

Clinical Anatomy

| 1. IMPRINT | | |
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| Academic Year | 2022/2023 | |
| Department | Faculty of Dental Medicine | |
| Field of study | English Dentistry Division | |
| Main scientific discipline (in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019) | Medical sciences | |
| Study Profile (general academic / practical) | General academic | |
| Level of studies (1st level /2nd level/ uniform MSc) | Uniform MSc | |
| Form of studies | Full-time program | |
| Type of module / course (obligatory / non-compulsory) | Obligatory | |
| Form of verification of learning outcomes (exam / completion) | Exam | |
| Educational Unit / Educational Units (and address / addresses of unit / units) | Department of Descriptive and Clinical Anatomy 5 Chałubinskiego Street, 02-004 Warsaw, (+48 22) 629 52 83; 628 10 41 | |

| Head of Educational Unit / Heads of Educational Units | Prof. Bogdan Ciszek, MD, PhD |
|--|--|
| Course coordinator (title, First Name, Last Name, contact) | Prof. Bogdan Ciszek, MD, PhD; bogdan.ciszek@wum.edu.pl |
| Person responsible for syllabus (First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported) | Robert Franczyk PhD, MD, DMD; rfranczyk@wum.edu.pl |
| Teachers | Robert Franczyk PhD, MD, DMD; rfranczyk@wum.edu.pl |

| 2. BASIC INFORMATION | | | |
|---|--------------------|--------------------------|----|
| /ear and semester of studies | | Number of ECTS credits | 10 |
| FORMS OF CLASSES | Number of hours | ECTS credits calculation | |
| Contacting hours with academic teacher | | | |
| Lecture (L) | 20 | 0, | .8 |
| Seminar (S) | | | |
| Discussions (D) | | | |
| e-learning (e-L) | | | |
| Practical classes (PC) | 115 | 4 | .6 |
| Work placement (WP) | | | |
| Unassisted student's work | | | |
| Preparation for classes and completions | 115 | 4 | .6 |

| 3. | 3. Course objectives | | | |
|----|---|--|--|--|
| 01 | Aquire the knowledge about parts and organs of the human body (shape, structure, topography, relationships to neighboring organs) | | | |
| 02 | Know the construction and usage of anatomical terminology | | | |
| 03 | Know the descriptive and topographic anatomy of the head, neck and the stomatognathic system. | | | |

| O4 | Know the anatomy of stomatognathic system (e.g. be able to describe the structure of permanent and deciduous teeth, be able to describe the features of a correct occlusion in three planes, be able to describe the structure and function of the temporomandibular joint, be able to describe the structures of the stomatognathic system in examinations: radiographic, CT, CBCT, MRI). | |
|----|--|--|
| O5 | Know the main clinical terms and apply the acquired knowledge on the structure and function of organs as a basis for learning clinical subjects | |

4. STANDARDS OF LEARNING — DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

| Code and number of | | |
|-----------------------|--|--|
| effect of learning in | | |
| accordance with | | |
| standards of learning | | |
| (in accordance | | |
| with appendix to | | |
| the Regulation | | |
| of Minister of | | |
| Science and | | |
| Higher | | |
| Education from | | |

26th of July 2019)

Effects in time

Knowledge - Graduate* knows and understands:

| A.W1. | structures of the human body: cells, tissues, organs and systems, with particular emphasis on the dental system; |
|-------|--|
| A.W2. | development of organs and the whole organism, with particular emphasis on the masticatory system; |
| A.W3. | the structure of the human body in a topographic and functional approach; |
| A.W4. | the role of the nervous system in the functioning of individual organs; |
| A.W5. | functional importance of individual organs and the systems they create; |
| A.W6. | anatomical justification of the physical examination. |

Skills- Graduate* is able to:

| A.U1. | interpret anatomical relations illustrated with the basic methods of diagnostic tests in the field of radiology |
|-------|---|
| | (overview and contrast media radiographs); |
| | |

