**MINISTRY OF HEALTH, LABOR AND SOCIAL PROTECTION OF**

**REPUBLIC OF MOLDOVA**

**STATE UNIVERSITY OF MEDICINE AND PHARMACY**

**“NICOLAE TESTEMIŢANU”**

**Dental Faculty**

#### *CHAIR OF DENTAL PROPAEDEUTICS „PAVEL GODOROJA”*

PRECLINICAL CONSERVATIVE AND RESTORATIVE ODONTOTHERAPY

A P PROVE

Dean of Dental Faculty

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“ \_\_\_\_” \_\_\_\_\_\_\_\_\_\_\_\_\_\_2018

## ***METHODICAL ELABORATIONS***

*FOR PRACTICAL LESSONS*

*FOR THE STUDENTS OF 2ND YEAR, 3RD TERM*

***The methodical elaborations were reviewed and approved at the meeting No. 1 of 01.02.2018***

Chief of the chair

dr.hab.șt.med.,conf.univ. D. Uncuța

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**The list**

of practical work at :

**PRECLINICAL CONSERVATIVE AND RESTORATIVE THERAPY**

II year, III semester

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **N** | **Practical work** | **Obligat.** | **Demonst.** | **Student’s signature** | **Teacher’s****signature** |
| 1 | Draw the dental office scheme with its equipment  | 1 |  |  |  |
| 2 | Study of the dental instruments necessary for patient examination; burs and instruments for carious cavity filling | 1 |  |  |  |
| 3 | Assistance in the preparation of dental instruments for sterilization in curative rooms. Study of the auxiliary personnel's work obligations in the dental office. Study of the rules of behavior in the sterilization room | 1 |  |  |  |
| 4 | Implementation of knowledge regarding working positions of doctor and patient in practice on simulators | 1 |  |  |  |
| 5 | Preparation of caries cavities of class I by Black | 1 |  |  |  |
| 6 | Preparation of caries cavities of class II by Black | 1 |  |  |  |
| 7 | Preparation of caries cavities of class III and IV by Black | 1 |  |  |  |
| 8 | Preparation of caries cavities of class V and VI by Black | 1 |  |  |  |
| 9 | Preparation on models of atypical and deep cavities | 1 |  |  |  |
| 10 | Application of clamps on models by different methods | 1 |  |  |  |
| 11 | Mixing of curative pastes and application in the prepared cavities of curative and provisional filling (on models) | 1 |  |  |  |
| 12 | Study of dental amalgam, method of mixing and application in carious cavities | 1 |  |  |  |
| 13 | Study of manual mixing of glass ionomer cements and application in prepared carious cavities of insulating and final filling (on models) | 1 |  |  |  |
| 14 | Application of final fillings of autopolymerizable composite in cavities prepared on models  | 1 |  |  |  |
| 15 | Application of different generations of adhesive in caries cavities prepared on models | 1 |  |  |  |
| 16 | Implementation of the principles of restoration on layers in the restoration of coronary defects with photopolymerizable composite materials | 1 |  |  |  |
| 17 | Filling of superficial carious cavities prepared by minimally invasive methods with the use of fluorinated photopolymerizable composites | 1 |  |  |  |

**ThematicAL plan**

1. Organization of dental clinic, department and polyclinic. Arrangement and assembling of the dental office. Equipment. Ergonomy in dentistry.
2. Dental equipment for patient examination, preparation and filling of carious cavities.
3. Methods of instruments sterilization. Service obligations of medical staff in the dental office. Triage of medical waste. Totalization.
4. Dental caries. Classifications. Classical and modern principles of carious cavity preparation.
5. Preparation of Class I cavities after Black. Varieties.
6. Preparation of carious cavities Class II after Black. Varieties.
7. Preparation of carious cavities Class III, IV after Black. Varieties.
8. Preparation of carious cavities Class V, VI after Black. Varieties. Totalization.
9. Preparation of atypical and deep carious cavities.
10. Techniques of isolation of the operator field.
11. Curative and temporary fillings.
12. Filling of carious cavities with amalgam. Sanding and polishing of the fillings.
13. Filling of carious cavities with glassionomeric cements and compomers. Sanding and polishing of the fillings. Totalization.
14. Filling of carious cavities with composite materials (chemical and ligth cured). Sanding and polishing of fillings.
15. Adhesive techniques. Generations.
16. The restoring technique of the front and lateral teeth group.
17. Minimally invasive treatment methods for dental caries. Totalization.

