

REGULATIONS FOR CLASSES IN THE SUBJECT

Picture Diagnosis

For Students 2 year of Dentistry studies conducted
in Department of Radiology the Faculty of Medical Sciences in Zabrze
in the academic year 2022/2023

Head of the Department prof dr hab. Ewa Kluczevska
Subject coordinator (*applies to subjects taught in more than one department*) dr med. Jan
Głowacki

Classes in the subject of Picture diagnosis are conducted on the basis of o Study Regulations of the Medical University of Silesia in Katowice, constituting the Appendix 1 to Resolution 49/2022 of the Senate of SUM of June 29, 2022. and these Regulations.

I. Principles of participation in the classes

1. Classes (lectures, seminars, exercises) are held according to the schedule set by the Dean.
2. In terms of remote classes, it is allowed to change the date of the classes by the Head of the Unit - information about the date and the platform used is announced on the Unit's website.
3. Participation in lectures, seminars and exercises is obligatory.
4. The student is obliged to participate in classes with the student group to which he has been assigned for the given academic year.
5. The student is obliged to arrive on time for classes conducted in the form of stationary and to log in to the e-learning system on time in the case of classes conducted with the use of distance learning techniques and methods.
6. The student is obliged to prepare theoretical for classes in accordance with the planned subject matter, based on the given literature. Failure to prepare for the classes will be equivalent to failing them.
7. During classes at the University, the Student:
 - is obliged to maintain medical confidentiality and protect personal data in accordance with the GDPR,
 - is obliged to comply with the content of the oath and the regulations applicable at SUM, and in particular to respect the dignity of all participants of the teaching process and to take care of the good name of the University,
 - is obliged to comply with the health and safety rules,
 - is obliged to use personal protective equipment in accordance with the guidelines of the Unit.
8. Should take care of the place where classes are conducted, including the order and proper condition of the devices they use. Any noticed defects should be reported to the academic teacher conducting the classes. In the event of damage, a Medical Equipment Damage Protocol is prepared. Students of a given group / section are financially responsible for any shortages of materials and instruments found after the end of the exercises, as well as for damage to equipment.
9. Should not: eat meals in the place where classes are conducted or bring unnecessary personal belongings to be left in the cloakroom.
10. It is strictly forbidden to bring and use electronic devices and audiovisual registration during the course of classes and final credits in the Student's course.

11. All teaching materials are protected by copyright in terms of intellectual property. Violation of copyright and the right to protect the image (recording, photographing, copying, recording) will result in the initiation of disciplinary proceedings.

II. Rules for justifying absences from classes and making up for absences

1. Every absence from classes must be excused by presenting the teacher to the classes immediately, or within 5 working days after the cause of the absence ceases to exist, an appropriate document (medical certificate, court certificate, etc.)
2. Justifying absences from classes is carried out in accordance with par. 15 of the Rules of Study at SUM
3. Classes missed for justified reasons should be done with another exercise group on the date agreed with the Head of the Unit or a person authorized by him.
4. In the event of absence from the classes, the Student is obliged to proceed with the verification of the obtained learning outcomes on the terms and within the time limits set by the Head of the Unit or a person authorized by him.

III. Rules for completing the classes

1. The condition for obtaining credit for classes in the subject is participation in all planned forms of classes (lectures, seminars)
2. If the Student is absent from the partial credit for the course within the prescribed period, he / she may report for the next fixed date, treated as a resit.
3. The student has the right to a double improvement of each partial credit.
4. The deadlines for completing the course are set by the Head of the Unit running the course.
5. The Student's absence at the test on the date set by the Head of the Unit results in the loss of the completion date.
6. A student who has not obtained a credit for a course in a subject will not be allowed to take graded credit on the first date, obtaining an unsatisfactory grade on the first date of graded credit.
7. The student has the right to attempt to pass the course classes before each graded credit date.

IV. Rules for completing the final course graded credit

1. The form of passing the final course of Picture diagnosis is a graded credit.
2. During one day, the Student may take an exam or get a grade for one subject only.
3. The condition for getting credit with the grade is getting credit for classes in the subject.
4. The date of the graded credit is set and announced to students in accordance with §19 of the *Regulations of Studies at SUM*.
5. Failure to pass a course or unexcused absence of a Student from graded credit on the scheduled date is tantamount to receiving an unsatisfactory grade (applies to all dates of graded credits).
6. The thematic scope of the graded credit includes materials from lectures and seminars as well as recommended literature.
7. The graded credit is carried out in written/test.
8. The condition for admission to the practical part of the graded credit is obtaining credit for classes and seminars.
9. The graded credit should take place after completing the course classes and before the examination session.