^{*} In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 "graduate", not student is mentioned.

| 5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory) | | |
|--|-----------------------------|--|
| Number of effect of learning | Effects of learning in time | |

Knowledge – Graduate knows and understands:

| K1 | Knows, describes, explains the human body structure using anatomical names in English |
|----|--|
| K2 | demonstrates knowledge of the structures of the human body, with particular emphasis on the stomatognathic system. |
| К3 | characterizes development of the stomatognathic system. |
| K4 | knows the development, topography and function of organs learned during practical classes, on X-rays, ultrasound, CT, MRI, endoscopic images as well as the relationship between the structure and function of the organ |
| K5 | knows the basic issues of clinical anatomy and a basis for further study of clinical subjects |
| К6 | understands respect for the human body, also during practical classes in relation to human corpses |

Skills- Graduate is able to:

| S1 | use anatomical terminology in spoken and written English |
|-----|--|
| S2 | recognize anatomical structures on cadavers, anatomical models and diagnostic radiological examinations (CT, CBCT, MRI, X-ray) |
| \$3 | use the acquired anatomical knowledge of human anatomy in clinical subjects |

Social Competencies – Graduate is ready for:

| SC1 | showing respect for the human body (also human corpses) |
|-----|---|
| SC2 | continuation of self-education with medical confidentiality |

| 6. CLASSES | | |
|---------------|--|---|
| Form of class | Class contents | Effects of Learning |
| | Lectures | |
| Lecture 1 | Introduction to the gross and clinical anatomy. Role of anatomy in medicine. Classification and morphology of bones. Classification of joints. | A.W1, A.W3, K1, K2, K5, K6, S1, S2 S3, SC1, SC2 |
| Lecture 2 | Bones, joints, ligaments, superficial and functional anatomy of the vertebral column, thorax and pelvis. Bones, joints, ligaments of upper and lower limb. | A.W5, A.W6, K1, K2, K5, K6, S1, S2 S3, SC1, SC2 |
| Lecture 3 | General topography of the skull. Temporomandibular joint. Surgical anatomy of the skull. | A.W1, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 4 | Classification of the central nervous system. Development of the central nervous system. Cerebrospinal fluid and ventricular system of the brain. | A.W4, A.W5, K1, K2, K5, K6, S1, S2 S3, SC1, SC2 |
| Lecture 5 | Sensory pathways and centers in the central nervous system. Diencephalon. | A.W4, A.W5, K1, K2, K5, K6, S1, S2 S3, SC1, SC2 |
| Lecture 6 | Motor pathways and centers in the central nervous system. Cerebellum. | A.W4, A.W5, K1, K2, K5, K6, S1, S2 S3, SC1, SC2 |

| Lecture 7 | General topography of the neck. Triangles and muscles of the neck. Cervical plexus. | A.W3, G.K.5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
|--------------------|---|---|
| Lecture 8 | Vascular system of head and neck. Larynx. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 9 | Facial development. Facial nerve – clinical syndromes. | A.W2, A.W3, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2, K3 |
| Lecture 10 | Oral cavity, salivary glands. Trigeminal nerve – clinical syndromes. | A.W1, A.W3, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 11 | Surgical anatomy of the head and neck. | A.W1, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 12 | Autonomic system of head and neck. Eye, Ear. | A.W3, A.W4, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 13 | Teeth. Periodontium. | A.W1, A.W2, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 15 | Occlusion. Stomatognathic system. | A.W1, A.W2, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2, K3 |
| Lecture 15 | Thorax: general topography, muscles and fascia. Axilla – walls, content. Breast. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 16 | Mediastinum. Lungs and pleura. Physiology of breathing. Heart – anatomy, vessels. Blood circulation. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 17 | Abdomen – walls, cavity, regions. Inguinal region. Peritoneum and peritoneal cavity. Esophagus, stomach, small intestine, large intestine. Liver. Pancreas. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 18 | Urinary system. Male, female reproductive system. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 19 | Upper limb. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Lecture 20 | Lower limb. | A.W3, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes | | |

| Laboratory classes 1 | Axial skeleton, Vertebrae, Ribs. | A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
|--------------------------|---|--|
| Laboratory classes 2 | Upper extremity. | A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 3 | Lower extremity. | A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 4 | Bones of the skull 1. | A.W2, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 5 | Bones of the skull 2. | A.W2, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 6 | Joints, fossae, canals and spaces of the skull. | A.W2, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 7 | Radiology in osteology. Repetition. | A.W2, A.W5, A.U1, K1, K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 8 | Introduction, general structure of CNS. Spinal cord. Spinal nerve. Vascularization of the CNS. Circle of Willis. Cranial meninges: structure, layers, meningeal spaces. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 9 | Telencephalon. Lateral ventricle, Basal ganglia. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 10 | Diencephalon. third ventricle. Brainstem. Cranial nerves. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 11 | Identification of elements of the CNS sensory pathways. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 12 | Identification of elements of the CNS motor pathways. Cerebellum. Fourth ventricle. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 13 | Radiology and repetition of the CNS. Repetition. | A.W4, A.W5, A.W6, A.U1, K1, K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |

| Laboratory classes 14 | Skin. Neck: triangles, fascias. Platysma. | A.W3, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
|--------------------------|---|---|
| Laboratory classes 15 | Cervical plexus. Neck: muscles. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 16 | Thyroid gland, parathyroids. Vessels of the neck. Cranial nerves: X, XI.(classes 45 min. longer). | A.W3, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 17 | Larynx, trachea. Sympathetic trunk. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 17 | Muscles of face. Facial nerve and artery. Parotid gland.(classes 45 min. longer). | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 18 | Muscles of mastication. TMJ. | A.W1, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 19 | Oral cavity, teeth, gums, tongue, palate. Trigeminal nerve V3.(classes 45 min. longer). | A.W1, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 20 | Nasal cavity. Fauces. Pharynx. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 21 | Maxillary nerve. Maxillary artery. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 22 | Orbit, eye. Ear. Hearing organ. Temporal bone. Dura mater. Dural sinuses(classes 45 min. longer). | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 23 | Facial development. Local anesthesia in dentistry. | A.W2, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2, K3 |
| Laboratory classes 24 | Spaces and fossae of head and neck. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 25 | Radiology of H&N. Repetition (classes 45 min. longer). | A.W1, A.W5, A.W6, A.U1, K1, |

| | | K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |
|--------------------------|--|--|
| Laboratory classes 26 | Repetition and 1 st intermediate credit - pins. | A.W1, A.W3, A.U1, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 27 | Repetition and 1 st intermediate credit - theory. | A.W1, A.W2, A.W3, A.W4, A.W5, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 28 | Teeth – anatomy, blood supply, innervations, time of eruption, developmental abnormalities. | A.W1, A.W2, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2, K3 |
| Laboratory classes 29 | Human dentition. Norms of occlusion (classes 45 min. longer). | A.W1, A.W3, A.W5, K1, K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 30 | Thorax: Fascia of the thoracic wall. Muscles Breast Axillary fossa. Axillary artery, Axillary vein. Internal thoracic artery. Intercostal space anatomy – vessels and nerve. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 31 | Mediastinum Diaphragm Phrenic nerve. Thymus. Trachea and main bronchi. Pleurae. Lungs. Breathing. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 32 | Pericardium. Heart. Valves. Coronary arteries. Veins of the heart. Innervation; Conducting system of the heart. Blood circulation. Thoracic aorta, pulmonary trunk. Superior and inferior vena cava. | A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 33 | Topography of esophagus, vagus nerve. Thoracic duct. Azygos system of veins. Vessels and lymph nodes of the posterior mediastinum. Sympathetic trunk – thoracic part. | A.W3, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 34 | Medical imaging of the thorax. | A.W4, A.W5, A.W6, A.U1, K1, K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 35 | Abdominal wall, fascia, muscles, nerves, blood vessels, internal surface. Inguinal region. Peritoneum. Esophagus, stomach, small intestine. Celiac trunk, superior mesenteric artery. Pancreas, spleen. (classes 45 min. longer) | A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 36 | Large intestine. Inferior mesenteric artery. Liver, gallbladder. Biliary ducts. Hepatic portal system. (classes 45 min. longer) | A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |

| Laboratory classes 37 | I Himpar piexus, Andominal aorta, common illac artery, interior vena cava – topograpny, pranches | |
|--------------------------|--|--|
| Laboratory classes 38 | Retroperitoneal space. Kidneys, suprarenal glands, ureter, urinary bladder, male and female urethra - anatomy, functions, blood support, innervation. | |
| Laboratory classes 39 | hranches range of blood support. Female internal genital organs and peripelim - anatomy | |
| Laboratory classes 40 | | |
| Laboratory classes 41 | Medical imaging of the andomen and nelvis | |
| Laboratory classes 42 | | |
| Laboratory classes 43 | Muscles of the forearm, hand - functions, blood support, innervation. Cubital fossa – boundaries, content. Radial and ulnar arteries - topography, branches, range of blood support. Radial, ulnar and median nerves - topography, branches, innervation. Veins of the forearm. Places of pulse palpation. | A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 44 | Thigh and gluteal region, muscles, blood vessels, nerves. Inguinal lymph nodes. Iliotibial tract. | A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 45 | Popliteal fossa – content, relations of structures. Leg and foot – muscles, blood vessels, nerves. | A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 46 | Bones, joints of the upper and lower limbs – repetition, medical imaging.(classes 45 min. longer) | A.W3, A.W4, A.W5, A.W6, A.U1, K1, K2, K4, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 47 | Repetitoin and 2 nd intermediate credit – pins. | A.W1, A.W3, A.W4, A.W5, A.W6, A.U1, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 48 | Repeatitoin and 2 nd intermediate credit – theory. | A.W1, A.W3, A.W4, A.W5, A.W6, K1, K2, K5, |

| | | K6, S1, S2, S3, SC1, SC2 |
|--------------------------|---|--|
| Laboratory classes 49 | Repetition. Admission credit – pins. | A.W1, A.W3, A.W4, A.W5, A.W6, A.U1, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |
| Laboratory classes 50 | Repetition. Admission credit – theory (classes 45 min. longer). | A.W1, A.W2, A.W3, A.W4, A.W5, A.W6, K1, K2, K5, K6, S1, S2, S3, SC1, SC2 |

7. LITERATURE

Obligatory

- 1. Moore KL, Dalley AF, Agur AMR. Clinically oriented anatomy. Philadelphia: Wolters Kluwer/Lippincott Williams & Wilkins
 The basic textbook to prepare for the laboratory classes and theoretical tests. Multiple choice questions are written according
 to this book and lectures. Please read clinical blue boxes as well they will expand your understanding of clinical importance of
 anatomical structures you learn about. Some of clinical issues may be also included in the tests.
- 2. Snell RS. Clinical neuroanatomy. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins; 2010 The basic textbook of clinical neuroanatomy. We recommend it for the CNS section.
- 3. Fitzgerald MJT, Gruener G, Mtui E. Clinical Neuroanatomy and Neuroscience. Saunders; 2012

 A comprehensive textbook of clinical anatomy of the central nervous system. We recommend it for the CNS section.
- 4. Dauber W, Feneis H. Pocket atlas of human anatomy: Founded by Heinz Feneis. Stuttgart; New York: Thieme An illustrated dictionary of anatomical nomenclature based on Terminologia Anatomica, useful for practical classes, repetitions and practical tests.