**PRECLINICAL CONSERVATIVE AND RESTORATIVE THERAPY**

**Methodical elaboration №1**

Topic: Organization of dental clinic, department and polyclinic. Arrangement and assembling of the dental office. Equipment. Ergonomy in dentistry.

Time: 3 hours.

Place of work: study room.

Aim of work : to acquire the general principles of the organization of the dental clinic, section and clinic. Dental equipment, notions of ergonomics.

**Plan of the lesson:**

1. Interrogation - 70 min.

2. Practical work: Draw the dental cabinet scheme with its equipment - 55min.

3. Conclusion - 10 min.

**Control questions:**

1. Organization of dental care in Republic of Moldova.
2. Structure and functions of dental clinics.
3. Norms and requirements for the organization of the dental office.
4. The working place of nurse and cleaning staff.
5. Dental units, contemporary models.
6. Necessary devices for the organization of the dental work.
7. Notions of ergonomic in dentistry.

**Homework**

 In the copybooks to register: the structure of dental care in Republic of Moldova and the requirements of the organization of the dental office and the equipment necessary for its assembly.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №2**

**Topic:** Dental equipment for patient examination, preparation and filling of carious cavities.

**Place of the practical lesson**: simulator room.

**Time:** 3 hours.

**Purpose of the lesson:** study of the dental instruments necessary for examination and treatment of dental decay.

Plan of the work:

1.Integration - 70 min.

2. Practical work: study of dental instruments for patient examination; burs and instruments for carious cavity filling - 55min.

3.Conclusion - 10 min.

Control questions:

1. Classification of dental instruments.
2. Necessary instruments required for patient examination.
3. Components of the dental mirror.
4. Dental probes, their application.
5. Dental tweezers, types.
6. Hand tools for dental caries preparation.
7. Rotary tools for dental caries preparation.
8. The characteristics of cavity filling instruments.

**Homework**

In the copybooks write the classification of dental instruments and draw all the instruments.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №3**

**Topic:** Methods of instruments sterilization. Service obligations of medical staff in the dental office.Triage of medical waste.Totalization.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**Purpose of the lesson:** learn how to prepare and sterilize dental instruments. Necessary devices. Medical waste.

**Plan of the lesson:**

1.Interrogation - 70 min.

2. Practical work - assisting in the preparation of dental instruments for sterilization in curative rooms. Study of auxiliary personnel's work obligations in the dental office. Rules of behavior in the sterilization room - 55min.

3.Conclusion - 10 min.

**Control questions**

1. Methods of sterilization in dentistry.
2. Mechanical processing of instruments before sterilization.
3. Chemical processing of instruments in the stages preceeding sterilization.
4. Sterilization by steam treatment under pressure.
5. Hot air method of sterilization.
6. Cold method of sterilization.
7. Sterilization of dentistry tools.
8. Devices used for instruments sterilization and burs.
9. Cleaning staff's work obligations.
10. Nurse's work obligations
11. Rules for sorting medical waste.

**Homework**

In the copybooks note the methods of sterilization, the devices and the necessary solutions; methods of sterilization of dental pieces.

 **Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

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**Methodical elaboration №4**

**Topic:** Dental caries. Classification. Classical and modern principles of carious cavity preparation.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** to learn the notion of caries and its classification; classic and modern principles for cavities preparation. Correct positions of the patient and the doctor during the work.

**PLAN OF THE WORK:**

1.Interrogation - 70 min.

2. Practical work: implementation in practice on simulators of knowledge regarding working positions of doctor and patient-55min.

3.Closing - 10 min.

**CONTROL QUESTIONS**

Dental caries.

Classification of dental caries after Black, by depth and by clinical development.

The classical and modern principles of carious cavity preparation.

Conditions for painless preparation of dental hard tissue.

Pulp response to the rotary cutting instruments.

Eye protection.

Air contamination during preparation.

Patient and doctors position during cavity preparation on different groups of teeth.

**Homework**

In the workbooks to draw the variants of dentist and patient positions depending on the teeth.

**Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №5**

**TOPIC:** Preparation of Class I carious cavities by Black. Varieties

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** to assimilate the notion and the components of the carious cavity; the stages of cavity preparation and practical skills in using the tools for preparing the cavities of class I after Black.

**PLAN OF THE WORK:**

1.Examination - 30 min.

2.Practical work: preparation of caries cavities of class I after Black-95min.