10. The practical examination, with the Dean's consent, may be held before the examination session.
11. According to *the Regulations of Studies at SUM*, in the case of test exams, passing is obtained after achieving 70% of correct answers.
12. In the event of an unsatisfactory grade in the graded credit, the Student is entitled to two graded credits resit.
13. The first or second resit examination date may be a commission examination at the written request of the Student or Examiner. The commission examination is extraordinary and cannot be treated as an additional term.
14. The condition for passing the theoretical exam in advance is obtaining a credit for the course in the subject.
15. The grade obtained in the early exam is the final grade.
16. During the examination, the Student is strictly forbidden to contact third parties in person or via electronic devices and to use auxiliary materials. Failure to comply with the rules is the basis for stopping the graded credit, which is tantamount to receiving an unsatisfactory grade by the Student. This fact is recorded in the exam/graded credit report by the Examiner.
17. The graded credit includes the verification of learning outcomes in terms of knowledge and skills. Therefore, the final grade in the subject takes into account the results theoretical part of the graded credit. The percentage of participation is determined by the Examiner or the Course Coordinator in consultation with the Dean.
18. A positive grade obtained in the graded credit is final. Retake the graded credit in order to improve the positive grade obtained in the above-mentioned is unacceptable.
19. The results of the graded credit are announced within 5 working days from the date of their completion in the University's IT system.

V. Principles of consultation with an academic teacher

Consultations with an academic teacher take place in accordance with the schedule available on the Unit's website [http:// radiologia.sum.edu.pl](http://radiologia.sum.edu.pl)

VI. Current administrative matters related to didactics

1. Matters related to teaching, including, for example, submitting an application for homework, should be handled electronically;
 - a. contact with the unit's secretary office: e-mail address: roenzab@su.edu.pl
 - b. contact with the Exercise Manager, Dr. Glowacki.: e-mail address: roenzab@su.edu.pl
2. Electronic correspondence with employees and SUM entities should be made from the student's e-mail account.
3. The student is obliged to read messages directed to his account in the domain s...@365.sum.edu.pl.

- VII. Disputes and issues not included in these regulations will be settled in accordance with the applicable regulations of studies at the Medical University of Silesia in Katowice, constituting Appendix No. 1 to Resolution No. 49/2022 of the Senate of SUM of June 29, 2022.
- VIII. Depending on the current epidemic situation and the resulting Regulations of the Rector of SUM, it is possible to change the mode and form of conducting classes, credits and exams.
- IX. The Regulations come into force on 01/10/2023

KIEROWNIK
Katedry i Zakładu Radiologii Lekarskiej
i Radiodiagnostyki
Śląskiego Uniwersytetu Medycznego w Katowicach

prof. dr hab. n. med. Ewa Kluczevska



.....
The signature of the Head of the Unit implementing the subject

PRODZIEKAN DS. STUDENCKICH
Wydziału Nauk Medycznych w Zabrze
Śląskiego Uniwersytetu Medycznego w Katowicach

dr hab. n. med. Andrzej Tomasiak

Śląski Uniwersytet Medyczny w Katowicach
Katedra i Zakład Radiologii Lekarskiej
i Radiodiagnostyki
41-800 Zabrze, ul. 3-go Maja 13/15
tel. 32 370 42 48, fax 32 370 42 47