Supplementary

- FIPAT. Terminologia Anatomica. International Anatomical Terminology. Stuttgart, New York: Thieme; 2011
 The official anatomical terminology. The reference book in case of any discrepancies regarding the terminology used by various authors.
- 2. Gilroy AM, MacPherson BR, Ross LM, Schünke M, Schulte E, Schumacher U. Atlas of anatomy. New York: Thieme; 2012 A good and popular anatomical atlas. Our recommendation.
- 3. Sobotta Atlas of Human Anatomy or Atlas of Anatomy
 There are numerous editions of one of the most popular anatomical atlases worldwide. Editors and publishers are different, but illustrations are the same.
- 4. Rohen JW, Yokochi C, Lütjen-Drecoll E. Color atlas of anatomy : A photographic study of the human body. Baltimore: Lippincott Williams & Wilkins; 2011
 - An atlas with photographs of real anatomical specimens.

8. VERIFYING THE EFFECT OF LEARNING

| Code of the cource effect of learning | Ways of verifying the effect of learning | Completion criterion |
|---------------------------------------|---|---------------------------------|
| e.g. A.W1, G.C1, K1 | This field defines the methods used for grading students e.g. pop quiz, test, written report etc. | e.g. threshold number of points |
| A.W1., A.W2., A.W3., A.W6., | Participation in lectures and exercises | passing quizzes |

| A.U1., W1-W6, U1- U3., K1-K2., | Quiz in each class - documented in the student's card Students have to participate in the intermediate credit (60 MCQ points and 60 practical test points). | The subject ends with a test and practical exam for evaluation. Obtaining ≥ 65% correct answers in both parts The verification covers all categories of areas (knowledge, skills and social competences). |
|--|--|---|
| A.W1., A.W2., A.W3., A.W4., A.W5., A.W6., | Participation in lectures and exercises | passing quizzes |
| A.U1. | Quiz in each class - documented in the student's card | The subject ends with a test and practical exam for evaluation. Obtaining ≥ 65% correct answers in both parts |
| | Students have to participate in the intermediate credit (60 MCQ points and 60 practical test points). | The verification covers all categories of areas (knowledge, skills and social competences). |
| | A test (colloquium) summarizing knowledge in a specific area in a practical (pins) and written form (test) 65% of correct answers | |

9. ADDITIONAL INFORMATION (information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)

INTERNAL REGULATIONS OF THE DEPARTMENT OF DESCRIPTIVE AND CLINICAL ANATOMY

In the case of on-line teaching in the academic year 2022/2023, an amendment to the regulations will be provided.

- In order to complete a semester, a year and to pass Final Anatomy Examination student should participate actively in lectures and practical classes. Participation in practical classes is obligatory.
 CAUTION: During the course of anatomy, the student is supposed to have the knowledge acquired from all previous practical.
 - CAUTION: During the course of anatomy, the student is supposed to have the knowledge acquired from all previous practical classes and lectures.
- The course of anatomy is divided into eight following modules:
 (a) osteology and arthrology, (b) central nervous system, (c) head and neck, (d) thorax, (e) abdomen, (f) retroperitoneal space and pelvis, (g) upper limb and back, (h) lower limb.
- 3. Student is obliged to participate in a credit during each of practical classes (except for some of them mentioned in the class schedule) the theoretical part based on multiple choice questions (MCQ 6 questions and 4/6 points to pass) and the practical part based on the practical (pin) test (4 pins, 5/8 points to pass). The credit can only be taken by students present throughout the whole class (a late student cannot enter the dissecting room, which is considered an absence) and cannot be retaken.
- 4. Moreover, students should participate in two intermediate credits (60 MCQ points and 60 practical test points, no 2nd terms/retakes are organized).
- 5. In the end of the academic year, points are summarized. In order to be admitted to the final examination in anatomy, a student has to obtain 65% of total number of points (credits and intermediate credits points) both in theoretical and practical parts.
- 6. Those who failed to get the required number of points have a chance to be allowed to take the final examination on the basis of the admission test organized in the end of May. It consists of MCQ questions and practical test points (the student must take the part from which he did not obtain the required number of points to be admitted to the final examination). In order to