3.Conclusion - 10 min.

**CONTROL QUESTIONS:**

Stages of preparation of dental caries cavities.

Name the elements of the prepared cavity.

The indications for each stage.

The technique for opening and enlarging the dental caries cavities.

Necessary instruments for opening and enlargement of the cavities.

Excision of decrepit dentine (necrectomy).

Variants of carious cavities of class I.

Preparation of the caries cavity's bottom.

The formation of class I cavities, scope and technique.

**Homework**

In workbooks: to draw the variants of caries cavities characteristic for class I; carious cavities formed.

**Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №6**

**Topic:** Preparation of carious cavities Class II by Black. Varieties.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours

**The purpose of the lesson:** To assimilate the methods of preparation of the second-class carious cavities by Black.

**PLAN OF THE WORK:**

1. Examination - 30 min.

2.Practical work: preparation of caries cavities of class II by Black-95min.

3.Conclusion - 10 min.

**CONTROL QUESTIONS:**

Carious cavities of the class II.

Variants of class II cavities.

Order of preparation of the second class cavities.

Access routes to the cavities of class II.

Definition of the accessory cavity. Characteristic.

Vertical and horizontal cavities in the preparation of class II cavities.

Elements of the second-class cavity.

Exigencies for the formation of the pregingival wall of the second class cavities.

Indications for the formation of the MOD cavity

**Homework**

In the workbooks: to draw the variants of carious cavities characteristic for class II; carious cavities formed.

**Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

Methodical elaboration №7

**Topic:** Preparation of carious cavities Class III, IV after Black. Varieties.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours

**The purpose of the lesson:** To assimilate the methods of preparation of class III and IV cavities by Black.

**Plan of the work:**

**1.Intergatorium - 30 min.**

**2. Practical work: preparation of caries cavities of class III and IV after Black-95min.**

**3.Closing - 10 min.**

 **CONTROL QUESTIONS:**

Cavities of class III.

Variants of class III cavities.

Access ways in the preparation of the third class cavities.

The exigencies for Class III cavities.

Caracteristics of the exigencies for the formation of the pregingival wall of the class III cavities.

Cavities of class IV.

Variants of class IV carious cavities.

Access ways in the preparation of the class IV cavities.

The exigencies for Class IV cavities.

**Homework**

In workbooks: to draw the variants of cavities characteristic for Class III and IV; carious cavities formed.

**Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999, 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №7**

Topic: Preparation of carious cavities Class III, IV after Black. Varieties.

**Place of the practical lesson:** simulator room.

**Time: 3 hours.**

**The purpose of the lesson:** To assimilate the preparation of the cavities of class III and IV after Black.

**PLAN OF THE WORK:**

1.Interrogatorium - 30 min.

2. Practical work: preparation of caries cavities of class III and IV after Black-95min.

3.Closing - 10 min.

 **CONTROL QUESTIONS:**

Which cavities are assigned to Class III.

Variants of Class III cavities.

Access ways in the preparation of the third class cavities.

The exigencies for Class III cavities.

Doctor's attitude towards adamantine vestibular walls in the preparation of class III cavities.

Characteristics of the exigencies for the formation of the pregingival wall of the class III cavities. Which cavities are attributed to the Class IV.

Variants of Class IV carious cavities.

The routes of access cavities in the preparation of the class IV.

The exigencies for Class IV cavities.

**Homework**

In workbooks: to draw the variants of cavities characteristic for Class III and IV; formed carious cavities.

**Literature**

1.Course notes.

2.Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

3.Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.

4.Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

5.Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №8**

Topic: Preparation of carious cavities of Class V, VI after Black. Varieties. Totalization.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** To acquire the methods of preparation of the V-th and VI-th class carious cavities after Black.

**PLAN OF THE WORK:**

1.Interrogatorium - 30 min.

2. Practical work: preparation of carious cavities of class V and VI after Black -95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

Which cavities are assigned to Class V.

Variants of Class V cavities.

List the elements of carious cavities Class V.

Which are the variants of additional cavities in the Class V.

Which cavities are attributed to the Class VI.

Variants of Class VI carious cavities.

The ways of access in caries cavities preparation of the class VI.

The requirements for Class VI cavities.

**Homework**

In workbooks: to draw the variants of cavities characteristic for Class V and VI; formed carious cavities.

 **Literature**

1.Course notes.

2.Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

3.Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.