Subject card: Picture diagnosis

Study cycle 2022-2027

| General information about the subject | | |
|---|--|---------------------|
| 1. Field of study: Dentistry Program | 2. Level of studies: uniform master studies | |
| | 3. Mode of studies: intramural | |
| 4. Year of study: II | 5. Semester: according to the schedule | |
| 6. Name of subject: Picture diagnosis | | |
| 7. Subject status: obligatory | | |
| 8. Treści programowe przedmiotu i przypisane do nich efekty uczenia się Morphological abnormalities and the function of altered organs and systems, clinical symptoms a diagnostic and therapeutic possibilities; diseases of the respiratory, circulatory, hematopoietic, genitourinary, immune, digestive, movement and endocrine systems, with particular emphasis on disease entities showing symptoms in the oral cavity; identification of normal and pathological structures and organs in additional imaging tests (X-ray, ultrasound, CT - computed tomography); brain injuries, cerebrovascular diseases, dementia syndromes and impaired consciousness; shock and acute circulatory failure; work in a multidisciplinary team, in a multicultural and multinational environment; patient rights; using and processing information, using IT tools and using modern sources of medical knowledge. | | |
| Learning outcomes/reference to learning outcomes included in standards in terms of knowledge, the student knows and understands: E.W1; E.W3 in terms of skills, the student can: E.U5; E.U9; E.U10 in the field of social competence, the student is ready to: D.U10; D.U12; D.U13 | | |
| Form of approval: GRADE CREDIT | | |
| 9. Amount of hours intended for subject | | 15 |
| 10. Amount of ECTS points intended for subject | | 1 |
| 11. Methods of verification and assessment of learning outcomes | | |
| Learning outcomes | methods of verification * | ways of evaluating* |
| In terms of knowledge | Written test - open questions / Grade credit - selection test /test exam oral test | * |
| In terms of skills | Report /observation/Practical exam | * |
| In terms of social competence | Observation discussion during classes, opinions of colleagues Assessment of activity in the classes | * |

* according to the regulations of the subject, Resolution of the Rector No. 75/2016 with further amendments

the grade obtained means that:

Very good (5,0) - the assumed learning outcomes have been achieved and largely exceed the required level

Better than good (4,5) - the assumed learning outcomes have been achieved and slightly exceed the required level

Good (4,0) – the assumed learning outcomes were achieved on the required level

better than satisfactory (3,5) – the assumed learning outcomes were achieved on the average required level

satisfactory (3,0) - the assumed learning outcomes were achieved at the minimum required level

unsatisfactory (2,0) – the assumed learning outcomes were not achieved.

Subject card

| Additional useful information about the subject | | |
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| 12. Department, address, e-mail: Department of Radiology and Radiodiagnostics; 41-800 Zabrze, ul. 3-go Maja 13/15 roenzab@sum.edu.pl | | |
| 13. Name and surname of the person responsible for realization of the subject: Head of the Department | | |
| 14. Prerequisites in terms of knowledge, skills and other competences: Knowledge covering learning outcomes in the subjects Human Anatomy, Biology, Chemistry, Biophysics, Histology, Cytology and Embryology, incl. knows and understands the structures of the human body: cells, tissues, organs and systems, with particular emphasis on the stomatognathic system; development of organs and the whole organism, with particular emphasis on the masticatory system; the structure of the human body in a topographic and functional approach; is able to interpret anatomical relations illustrated by the basic methods of diagnostic tests in the field of radiology (overview and contrast images); is able to apply the provisions concerning health and safety at work. | | |
| 15. Group size | In accordance with SUM's Senate Resolution | |
| 16. Materials for classes | In accordance with the regulations of the Department that carries out the subject | |
| 17. Place of the classes | according to the schedule | |
| 18. Place and time of consultation | In accordance with the regulations of the Department that carries out the subject | |
| 19. Learning outcomes | | |
| Number of subjects learning outcome | Subject learning outcomes | Reference to learning outcomes included in standards |
| In terms of knowledge | | |
| 1. | the relationship between morphological abnormalities and the function of altered organs and systems, as well as clinical symptoms, diagnostic and treatment options; | E.W1 |
| 2. | etiopathogenesis and symptomatology of respiratory, circulatory, hematopoietic, urogenital, immune, digestive, movement and endocrine diseases, with particular emphasis on diseases manifesting in the oral cavity; | E.W3 |
| In terms of skills | | |
| 1. | identify physiological and pathological structures and organs in additional imaging studies (X-ray, ultrasound, computed tomography - CT); | E.U5 |
| 2. | describe and recognize the symptoms of shock and acute heart failure; | E.U9 |

