoracic and abdominal wall.	2	1				3	3	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
Embryogenesis of viscera and serosal covering, formation of body cavities. Formations of the peritoneum.	2	1				3	3	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
<u>Digestive system.</u> Mouth and its organs: teeth, tongue, palate, salivary glands and their ducts.		1	1			2	2	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
<u>Digestive system.</u> Pharynx and oesophagus. The abdominal part of the digestive canal: stomach, small and large intestines, their structure, topography, morphofunctional differences. Gross digestive glands: liver and pancreas. Gall bladder and biliary ducts.	2	2	2			6	6	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
<u>Respiratory system.</u> Upper and lower respiratory ducts. Nasal cavity and paranasal sinuses. Larynx. Trachea, bronchi, bronchial tree. Lungs: form, parts, structure. Pleura. Mechanism of respiration. Mediastinum.	2	1	1			4	4	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
<u>Development of the urogenital system.</u> Structure and topography of kidneys. Urinary tracts: renal calyces and pelvis, ureters, urinary bladder, urethra.	2					2	2	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
Internal and external male genital organs. Internal and external female genital organs. Menstrual cycle. Perineum.	2	3	1			6	6	Study of named literature, terminology, specimens and models, preparation to practical, seminars and colloquiums.
Total	32	19	16	0	0	67	67	

Assessment strategy	Weight (%)	Assessment criteria
The control during practicals and seminars.		Short questioning and discussion about the topic of current day (in written and oral form). Not less than 80 % of practicals and seminars must be attended. All compulsory drawings must be done and revised.

5 colloquiums are arranged.	15	<p>The colloquiums (osteology, arthrology, myology, gastrointestinal and respiratory systems and urogenital system) must be taken. The colloquiums are organized in either written or oral form and rated 10 points in the system:</p> <p>10 points - the student well mastered the studied material, is able to analyze and summarize, uses correctly the concepts and terms. Written colloquium - answered at least 90 percent of test questions.</p> <p>8-9 points - the student very good / good mastered the studied material, is able to organize and summarize, uses correctly the concepts and terms. Written colloquium - answered at least 85 percent test questions (9 points), or 75 percent of test questions (8 points).</p> <p>6-7 points - the student satisfactorily mastered the material studied, some of the concepts and terminology used inaccurately. Written colloquium - answer at least 65 percent of test questions (7 points), or 55 percent of test questions (6 points).</p> <p>5 points - student superficially mastered the material studied, imprecise use of concepts and terms. Written colloquium - answered at least 50 percent of test questions.</p> <p>4-1 points – student’s knowledge is insufficient, terms and concepts used incorrectly. Holding the writing - answered less than 50 percent of test questions.</p> <p>Failed colloquiums could be retaken.</p>
Accumulative credit		Student must fulfil attendance requirements and pass the colloquiums of the 1 st semester.

Author	Year of publication	Title	No of periodical or vol. of publication	Publication place and publisher or Internet link
Required reading				
Drake R., Vogl W.A., Mitchell A.W.M.	2014; 2016	Gray's Anatomy for Students.	2 nd , 3 rd ed.	Churchill Livingstone https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20110061707
Netter F.H.	2010; 2014	Atlas of Human Anatomy	5 th , 6 th ed.	Saunders https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20100686068
F, Paulsen, J. Waschke	2011	Sobotta Atlas of Human Anatomy, Vol.1, 2, 3	15 th ed.	Urban & Fischer
Tortora G.J., Nielsen M.	2010, 2014	Principles of Human Anatomy	13 th ed.	Wiley and Sons, Inc
Kahle W., Leonhardt H., Platzer W.	2008, 2015	Color Atlas / Text of Human Anatomy. Vol. 1-3.	(any ed.)	Thieme Medical Publishers Inc.
W. Dauber	2006	Pocket Atlas of Human Anatomy	5 ed.	Thieme Medical Publishers Inc.
Recommended reading				
Möller B., Reif E.	2007	Pocket Atlas of Sectional Anatomy, CT and MRI imaging	3 rd ed. Vol.1,2,3	Georg Thieme Verlag Stuttgart, New York,
Moore K.L., Dalley A.F., Agur M.R.	2008	Clinically Oriented Anatomy	6 th Ed.	Lippincott Williams and Wilkins
A.M. Gilroy, B.R. MacPherson, L.M. Ross (eds.)	2017	Atlas of anatomy	3 rd ed.	Thieme Medical Publishers Inc.