4.Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

5.Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №9**

Topic: Preparation of atypical and deep carious cavities.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** To acquire the methods of preparation of atypical and deep carious cavities.

**PLAN OF THE WORK:**

1.Interrogatorium - 30 min.

2.Practical work: preparation on models of atypical and deep cavities-95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

Atypical cavities.

The preparation and the formation mode of these cavities.

The term of deep carious cavity.

The particularities of the preparation of deep cavities of grades I-VI.

Name the necessary tools for the preparation of deep carious cavities.

The particularities of the formation of the bottom of the deep cavity.

Errors and complications during deep cavity preparation.

**Homework**

In workbooks: to draw the variants of atypical and deep cavities; formed carious cavities.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №10**

Topic: Techniques of isolation of the operator field.

**Place of the practical lesson:** simulator room.

**Time: 3** hours**.**

**The purpose of the lesson:** to acquire various techniques of isolation of the operator field.

**PLAN OF THE WORK:**

1.Interrogatorium - 30 min.

2.Practical work: application of rubber dam system on models by different methods - 95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

Saliva ejectors, varieties.

Cotton rolls, uses.

Definition of rubber dam.

Rubber dam components, uses, variants of clips.

Advantages and disadvantages of the rubber dam.

Preparing the rubber dam.

Methods of application of rubber dam on the operator field.

**Homework**

In workbooks: to draw the tools used in rubber dam. Draw variants of clamps depending on the group of teeth.

**Literature**

Course notes.

Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.

Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.

Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.

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**Methodical elaboration №11**

Topic: Curative and temporary fillings.

**Place of the practical lesson:** simulator room**.**

**Time:** 3 hours**.**

**The purpose of the lesson:** to study materials for temporary and curative fillings, how to mix and apply them in the prepared carious cavities.

**PLAN OF THE WORK:**

1.Interrogatorium - 30 min.

2.Practical work: mixing of the curative pastes and application in the prepared cavities (models) of curative and provisional fillings-95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

1. What are temporary filling materials.
2. Requirements for temporary materials.
3. Characteristic of artificial dentin and dentin-paste.
4. Methods of preparation and application of temporary filling materials.
5. Name the curative paste groups.
6. The purpose of applying of curative pastes.
7. How to apply curative pastes.
8. Mechanism of action of curative pastes.

**Homework**

To write in the workbooks the classification of curative and provisional filling materials. To draw teeth with Class I cavities after Black in which curative fillings should be applied.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №12**

Topic: Closure of carious cavities with amalgam. Sanding and polishing of the fillings.

**Place of the practical lesson:** simulator room**.**

**Time:** 3 hours**.**

**The purpose of the lesson:** to study the chemical composition, the way of mixing and application of dental amalgam in carious cavities.

**PLAN OF THE WORK:**

1.Interrogation - 70 min.

2. Practical work: students study dental amalgam, mode of mixing and application in carious cavities - 55min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

1. The notion of amalgam.
2. Classification of dental amalgam.
3. Presentation mode.
4. Mixing technique (by amalgamation).
5. Indications for use.
6. Contraindications for application.
7. Advantages and disadvantages of amalgam fillings.
8. Instruments and devices necessary for working with dental amalgams.
9. The insertion of the dental amalgam into the cavity.
10. The filling technique of Class I cavities.
11. The filling technique of Class II cavities.
12. Setting time of amalgams.
13. Finishing amalgam fillings.

**Homework**

To write the amalgam classification and the necessary tools for dental amalgam mixing.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №13**

Topic: Objecting the carious cavities with glassionomeric cements and compomers. Sanding and polishing of the fillings. Totalization.

**Place of the practical lesson:** simulator room**.**

**Time**: 3 hours.

**The purpose of the lesson: t**o study the chemical composition, the way of mixing and application of glass ionomer cements in carious cavities.

**PLAN OF THE WORK:**

1.Interrogation - 30 min.

2. Practical work: manual mixing of glass ionomer cements and application in prepared carious cavities (on models) of insulating and lasting filling-95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

1. Definition of glassionomer cement.
2. Characteristics. Presentation mode.
3. Mixing technology. Indications for use.
4. Contraindications for application.
5. Advantages and disadvantages of glassionomer cement fillings.
6. Requirements for basic filling.
7. Glass ionomer cement application technique.
8. Compomers. Indications, contraindications for the application of the compomers.
9. Advantages and disadvantages of compomer fillings. Sanding and polishing of fillings.