| | | |
|---|---|------------------------|
| 3. | recognize the symptoms of brain injuries and cerebrovascular diseases, dementia syndromes and disorders of consciousness; | E.U10 |
| In terms of social competence | | |
| 1. | work in a multidisciplinary team, in a multicultural and multinational environment; | D.U10 |
| 2. | respect patient's rights; | D.U12 |
| 3. | use and process information using IT tools and modern sources of medical knowledge; | D.U13 |
| 20. Forms and topics of classes | | number of hours |
| 21.1. Lectures | | |
| Discussion of the physical basis of X-ray radiation. Principles of X-ray image formation. Absorbing X-rays groups. Types of photo projections. Radiation protection: sources of radiation. Aims of the radiation protection system. The ALARA principle - optimization of protection, sequence of phenomena in irradiated matter, somatic, genetic, non-stochastic, stochastic effects, effects of embryo irradiation and fetus, tissue radiosensitivity, radiosensitive tissues, less sensitive tissues. What is dose, dose exposure, dose absorbed. Acute radiation sickness, myeloid syndrome, intestinal syndrome, cerebrovascular syndrome. Early changes in organs after high-dose irradiation. Late sequelae of radiation. Means of protection against irradiation. Average effective doses of an adult patient in conventional studies. Physical methods of protection against radiation. Individual dose control. Personal protection measures | | |
| Ultrasonography, forms of imaging in ultrasound, usefulness of the method. Doppler methods of the study of flows. Computed tomography. The technique of performing a CT examination. Hounsfield scale - reflection of tissue density in images. Nuclear magnetic resonance, types of sequences - T1 images - weighted, T2 – weighted. PD image. Contrast agents used in CT, MRI and USG examinations and their role in imaging. Complications after administration of contrast agents. Contraindications to the administration of contrast agents | | |
| In total | | 5 |
| 22.2. Seminars | | |
| Conventional radiological diagnostics - X-rays, real time images (fluoroscopy), contrast tests. Ultrasound - visualization of the border surfaces of organs and soft tissues. Cross-sectional methods - computed tomography and magnetic resonance imaging. Software for diagnostic stations in computed tomography and with the use of multi-plane and three-dimensional reconstructions | | |
| Modern methods used in the diagnosis of chest. Photos in PA and AP projection and side views, tomography photos, copy. Chest anatomy with the division of the lungs into lobes and segments. Projection and shadow summation of anatomical structures in basic photo projections. Assessment of the contours of the mediastinum. Interpretation of a chest X-ray. Basic pathologies; atelectasis, emphysema, pneumonia, lung abscess, sarcoidosis, pneumoconiosis, bronchiectasis, emphysema, lung cancer | | |
| Methods of examination and X-ray anatomy of the gastrointestinal tract, pancreas, liver, urinary system. Single and double contrast studies of the gastrointestinal tract. Urography | | |

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|---|-----------|
| and cystography. The use of classic X-ray examinations, USG, CT and MRI in selected pathologies of the abdominal cavity and pelvis (intestinal obstruction, gastrointestinal perforation, tumors of the digestive tract of the liver and pancreas). Focal changes in the kidneys. Focal changes in the liver. Acute pancreatitis | |
| X-ray anatomy and imaging methods in the diagnosis of the CNS - computed tomography and magnetic resonance imaging. Post-traumatic changes (fracture fissures, pneumothorax, contusion of the brain, cerebral and intracerebral hematomas, edema and brain). Vascular diseases - hemorrhagic stroke, subarachnoid hemorrhage, ischemic stroke, vascular malformations, aneurysm. Brain Tumors | |
| Summarizing the knowledge gained during classes, filling up the arrears Test pass from the entire material with a grade | |
| In total | 10 |
| 23.3. Exercises | |
| In total | 0 |
| 24. Literature | |
| LITERATURA PODSTAWOWA Radiologia Diagnostyka obrazowa RTG, TK, USG, i MR red naukowa Andrzej Cieszanowski PZWL, Warszawa 2014 | |
| 25. EVALUATION CRITERIA - details | |
| In accordance with the recommendations of the inspection authority. Passing the subject - the student has achieved the expected learning outcomes. Detailed criteria for passing and assessing the subject are set out in the subject rules | |