- pass, the student has to obtain 65% of points on each of the two components. No other attempts are to be organized by the Department of Descriptive and Clinical Anatomy. A student who fails any part of the admission credit cannot take the exam.
- 7. Absence exceeding four practical classes per semester excludes completion of the semester. The student is therefore not allowed to take the final examination in anatomy.
- 8. The final examination in anatomy is scheduled in summer examination period and consists of two parts: practical (pin) test and theoretical (Multiple Choice Questions test). The level to pass the practical examination is 36/40 basic points (the basic points list is available on the website of the Department of Descriptive and Clinical Anatomy) and 76/120 total score. The level to pass MCQ is 76/120. Examination grades according to points: 152-169 satisfactory, 170-187 better than satisfactory, 188-205 good, 206-223 better than good, 224-240 very good.
- 9. Retake of the Final Anatomy Examination is administered in September. Only the failed components are to be retaken.
- 10. Practical anatomy involves students in the examination and dissection of human subjects. This privileged opportunity relies on the generosity of local people who recognize the value to medicine that the practical study of human anatomy can provide and generously make their bodies available for that purpose to medical and science students.
 - It is important that, at all times, you respect that generosity and behave accordingly. The students must wear long trousers or skirts otherwise they will not enter the Dissection Room.
- 11. Much of the course work is carried out in the Dissection Room. To enter it students will need to provide themselves with clean white lab coats, white protective cap or headscarf and photo ID badge. Changing of the clothes must be done outside the Dissection Rooms only.
 - Students are allowed to enter the Dissection Room only in time of practical classes of her/his students' group if not otherwise specified.
- 12. Unauthorized persons must not enter the Dissection Rooms.
- 13. Students MUST care about hygiene. In particular:
 - 1. have clean hands with short, unpolished nails; no jewelry is allowed,
 - 2. use protective gloves while examining of specimens,
 - 3. in the case of minor injuries rinse the wound in tap water and manage it properly.
- 14. While examining the specimens, sufficient care should be applied to prevent the damage or loss of the specimen.
- 15. Leaders of the student's groups are responsible for damage or loss of the specimen.
- 16. Smoking in the area of the Department of Anatomy, as in whole building of Collegium Anatomicum, is prohibited.
- 17. Eating and drinking in Dissection Rooms is prohibited.
- 18. The students can, and are encouraged, to bring the anatomical tweezers, books and atlases to the Dissection Rooms.
- 19. To gain from the practical classes as much as possible, the students should have sufficient theoretical knowledge about the current topic.
- 20. At the end of practical classes students should fix the specimens according to the teaching assistant suggestions.
- 21. Taking of any photos or movies in dissection room is strictly prohibited!
- 22. It is not allowed to use mobile phones in the area of the Department of Anatomy!
- 23. Students who do not follow the regulations and do not react to the warnings can be expelled from the class. In all the cases such event will be reported in student's files. In special cases the Dean will be informed about the student's misbehavior.

According to the epidemiological status the lectures and laboratory classes can be transferred to the e-learning platform by decision of the Rector Magnificus of Warsaw Medical University (seperate regulations will be published then).

GUIDELINES FOR THE SEMESTRAL AND FINAL PIN TESTS

Two structures marked with pins should be recognized on each of thirty stations.

There are 60 seconds of time per station.

It is not allowed to touch, move or rotate specimens.

The maximum score for one pin is 2 points.

Examples:

left superior thyroid a. -2 p. right superior thyroid a. -1 p. superior thyroid a. -1 p. thyroid a. -0 p. left -0 p.

Attention! Recognition of single structure in the way suggesting that the structure is paired or multiple = 0p.

