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**Azerbaijan Medical University**

**SYLLABUS**

**on the course of**

**ORTHODONTIC DISEASES IN CHILDREN**

**«I APPROVE»**

**Head of the Department of Pediatric dentistry Prof.Aliyeva.R.G.**

**Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**12.09.2021**

**COURSE CODE:** 3226.01

**COURSE TYPE:**  Mandatory

**COURSE SEMESTER:** VIII

**COURSE CREDITS:** 2

**COURSE FORM:**  in person

**COURSE LANGUAGES:**  Azerbaijani, Russian, English

**TEACHERS CONDUCTING THE COURSE:** Shadlinskaya R., Hasanova N., Kalbiyeva N., Yagubova F., Piriyev R.

**CONTACT NUMBERS**

**OF THE DEPARTMENT:** 012 447-47-87; 012 567-59-21

**Е-MАIL:** аzеrbstom@yаhoo.com

**PREREQUISITES:** none

**COREQUISITES:** none

**COURSE OVERVIEW:**

Orthodontics is a branch of clinical medicine, aiming the use of modern orthodontic appliances and equipment and the development of new methods of treatment, along with the study of the development and growth of teeth, jaws, facial skeleton, etiology, pathogenesis, diagnosis, prevention and treatment of dentoalveolar anomalies.

**COURSE OBJECTIVES:**

The main objective is to teach students to understand the basics of diagnostics in orthodontics, justify the diagnosis, determine a patient's treatment plan, consult with doctors of other fields and treat dentoalveolar anomalies with modern orthodontic appliances.

**COURSE RESULTS:**

 Students should become familiar with the peculiarities of orthodontic treatment of dentition defects in childhood. Must master the theoretical and practical knowledge of prosthetics in children.

**COURSE TOPICS:**

1. Interceptive, preventive and therapeutic orthodontic interventions.

2. Growth and development of the stomatognathic system. Development of the primary oral cavity. Zones of bone growth. The importance of bone cells in terms of orthodontics.

3. Functional anatomy of the maxillofacial system. Formation of the germs of primary teeth, formation of roots and their eruption.

4. Formation of the germs of permanent teeth, formation of roots and their eruption.

5. Definition of normal occlusion. Occlusion assessment.

6. Etiology and pathogenesis of maxillofacial anomalies and deformations.

7. Classification of orthodontic anomalies. Classification by WHO, Angle, etc.

8. Application of existing classifications in the clinical work and diagnosis.

9. Methods for prevention of dentoalveolar anomalies.

10. Examination of the patient in the orthodontic clinic. Collecting anamnesis.

11. Taking an impression from the upper and lower dental arches. Preparation of diagnostic models.

12. Assessment of diagnostic models.

13. Assessment of orthodontic photographs

14. Reading of the orthopantomogram.

15. Cephalometric X-ray. Steiner analysis.

16. Cephalometric X-ray. McNamara analysis.

17. Assessment of X-ray images of the skull in the anteroposterior direction.

18. Reading the hand-wrist X-ray and determination of the development stages.

19. Indications and contraindications for removable orthodontic appliances.

20. Indications and contraindications for fixed orthodontic appliances.

21. Stages of preparation of the orthodontic appliances.

22. Choice of orthodontic appliance for various dentoalveolar anomalies.

23. Change of teeth position under the influence of orthodontic forces.

24. Biomechanics in orthodontics.

25. Indications and use of orthopedic constructions in children.

 **LECTURE TEXTS OF THE COURSE:**

Lecture texts and sample tests on all topics of the course are prepared in electronic form and posted in the department of innovation and informatics.

Virtual address of the course: [www.amu.edu.az](http://www.amu.edu.az)

**GRADING:**

The set of the required 100 points for obtaining credits in this course will take place in the following form:

50 points - before exams

Including:

10 points - attendance

10 points - independent work

10 point - skills

20 points - points scored from seminars

50 points - points scored on the exam.

The exam will be conducted in a test form. The test consists of 50 questions. Each question is worth 1 point. Wrongly answered questions deduct points from correct answers.

**NOTE:**

If during the exam the minimum 17 points are not scored, the points scored before the exam will not be taken into account. The points scored on the exam and before the exam are added and the final result is assessed in the following form:

А – «Outstanding» -91 – 100

B – «Very good» - 81 – 90

C – «Good» - 71 – 80

D – «Not bad» - 61 – 70

Е – «Satisfactory» - 51 – 60

F – «Unsatisfactory» - lower than 51.

**FREE WORKS:**

During the semester, 10 independent works are given. The performance of each task is estimated at 1 point.

Independent work should be in writing, in word file format, volume 1-2 pages (font size 12).

Plagiarism is unacceptable, since each independent work is a conclusion of the student's own thoughts.

**TOPICS AND DEADLINE OF THE INDEPENDENT WORKS**

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| --- | --- | --- |
| № | Topic | Deadline |
|  | Definition of normal occlusion. Occlusion assessment.  |  |
|  |  Etiology and pathogenesis of maxillofacial anomalies and deformations. |
|  |  Classification of orthodontic anomalies. Classification by WHO, Angle, etc.  |
| 4 | Assessment of X-ray images of the skull in the anteroposterior direction |  |
| 5 |  Reading the hand-wrist X-ray and determination of the development stages |  |
| 6 | Indications and contraindications for removable orthodontic appliances. |   |
| 7 | Stages of preparation of the orthodontic appliances. |
| 8 |  Change of teeth position under the influence of orthodontic forces |
| 9 |  Biomechanics in orthodontics. |  |
|  10 |  Indications and use of orthopedic constructions in children  |  |

 **Skills - VIII semester**

1. Choice of the impression trays for the upper and lower jaw
2. Taking of the impression from the upper and lower jaw
3. Preparation of the diagnostic models
4. Analysis of the model
5. Taking photographs with orthodontic purposes
6. Determination of the cefalometric points
7. Sefalometrik analizin aparılması
8. Analysis of the hand-wrist x-rays
9. Fixation of orthopedic constructions in children
10. Fixation of the simple removable orthodontic appliances

 **LITERATURE AND MATERIALS**

1. Əliyеvа R.Q., S.B.Ulitovski. Stomаtoloji хəstəliklərin profilаktikаsı.
2. Qarayev Z.İ., Əliyeva R.Q., Novruzov Z.H. “ Ortodontiya”
3. Ф.Я.Хорошилкина Руководство по ортодонтии.
4. Л.С.Персин «Ортодонтия» лечение зубочелюстных аномалии.

**COURSE WORK:**

There is no course work for this subject.

**PRACTICE:**

There is no internship for this subject.

**Head of the educational part: Doc. Imanov E.A.**