21.09.2023 SCHEDULE FOR THE 2nd YEAR OF STUDY AT THE DENTISTRY PROGRAM

Faculty of Medical Sciences in Zabrze Medical University of Silesia, Katowice, Poland, ACADEMIC YEAR 2023/2024

| SUBJECT | Amount of hours in year | | | Amount of hours in sem | | | Credit / Exam | TIME | MON | TUE | WED | THU | FRI | Term and class type | | |
|---|-------------------------|----|----|------------------------|----|----|----------------------|-------------|-------------|------|------|------|------|---|--|---|
| | L | S | E | L | S | E | | | | | | | | | | |
| Microbiology and immunology Department of Microbiology and Immunology Zabrze-Rokitnica, ul. Jordana 19 Email: mikroimm@sum.edu.pl | | | | | | | Exam after 3rd sem. | 16.30-18.00 | - | - | - | - | GW | Lectures online or e-learning: FRI: 13.10.; 27.10; 17.11.; 01.12; 15.12.2023 | | |
| | 10 | 10 | 25 | 10 | 10 | 25 | | 13.00-15.15 | - | GS 1 | - | - | - | - | Seminar in Department TUE: 07.11.; 28.11.2023 | |
| | | | | | | | | | 13.00-16.00 | - | GS 1 | - | - | - | - | 16.01.2024 |
| Human physiology with elements of clinical physiology Department of Physiology Zabrze-Rokitnica, ul. Jordana 19 Email: fizjozab@sum.edu.pl | | | | | | | Exam after 3rd sem.. | 13.00-16.00 | - | GC 1 | - | - | - | Exercises in Department TUE: 03.10.2023 | | |
| | | | | | | | | 13.00-15.15 | - | GC 1 | - | - | - | - | TUE: 10.10.; 17.10.; 24.10.; 14.11.; 21.11.; 05.12.2023; 09.01.2024 | |
| | 25 | 20 | 45 | 25 | 20 | 45 | | 14.00-16.15 | - | - | - | - | - | GW | Lectures online or e-learning: FRI: 13.10.; 27.10; 17.11; 01.12; 15.12.2023 | |
| Picture diagnosis Department of Radiology and Radiodiagnostics SK I, Zabrze, ul. 3-go Maja 13/15 Email: roenzab@sum.edu.pl | | | | | | | Credit with grade | 17.15-19.30 | - | - | - | - | - | GW | FRI: 12.01; 19.01.2024 | |
| | | | | | | | | 18.00-21.00 | - | - | - | - | - | - | GW | FRI: 26.01.2024 |
| | 5 | 10 | 0 | 5 | 10 | 0 | | 16.00-19.45 | - | - | GS 1 | - | - | - | Seminar in Department WED: 18.10.;15.11.; 06.12.2023; 10.01.2024 | |
| Elements of gynecology and perinatology Department of Gynaecology, Obstetrics and Oncological Gynaecology Bytom, ul. Batorego 15 Email: bytomobstgyn@sum.edu.pl | | | | | | | Credit | 15.00-16.30 | GW | - | - | - | - | - | Exercises in Department WED: 04.10.;11.10.; 25.10.; 08.11.; 22.11.; 29.11; 13.12.2023; 17.01.; 24.01.2024 | |
| | | | | | | | | 15.00-17.15 | GW | - | - | - | - | - | - | Lectures online or e-learning: MON: 04.12.2023 |
| | 0 | 7 | 8 | 0 | 7 | 8 | | 15.00-17.15 | GS 1 | - | - | - | - | - | MON: 11.12.2023 | |
| Elements of gynecology and perinatology Department of Gynaecology, Obstetrics and Oncological Gynaecology Bytom, ul. Batorego 15 Email: bytomobstgyn@sum.edu.pl | | | | | | | Credit | 14.00-16.15 | - | - | - | GS 1 | - | - | Seminar in Department: MON: 15.01.2024 | |
| | | | | | | | | 14.00-17.00 | - | - | - | - | GS 1 | - | THU: 19.01.2024 | |
| | 0 | 7 | 8 | 0 | 7 | 8 | | 15.15-16.45 | - | - | - | - | GS 1 | - | THU: 26.01.2024 | |
| Elements of gynecology and perinatology Department of Gynaecology, Obstetrics and Oncological Gynaecology Bytom, ul. Batorego 15 Email: bytomobstgyn@sum.edu.pl | | | | | | | Credit | 15.15-16.00 | - | - | - | GS 1 | - | - | Seminar in Department THU: 16.11.; 23.11; 30.11.2023 | |
| | | | | | | | | 13.30-15.00 | - | - | - | - | GC 1 | - | THU: 07.12.2023 | |
| | | | | | | | | 13.30-15.00 | - | - | - | - | GC 1 | - | Exercises in Department THU: 16.11.; 23.11.; 30.11.; 07.12.2023 | |