**Homework**

To write in the workbooks classification of glass ionomeric cements. To draw teeth with Class I cavities after Black with isolating fillings.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №14**

Topic: Filling of carious cavities with composite materials (chemical and ligth cured). Sanding and polishing of the fillings.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** to study the chemical composition, classification and method of application of the composite materials.

**PLAN OF THE WORK:**

1.Interrogation - 30 min.

2. Practical work: application of final fillings in cavities prepared on models of autopolymerizable composite -95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

1. Definition of composite material.
2. Classification of composite materials.
3. The mixing technique of chemical composites.
4. Indications and contraindications for application.
5. Advantages and disadvantages of composite fillings.
6. Color selection.
7. The application technique of chemical composites.
8. Application technique of light-curing composites.
9. Methods of personal protection.
10. Sanding and polishing of the fillings.

**Homework**

In the workbooks to write the classification of composite materials and to write the rules of color determination.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
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**Methodical elaboration №15**

Topic: Adhesive techniques. Generations.

**Place of the practical lesson:** simulator room**.**

**Time:** 3 hours.

**The purpose of the lesson:** to study different adhesive systems with their advantages and disadvantages, to learn ways to work with them.

**PLAN OF THE WORK:**

1.Interrogation - 30 min.

2. Practical work: application of different generations of adhesive in caries cavities prepared on models-95min.

3.Closing - 10 min.

**CONTROL QUESTIONS:**

1. The term of dentin detritus.

2. The term of hybrid layer.

3. Classification of adhesive systems.

4. Etching, methods of application.

5. Notion of adhesive system, components.

6. Algorithm of use of different generations of adhesive.

7. Advantages and disadvantages.

8. Factors on which the adhesion phenomenon depends.

9. Dual Socket Adhesive Systems.

**Homework**

In the workbooks to write the classification of adhesive systems, to describe the factors on which the adhesion phenomenon depends.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №16**

Topic: The restoring technique of the frontal and lateral teeth group.

**Place of the practical lesson:** simulator room**.**

**Time:** 3 hours.

**The purpose of the lesson:** to assimilate the principles of restorations on layers of hard dental tissues with photopolymerizable composite materials.

**PLAN OF THE WORK:**

1.Interrogation - 30 min.

2. Practical work: implementation of the principles of restoration on layers in the rehabilitation of coronary defects with photopolymerizable composite materials -95min.

3.Closing - 10 min.

 **CONTROL QUESTIONS:**

1. Particularities of extensive restorations.

2. Color selection rules.

3. Principles of restoration on the layers of dental structures.

4. Techniques and methods of restoring the morphological structures of the frontal and lateral teeth.

5. Special retention systems.

6. Parapulpar dowels. Their classification.

7. Indications and rules for application of parapulpar dowels.

8. Methods of inserting parapulpar dowels (by threading, friction or cementation)

**Homework**

In the workbooks to write the principles of dental restoration on layers.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.

**Methodical elaboration №17**

Topic: Minimally invasive treatment methods for dental caries. Totalization.

**Place of the practical lesson:** simulator room.

**Time:** 3 hours.

**The purpose of the lesson:** study of minimally invasive treatment methods.

**PLAN OF THE WORK:**

1. Interrogation - 30 min.

2. Practical work: filling of superficial carious cavities prepared by minimally invasive methods with the use of fluorinated photopolymerizable composites-95min.

 3. Conclusion - 10 min.

**CONTROL QUESTIONS:**

1. Minimally invasive methods for the preparation of carious cavities.
2. Definition of the fluid light-curing composite material.
3. Indications and contraindications in the use of these composites in dental restorations.
4. Advantages and disadvantages of the light-curing composite fluid type.
5. Application technique.
6. Sanding and polishing of the filling.

**Homework**

In the workbooks to write the advantages and disadvantages of liquid photopolymerizable composite materials.

**Literature**

1. Course notes.
2. Nicolau Gh., Terehov A., Năstase C., Nicolaiciuc V. Odontologie practică modernă. Iași, 2010, 448 p.
3. Mount G.J., Hume W.R. Conservarea și restaurarea structurilor dentare. București, 1999 , 272 p.
4. Iliescu A.A., Gafar M. Cariologie și Odontologie restauratorie . București, 2006, 494 p.
5. Borș A., Szekely M., Molnar-Varlam C. Tehnici adezive moderne în medicina dentară. Tîrgul- Mureș, 2015, 104 p.