Example: right trachea, left falx cerebri, superior tentorium cerebelli

Final examination

On the final examination you need 76 points to pass.

First 20 pins are so called basic points, it means the basic anatomical structures which should be known to every MD.

These points will be scored 2 or 0 points only!

Example: pin shows the left common carotid a

- left common carotid a. 2 p.
 - o right common carotid a. 0 p.
 - common carotid a. 0 p.
 - o carotid a. 0 p.
 - o carotid 0 p

You can make only two mistakes in the basic points section! In order to pass, you need at least 36 points from this section.

The basic points list

In all cases of paired structures (basic points from the skull, head, neck) the side has to be given!

THE SKULL

- 1. frontal bone
- 2. ethmoid bone
- 3. temporal bone
- 4. sphenoid bone
- 5. parietal bone
- 6. occipital bone
- 7. maxilla
- 8. zygomatic bone
- 9. palatine bone
- 10. nasal bone
- 11. mandible
- 12. alveolar part of mandible
- 13. alveolar process of maxilla
- 14. carotid canal
- 15. external acoustic meatus
- 16. nasolacrimal canal
- 17. hypophyseal fossa
- 18. pterygoid canal
- 19. trigeminal impression
- 20. mandibular foramen

mandibular canal

- 21. external occipital protuberance
- 22. groove for superior sagittal sinus
- 23. groove for transverse sinus
- 24. groove for sigmoid sinus
- 25. dental alveolus (of mandible or maxilla with the side)

all foramina and canals which contain cranial nerves (for the trigeminal nerve – foramina / canals for ophthalmic, maxillary, mandibular nerves)

HEAD

- 1. facial a.
- 2. parotid gland
- 3. upper lip
- 4. lower lip
- 5. mouth = rima oris
- 6.angle of mouth
- 7.oral vestibule
- 8. cheek
- 9.pulp chamber = pulp cavity
- 10.dentine
- 11.enamel
- 12.cementum
- 13.superior gingiva
 - inferior gingiva
- 14.crown of tooth
- 15.neck of tooth
- 16.root of tooth
- 17. frenulum of upper lip
- 18. upper eyelid

- 19. lower eyelid
- 20. external nose
- 21. mentum
- 22. masseter m.
- 23. temporalis m.
- 24. medial pterygoid m.
- 25. lateral pterygoid m.
- 26. temporomandibular joint
- 27. superior / inferior gum
- 28. interdental papilla between teeth \dots and \dots (FDI notation)
- 29. tongue
- 30. hard palate
- 31. uvula
- 32. palatine tonsil
- 33. pharyngeal tonsil
- 34. pharyngeal orifice of the auditory tube
- 35. maxillary sinus
- 36. frontal sinus
- 37. sphenoid sinus
- 38. middle nasal concha
- 39. trigeminal ganglion
- 40.inferior alveolar n.
- 41. lingual n.
- 42. maxillary a.
- 43. superficial temporal a.
- 44. falx cerebri
- 45. tentorium cerebelli
- 46. superior sagittal sinus
- 47. transverse sinus
- 48. sigmoid sinus
- 49. optic n.
- 50. eyeball
- 51. tympanic cavity
- 52. tooth (+ FDI / two-digit system number or description of the tooth; example: tooth 21 or left upper medial permanent incisor)

NECK

- 1. sternocleidomastoid m.
- 2. common carotid a.
- 3. internal carotid a.
- 4. external carotid a.
- 5. internal jugular v.
- 6. external jugular v.
- 7. trachea
- 8. thyroid gland
- 9. hyoid bone
- 10. epiglottis
- 11. vocal fold
- 12. thyroid cartilage
- 13. digastric m.
- 14. hypoglossal n.
- 15. submandibular gland
- 16. subclavian a.
- 17. subclavian v.
- 18. vagus n.
- 19. phrenic n.
- 20. anterior scalene m.
- 21. mylohyoid m.

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